



TABLE OF CONTENTS

CHAPTER 7 – FUTURE LAND USE..... 7-1

INTRODUCTION..... 7-1

LAND PLANNING PRINCIPLES..... 7-1

 Land Use Externalities..... 7-2

 Transportation Access..... 7-3

 Distribution of Public Services 7-3

 Neighborhood Design 7-4

FUTURE LAND USE..... 7-5

 Land Use Categories 7-5

 General Correlation Between Land Categories and Zoning 7-8

GROWTH PROJECTIONS 7-10

TABLES

Table 7.1: Correlation Between Land Use and Zoning..... 7-9

Table 7.2: Single-Family Building Permit Activity (1993 to 2002) 7-10



(This Page Left Blank Intentionally)



CHAPTER 7 – FUTURE LAND USE

INTRODUCTION

The Future Land Use chapter serves as a guide for the planned and orderly growth of the City of De Soto. Zoning changes, subdivisions, annexations, infill development, redevelopment and new development should generally be coordinated with the projections identified in this Chapter as part of the zoning and development approval processes. The Comprehensive Plan sets out the anticipated growth to the year 2020. This Chapter helps illustrate in general terms the City’s vision for this growth. The Chapter consists of the Future Land Use Map (see **Map 12**) and the supporting text, both of which must be considered along with all other elements of the Comprehensive Plan when evaluating land use changes.

The Plan should generally guide the direction of growth, but at the same time be a dynamic tool that accommodates changes in the market demands and our style of living. Per State Statutes (see K.S.A. 12-757) zoning and development applications that are in accordance with the projections of this Chapter should generally be presumed to be reasonable subject to the specific site planning details. However, it should be clear that the projections herein do not indicate or imply that proposed development shall have the right to develop at the greatest density possible. Rather the land uses projected herein are defined in general terms including anticipated uses, general density ranges and correlating zoning districts. When considering proposed zoning district changes, plats and development plans, each application will be considered in the context of the Comprehensive Plan as a whole as well as in relation to site specific details. Ultimately, the character of development in the community will be determined through the regulatory approval processes, including zoning, platting and site planning.

In some cases, the City may determine that zoning change requests and development plans are appropriate although they are not in accordance with the projections shown on the Future Land Use map. In these instances, the Comprehensive Plan needs to be reviewed and either the application or the Plan amended to achieve consistency between the two. Because the Plan functions as a representation of the Community’s desired future, it is important that the Plan be maintained and updated to serve as an accurate and current guide to development.

A more detailed summary of the Comprehensive Plan and its relation to the other ordinances and regulations of the City is provided in **Chapter 1 – The Plan and Local Government**.

LAND PLANNING PRINCIPLES

Land use and growth patterns are dictated by the physical circumstances presented by the specific geography of an area as well as various social, economic, and political forces that affect the community through time. The development of a long-range De Soto Comprehensive Plan for physical development is an opportunity for the City to influence change in accordance with the public interest while it carries out public improvements or responds to private development proposals. For De Soto to achieve its growth objectives, it is helpful to understand the dynamics of development. The Comprehensive Plan incorporates the land planning principles presented in this section, including land use externalities and distribution of public services.



Land Use Externalities

As De Soto plans for meeting the needs of new development pressures, several planning issues become relevant. One of the most basic affecting the use or reuse of a given parcel of land is the impact from land use on adjoining parcels. Economists refer to this impact as a "land use externality" because it is often not taken into consideration in the decision-making process by the public and private sectors. An example of land use externalities is a residential zoning district fronting an arterial road and facing a commercial strip. This residential zoning district has less value for residential purposes than a similar district in the middle of a residential neighborhood. The land use incompatibility and loss of value creates a cost imposed by the commercial owners on the residential owners. Similarly the function of the commercial use is impacted by the limitations posed by its proximity to residential development. The best way to minimize these external costs is to employ the following planning principles:

- Integrate the multiple land uses in a planned mixed-use development; or
- Separate incompatible land uses with effective urban design and buffers.

Implementation of these planning principles helps create effective transitions between residential and commercial areas and other similarly incompatible uses. Two different development possibilities exist in De Soto: infill development/redevelopment and new construction in undeveloped areas. Design criteria and buffering based on these planning principles are key to developing appropriate and compatible infill development and growth. As development expands into remaining undeveloped areas of the City, design standards should be followed to minimize land use conflicts.

Existing land uses at the edge of the City's arterials, such as the Lexington Avenue and Kill Creek corridor, are sensitive to these externalities. Long-standing residential uses are affected by land use conversion of non-residential uses. The City regulations utilize site plan review and special use permit procedures to address this issue, as well as identifying uses permitted in each defined zoning district to further ensure compatibility. However, the Comprehensive Plan can help guide appropriate transitions in uses and provide a means for requiring appropriate design to address compatibility among a variety of uses.

As growth occurs from the core of the community outward into areas to the south, east and west, development patterns must be carefully planned to allow the major thoroughfare roads to continue carrying traffic; while at the same time, residential areas can develop in an attractive manner. Subdivisions along these existing and projected major roads, such as new development along 87th Street, must be designed to minimize conflicts not only with surrounding non-residential uses, but also with the function of a major road network. Implementing the recommendations of the Comprehensive Plan can protect characteristics that most people seek in a residential area—a strong sense of neighborhood, quiet, serenity, and stability. Similarly, non-residential uses which are not designed as part of a mixed use development can be made compatible with sensitive screening and other mitigating design features.

Positive externalities can develop, as well. Concentrated commercial corridors and nodes such as the interchange of K-10 Highway and Kill Creek, or the Lexington Avenue corridor, will attract customers from a wider market area than will commercial uses scattered throughout an area. Clustering retail and commercial uses where arterial roads intersect, for example, benefits the commercial use, while protecting residential districts from disjointed/incompatible commercial strips.



Transportation Access

A second factor which influences the planning of future land uses is the location of major transportation corridors. The greater the transportation need of a particular use, the greater its preference for a site near major transportation facilities. Retail and office activities are most sensitive to accessibility since their survival depends on customers and employees traveling to their location often during peak hours.

With the exception of K-10 Highway which provides the primary access to the region, access east and west is primarily relegated to Lexington Avenue and 83rd Street. Similarly, access north and south is primarily relegated to Kill Creek Road and Lexington Avenue. The viability of these arterial streets to carry future traffic is critical. Continued development and potential redevelopment of the corridors must be done in a planned way to ensure that their function is preserved and enhanced. In addition, alternative thoroughfare connection development such as an improved 95th Street, 103rd Street, 87th Street, Sunflower Road and extensions such as 91st Street, would relieve pressure from existing arterial streets and help complete the city thoroughfare network.

The Future Land Use Map (**Map 12**) indicates land uses in the planning area. Higher traffic generators such as commercial, office and light industrial uses are located along the arterial roads where existing business districts exist, and at intersections of arterial streets. The clustering of these uses helps channel traffic efficiently onto arterial streets and creates discrete retail districts where facilities such as parking and access can be used jointly. Likewise, restricting direct access of residential uses to arterial and collector streets minimizes curb cuts, reduces traffic conflicts and helps ensure that the City's thoroughfare plan functions correctly.

Distribution of Public Services

Certain development patterns are more efficient and, therefore, less costly to serve than others. This issue has increasing relevance as the City plans for expansion of residential uses outward from the core of the City. Compact, orderly growth radiating from existing services and improved infrastructure provides for efficient and cost-effective expansion of service. Compact growth in the planning area can be achieved by encouraging development adjacent to the existing built-up areas, in-fill development and redevelopment, rather than allowing "leap-frog" development over large tracts of undeveloped land. The City's policy of requiring developer payment for utility main extensions, contributions to the transportation network through excise taxes, and requirements for other adequate public improvements helps compact growth and limits premature development of the surrounding rural and low-density residential areas.

A second means of increasing service delivery efficiency is to cluster those land uses that have the greatest need for fire and police protection, such as institutional, retail and office uses. This clustering will allow the concentration of protection efforts where they are most immediate. The City of De Soto Plan anticipates the retail and office commercial uses to cluster by market demand in discrete nodes on the transportation corridors particularly those with strong connections to the K-10 Highway Corridor. The challenge for the City will be to anticipate the non-residential growth as it follows the emerging



residential growth; then extend utilities, particularly southeast of the City, at a time which most cost-effectively serves that growth.

Neighborhood Design

The concern about development design can be summarized by focusing on neighborhood design. Good design can help new developments relate to adjacent developments to form strong neighborhoods within the City. The land use pattern of a neighborhood plays a major role in determining its strengths and weaknesses.

Ideally, neighborhoods should be centered around schools, parks, open spaces and civic amenities which serve as the recreational and cultural, as well as educational hubs of the City. Efficient and safe corridors to schools, commercial districts including Downtown, and other area amenities should be created for vehicular, bicycle and pedestrian traffic by implementing the plans for the development of a mature transportation network, complete sidewalk network and implementation of local and regional trail and linear park plans.

From 2,500 to 5,000 people are necessary to have sufficient population to warrant provision of public services such as schools and parks, and to support convenience shopping. As the residential growth extends north and east, the importance of the planning process becomes clear. The Thoroughfare Plan should be followed to create efficient access to existing and newly emerging growth areas including areas west of Sunflower Road and south of K-10 Highway. Because K-10 Highway and existing non-residential development including Intervet separate these growth areas from the core of the community, it is important that these development areas function as a part of the community through strong transportation connections. At the same time, these “Urban Service” areas provide the opportunity to create new patterns of development that help define the future of De Soto.

There are pressures in the planning area for development outside of areas where public improvements such as sewers already serve growth. Extending utilities must be done carefully to avoid a dispersed urban growth pattern, particularly to the south portion of the study area. For example, sewer interceptors and force mains should be extended only when they become cost effective to serve growth. In the interim, growth patterns in outlying areas should be carefully planned to ensure that incremental, sporadic development does not choke off long-term development potential and in the process increase the overall cost of providing services.

Compact, interconnected growth will allow the City to continue to plan for and provide cost-effective utility expansions and public services. For example, basing emergency services from the existing Fire Station in Downtown De Soto is more feasible if development radiates out from the core of the community. Scattered growth would place pressures on expanding public safety sites to farther regions to serve local growth, while poorly connected development inhibits the ability to serve growth efficiently.



FUTURE LAND USE

The “Future Land Use” Map (see **Map 12**) shows development patterns for the City of De Soto. These projections are based on the population projections, land use planning principles and development patterns identified in the Plan.

Land Use Categories

Following is a list of land use categories and their definitions as used in the Future Land Use Plan and Future Land Use Map (see **Map 12**).

1. **Agriculture:** 1.0 or fewer units per 20 acres. This is land that is used for farming, crops and pasture and is within the planning area but which is not likely to develop during the 20-year planning period. This category serves as a holding zone to preserve the land from premature development that would negatively affect the area while preserving the agricultural uses in the immediate area. Residential development should be limited to only that directly associated with an active agricultural operation but, in any case, should be limited to a maximum density of one dwelling unit per 20 acres. As long-term development potential is a relevant consideration for these areas, residential development that is approved should demonstrate the ability to be further subdivided in the future.
2. **Urban Service Area:** 1.0 units or fewer per 10.0 acres, unless on public utilities including sanitary sewer service. It is foreseeable that development pressures will be realized in portions of the planning area far before the City’s ability to extend public utilities. This designation is intended to provide for limited near-term residential growth while preserving the long-term capacity for growth. Development in these areas is intended to be restricted to one unit per 10 acres unless otherwise approved as part of a cluster design subdivision setting aside land for temporary preservation until public utilities are available to accommodate redevelopment. Development at higher densities should only be allowed following the extension of public utilities. In any case, development should demonstrate the ability to redevelop at the time utilities can be provided to ensure that public services can be cost effectively extended in the future.
3. **Rural Policy Area:** 1.0 unit per 5.0 acres or less unless developed as a cluster design subdivision. Development on large lots of no less than 5.0 acres (or more if required by soils tests), served by on-site private sanitary sewer/septic systems. These uses are intended to be allowed only where the City cannot cost effectively extend municipal sewers within the planning area.

Where natural resources can be better preserved through approval of smaller lot sizes, a cluster design subdivision may be approved with moderately increased densities allowed in exchange for increased preservation. However, this density bonus should not allow densities beyond 1.0 units per three (3) acres.

4. **Low-Density Residential:** 1.0 or fewer units per acre. Development within this category typically is characterized by existing single-family detached dwellings served by private sanitary sewer/septic systems. The intent of this district is to create a transition between rural development and low- to moderate-density development patterns.



5. **Low- to Moderate Density Residential:** 1.0 to 3.0 units per acre. Development within this category is characterized by single-family detached dwellings. This category is also appropriate for planned public and semi-public uses which are generally considered compatible with residential uses.

For smaller parcels and lots in developed areas of the City, the scale and unit count is intended to be generally limited to 2.5 units or less to maintain harmony with the predominance of detached single-family homes in the surrounding area. However, the planned development process and standards of the zoning regulations should be used so that development which proposes higher densities can be permitted with appropriate design and buffering standards that minimizes impacts on the character of the surrounding neighborhood. For large tracts, particularly those containing significant natural features, building forms may vary greatly in order to meet conservation and other objectives through clustering; however, the gross density of these sites should still fall within the maximum 3.0 units per acre standard.

In locations where the land is severely restricted by floodplain, steep slopes, deep ravines, significant vegetative cover and other significant natural features such as along existing creeks and streams net density of less than 2.5 units per acres is anticipated. For smaller parcels and lots where the creation of tracts to create private or public open space is unfeasible, the lots are intended to be generally limited to 1.0 unit per acre with the use of easements and setbacks to preserve the existing natural features. On larger parcels where tracts can be created to preserve natural features, the use of smaller lots may be appropriate.

6. **Higher-Density Residential:** More than 3.0 units and up to 12.0 units per acre unless developed as part of a planned development district. Development within this category typically is characterized by smaller lot single-family detached dwellings, attached single-family dwellings, duplexes, townhomes and multifamily dwellings. In developed areas of the City, the scale and density of individual structures should be generally limited to 3.0 to 6.0 units per acre as necessary to maintain harmony with the surrounding area. However, retirement homes, rest homes, adult congregate living facilities and similar uses also may be appropriate in this category at higher densities and higher unit counts given that the impact of these types of dwellings units is often far less than a “standard” residential development.

For large tracts containing multiple buildings, building forms may vary greatly in order to meet conservation objectives and to provide a mix of housing units (e.g. townhomes and garden apartments), but densities should remain within the 3.0 to 8.0 units per acre range unless approved in keeping with the City’s adopted Multifamily Design Guidelines or as part of a planned development application in which case an overall density of up to 12.0 units could be appropriate.

7. **Public and Semipublic:** This category includes uses such as schools, churches, post offices, fire stations, libraries, cemeteries, governmental uses and religious institutions. Although the zoning ordinance does not include an exclusive public/semipublic district these uses are identified on the Future Land Use Map in order to provide a higher level of detail of actual and proposed uses within the planning area. This category has also been included to identify large-scale public and semi-public



uses which are generally over 2.0 acres in size and have a more substantial impact on surrounding residential development than similar smaller-scale uses.

8. **De Soto Downtown District:** The De Soto Downtown District includes low- to moderate-density residential, office, retail, entertainment, civic and governmental uses clustered around Downtown De Soto and the Kansas (Kaw) River to be implemented as part of a master development plan. The De Soto Downtown is projected to be the heart of the city. The vitality of the downtown frequently is an indicator of the vitality of the city. Development density and intensity, setbacks and parking requirements are treated differently than in other districts. The form of the design and relationship to the street and surrounding development should be the primary focus when formulating development projects. The creation of pedestrian scale amenities and unique development patterns within an urban living environment and activity center is the primary intent of the District.
9. **General Commercial:** This category includes a broad variety of retail and service uses whether located in centers or in stand alone buildings. The list of uses includes but is not limited to retail, financial, box stores and restaurants.
10. **Mixed Use:** Mixed Use incorporates retail, office and institutional uses with planned residential components. Retail and office uses may be stand alone or may be on the ground floor with residential uses on the upper floors. This category supports a variety of zoning districts; however, the focus of development within the category is not so much on use as it is on design. All development projects should be well-planned and designed to ensure a high level of compatibility with surrounding development. Accordingly, overlay districts and/or the Planned Unit Development process should be employed to ensure the objectives of this category and the planning districts are met.
11. **Light Industrial:** Industrial assembly and warehousing, with limited manufacturing uses as defined in the zoning regulations.
12. **Heavy Industrial:** Intensive land uses for manufacture and assembly of goods associated with industrial activity, as defined in the Zoning Regulations. For areas within the floodplain, certain uses otherwise allowed in Industrial zoning districts may not be appropriate due to potential impacts to the floodplain. Land uses requiring extensive site development should receive particular scrutiny.
13. **Business Park:** The Business Park category is intended for larger tracts and parcels that can support intensive development but are in need of an overall master plan to ensure the quality development goals and objectives of this Plan can be met. Where applied, the development plan will control the predominate land uses (e.g. retail/service commercial, light industrial, etc.), but the sites should be designed and developed under a planned development approach that addresses how a unified development that coordinates with the surrounding development patterns will be achieved. The unified development complex should also address the general layout and design of the tract(s) as well as the overall mix and intensity/density of uses.
14. **Parks and Recreation:** Neighborhood, community, and regional park systems. Includes areas that are within Mid-America Regional Council's MetroGreen streamway trail system. Properties directly adjacent to the Kansas River should be encouraged to allow for public access to the river for



recreational purposes. Conservation easements or open space dedications may be required by the City to achieve this end.

15. **Rural Subdivision Overlay Area:** In response to the 2005 Sewer Master Plan study and other policy decisions, the Overlay was created for areas where rural subdivision developments are to be encouraged. Article 6 of the Subdivision Regulations contains the rural residential design standards to be imposed therein.
16. **View Shed Overlay:** During the development of the plan, the City identified the K-10 Highway Corridor as an area where special consideration is needed for the preservation of scenic views. The View Shed Overlay identifies a general area where special development considerations and criteria necessary to preserve these scenic views are intended to be applied through partnership with Johnson County, the K-10 Corridor Association, and KDOT. Strategies for implementation of the overlay are recommended in *Chapter 9, Implementation*.
17. **Primary and Secondary Gateways:** During the development of the plan, the community identified a need to promote a positive image to the residents and visitors as they enter and exit the City. The interchanges with K-10 Highway and major intersections within the City have been identified as areas where special consideration are needed to ensure that development projects a positive image of De Soto. Gateways also indicate areas where community investments in signage, way finding, landscaping and other public improvements are appropriate to improve the overall image of the City. Strategies for implementation of the gateways are recommended in *Chapter 9, Implementation*.

General Correlation Between Land Categories and Zoning

The “Land Use Categories” of the map legend correspond generally to zoning district classifications of the City of De Soto zoning regulations. There are five categories, however, that relate to development patterns and development styles more than land usage:

- Urban Service Area;
- Rural Policy Area;
- Mixed Use;
- Business Park; and
- Transitional Development Overlay.

Table 7.1 contains a list of the Future Land Use Categories and their correlation to the compatible zoning districts.



Table 7.1: Correlation Between Land Use and Zoning

Land Use Categories	Compatible Zoning Districts
Agriculture	“R-O” – Residential Suburban District
Urban Service Area	“R-O” – Residential Suburban District
Rural Policy Area	“R-O” – Residential Suburban District
Low-Density Residential	“R-O” – Residential Suburban District
Low- to Moderate-Density Residential	“R-1” - Residential - Low Density District “R-1A” Residential - Moderate Density District
High-Density Residential	“R-2” Residential - Medium Density District “R-3” Multifamily Dwelling District
Public and Semipublic	Large scale uses permitted primarily in the “O-I” Office - Institutional District, however, public uses are permitted in other districts as defined by the City’s Zoning Regulations.
De Soto Downtown District	“C-1” Business - Central District “R-H” Residential - Historic “Old Town” District
General Commercial	“C-2” Business - General District
Mixed Use	Retail-commercial, office-institutional, and light industrial uses developed within a unified concept as a Planned Development “P-D”
Light Industrial	“M-1” Industrial - Light District
Heavy Industrial	“M-2” Industrial - Heavy District
Business Park Overlay	Retail-commercial, office institutional, and industrial uses developed within a unified concept as a Planned Development “P-D”
Floodplain	Zoning shall be considered on a case by case basis. Zoning and uses shall be compatible with abutting land use projections and in keeping with the City’s adopted Floodplain Mitigation Plan and Floodplain Management Ordinances.
Transitional Development Overlay	“P-D” Planned Development District
View Shed Overlay	N/A
Primary and Secondary Gateways	N/A



GROWTH PROJECTIONS

As was identified in **Chapter 2, Demographics**, the City is projected to grow at a rate similar to or greater than that experienced throughout the 1990's. Growth scenarios based on the Kansas Water Office projections, Mid America Regional Council's projections for Johnson County as a whole and the City's recent building permit activity indicate that the City will grow by between 884 to 1,430 persons by 2010 and between 1,953 and 2,861 persons by 2020.

Table 7.2 summarizes single-family building permit activity for the last decade as an indicator of the potential to achieve these growth projections. Between 1993 and 2002 approximately 479 single-family building permits were issued. Using the average household size of 2.78 persons, the 479 permits issued represent approximately 1,332 persons over the course of the last decade.

Table 7.2: Single-Family Building Permit Activity (1993 to 2002)

Building Permit Activity	Yield
Total Permits/Units Approved Last Decade	479 permits
Approximate Population Yield based on 2.84 Persons per Household	1,332 persons
Average Permits/Units per Year	48 permits
Approximate Population Yield par Year	133 persons
High (1994)	78
Low (1996)	28

Source: City of De Soto

These projections along with an analysis of existing development, service, lot area, and capacity limitations were used to help determine the short- and long-term community development potential as well as preferred land use policies. A summary of the analysis is provided as **Appendix D, Land Use Policy Analysis**. This analysis concluded that primary growth opportunities exist west of Sunflower Road north of K-10 Highway, and west of Lexington Avenue south of K-10 Highway. Although more restricted, additional opportunities for development existing immediately east of Kill Creek Road north of K-10 Highway and immediately south of K-10 Highway along 95th Street and Kill Creek Roads.