

CITY OF BELTON, MISSOURI

Comprehensive Plan Update

April 1992

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ENGINEERS ■ PLANNERS ■ ARCHITECTS

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**CITY OF BELTON, MISSOURI
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Prepared With Assistance from City Staff by:

BWR BUCHER, WILLIS & RATLIFF
ENGINEERS • PLANNERS • ARCHITECTS

A RESOLUTION BY THE PLANNING COMMISSION
ADOPTING THE COMPREHENSIVE CITY PLAN FOR THE
CITY OF BELTON, MISSOURI.

WHEREAS, the City of Belton has a duly constituted Planning Commission as required by law;

WHEREAS, the Planning Commission has caused a Comprehensive City Plan to be prepared for the City of Belton;

WHEREAS, the Comprehensive City Plan includes the report and maps prepared by Bucher, Willis & Ratliff, Consulting Engineers, Planners and Architects titled the Comprehensive Plan Update, City of Belton, including Introduction, Population and Economics, Development Patterns, Public Facilities, Goals, Objectives and Policies, Future Land Use, Thoroughfare Plan, the Existing Land Use Map Update and Future Land Use Map;

WHEREAS, proper notice was published in at least one newspaper having general circulation in the City, fifteen days in advance of the public hearing, identifying the time and place of said hearing;

WHEREAS, a quorum of the Planning Commission was present to constitute a meeting;

WHEREAS, the Comprehensive City Plan and maps therein were discussed;

WHEREAS, the Public Hearing was closed and the meeting continued to the next regularly scheduled Planning Commission meeting;

WHEREAS, it was moved and seconded that the report titled Comprehensive Plan Update, City of Belton, Missouri, and all maps therein, be approved as the Comprehensive City Plan for the City of Belton, Missouri, and that copies be certified to the Board of Alderman, City Clerk, and County Recorder of Deeds; and

WHEREAS, the motion carried by a majority vote of the full membership of the City Planning Commission.

NOW, THEREFORE, be it resolved by the Planning Commission of the City of Belton, Missouri, that said Comprehensive City Plan Update and all maps therein are hereby approved and adopted.

PASSED AND APPROVED BY THE PLANNING COMMISSION OF THE CITY OF
BELTON, MISSOURI, THIS 3rd DAY OF February, 1992.



CHAIRMAN

R92-1

**A RESOLUTION BY THE BOARD OF ALDERMEN
ADOPTING THE COMPREHENSIVE CITY PLAN FOR THE
CITY OF BELTON, MISSOURI.**

WHEREAS, the City of Belton has a duly constituted Planning Commission as required by law;

WHEREAS, the Planning Commission has caused a Comprehensive City Plan to be prepared for the City of Belton;

WHEREAS, the Comprehensive City Plan includes the report and maps prepared by Bucher, Willis & Ratliff, Consulting Engineers, Planners and Architects, titled the Comprehensive Plan Update, City of Belton, including Introduction, Population and Economics, Development Patterns, Public Facilities, Goals, Objectives and Policies, Future Land Use, Thoroughfare Plan, the Existing Land Use Map Update and Future Land Use Map;

WHEREAS, a certified copy of the Comprehensive City Plan and Planning Commission adopting resolution were forwarded to the Board of Aldermen;

WHEREAS, the Board of Aldermen did review said resolution and plan;


WHEREAS, it was moved and seconded that the report titled Comprehensive Plan Update, City of Belton, Missouri, and all maps therein, be approved as the Comprehensive City Plan for the City of Belton, Missouri; and

WHEREAS, the motion carried by a majority vote of the full membership of the Board of Aldermen of the City of Belton, Missouri.

NOW, THEREFORE, be it resolved by the Board of Aldermen of the City of Belton, Missouri, that said Comprehensive City Plan Update and all maps therein are hereby approved and adopted.

**PASSED AND APPROVED BY THE BOARD OF ALDERMEN OF THE CITY OF
BELTON, MISSOURI, THIS** 11th **DAY OF** February, **1992.**

ATTEST:



CITY CLERK



MAYOR

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INTRODUCTION

INTRODUCTION

Purpose of the Plan

The adoption of a Comprehensive Plan update by the City of Belton Planning Commission is an opportunity for the entire community to work together for the future. The Plan Update allows the City and Belton residents to form a consensus about how the public should respond to growth in the northwest Cass County region. Further, the plan offers a way for the participants to shape a vision for how the area could possibly develop.

A land use plan is not handed down to the local jurisdiction from some higher authority. Rather, the plan is a product of a local process. The noted regionalist, Benton MacKaye, wrote that a community plan is **revealed** as the residents work together with the jurisdiction and articulate their objectives for growth.

Belton is composed of a variety of physical, environmental, economic and demographic conditions. The comprehensive planning process identifies these conditions and their relationship to the functioning of the city as a whole. The planning process begins by reviewing existing conditions and continues by projecting anticipated changes into the future. Understanding these changes and their impacts establishes a framework with which to coordinate development in the best interest of the City.

This updated section of the Comprehensive Plan is a supplement to the most recent Belton Comprehensive Plan which was adopted in 1982. It is a review of the most current population data, and a summary of the changes which have occurred in economic development, community facilities, and existing land use. The Future Land Use Plan will be revised, accordingly, in response to this new information.

**CHAPTER ONE
POPULATION AND ECONOMICS**

CHAPTER ONE POPULATION AND ECONOMICS

POPULATION

An evaluation of past trends in population and a reliable estimate of anticipated changes in population are important components of the comprehensive planning process. As changes occur over time in the Belton area, the nature of the population, both in size and structure, will determine the kind of land use issues which will need to be addressed.

This Plan Update includes an examination of the major population trends which have occurred in the City of Belton since 1982, population trends for the regional area surrounding the City of Belton, as well as a review of existing population projections for the City of Belton and its regional area. Figures for the eight-county Kansas City Metropolitan Area have been included, as well, to provide a comparison within the metropolitan context.

Local Demographic Trends

The population of the City of Belton has increased from 13,533 individuals in 1980 to 18,150 individuals in 1990. This represents an increase of 34.1% over the last 10 years (Table 1.1). Compared to the 10.3% increase in the number of individuals between 1970 to 1980, this recent growth is significant and contributes to making the City of Belton the tenth fastest growing city in Missouri during the 1980's.

Regional Demographic Trends

Looking at local population data within a regional context is an informative way to evaluate its significance. Cass County, the county within which Belton is located, has been and continues to be one of the fastest-growing counties in the state. Within the last 10 years, Cass County has increased steadily and significantly in population from 51,028 individuals in 1980 to 63,808 individuals in 1990 (Table 1.1). This growth would appear to be a direct result of its relationship with and access to the Kansas City Metropolitan Area. Within the context of Metropolitan Area, Cass County ranks 6th in population, followed by Platte and Lafayette Counties. Cass County's 1990 population represents 4.1% of the ten-county area (Table 1.2).

Table 1.1
Population Trends
Belton & Regional Area
1970 - 1990

	1970	1980	1990	% Change 1970-1980	% Change 1980-1990
Belton	12,270	13,533	18,150	10.3%	34.1%
Cass County	39,448	51,029	63,808	29.4%	25.0%
Kansas City* Metropolitan Area	1,273,926	1,327,107	1,556,280	4.2%	18.0%

Source: U.S. Bureau of the Census

Note: * The 1970 and 1980 Kansas City Metropolitan Area included Johnson, and Wyandotte Counties in Kansas and Cass, Clay, Jackson, Platte, and Ray Counties in Missouri. In 1990, Miami County, Kansas, Leavenworth and Lafayette Counties in Missouri were added to the Kansas City Metropolitan Area. For comparison purposes, the 1970 and 1980 population of these counties were added to the Metropolitan Area totals.

Between 1980 and 1990, 75% of Cass County's growth took place in incorporated areas in the northwest portion of the County as shown in Table 1.4. The growth in Belton alone was responsible for 36.1% of Cass County's population increase of 12,779 people since between 1980 and 1990.

Table 1.2
1990 Population
Metropolitan Area Counties

	1990 Population	% of Total
Jackson	633,232	40.4
Johnson	355,054	22.7
Wyandotte	161,993	10.3
Clay	153,411	9.8
Leavenworth	64,371	4.1
Cass	63,808	4.1
Platte	57,867	3.7
Lafayette	31,107	2.0
Miami	23,466	1.5
Ray	21,971	1.4
Total	1,556,280	100.0%

Source: U.S. Bureau of Census

Table 1.3
Components of Population Change
Cass County and Neighboring Missouri Counties

County	Percent Change 1970-80	Percent Change 1980-87	Natural Increase 1980-87	Net Migration 1980-87
Cass	29.4	16.0	3,070	5,114
Clay	10.3	8.8	8,345	3,675
Jackson	-3.8	1.4	31,854	(23,150)
Platte	44.5	14.5	3,406	3,297
Ray	21.5	4.4	571	358
Missouri	5.1	3.8	194,428	(8,353)

Source: Office of Social and Economic Data Analysis, University of Missouri

Both natural increases and net-migration account for the county's change in population as reported in the recently adopted Cass County Comprehensive Plan. Between 1980 and 1987, there were 3,600 more births than deaths in the county and 6,900 more people moved into Cass County than moved away.

Table 1.4
Population of Incorporated Areas
Northwest Portion of Cass County, Missouri
1980-1990

Incorporated Area	1980	1990	% Change 1980-1990	% of County Total Change
Belton	13,533	18,150	34.1%	36.1%
Harrisonville	6,372	7,683	20.6%	10.2%
Lake Winnebago	681	748	9.8%	.5%
Lee's Summit (partial)	50	433	766%	3.0%
Peculiar	1,571	1,777	13.1%	1.6%
Pleasant Hill	3,301	3,827	15.9%	4.1%
Raymore	<u>3,154</u>	<u>5,592</u>	<u>77.3%</u>	<u>19.1%</u>
Total	28,662	38,210	33.3%	75.0%

Source: U.S. Bureau of Census

Local Population Projections

The Mid-America Regional Council (MARC) Research Data Center population projections for specific areas within the northwest portion of Cass County. The areas which they chose to isolate are called Regional Analysis Areas (Figure 1-1) and are as follows:

The two areas encompassing the City of Belton:

- **Area 180** is that area bounded on the north and west by the Cass County Line, on the south by Missouri 58 Highway, and on the east by the Belton/Raymore city limits;
- **Area 182** is that area bounded on the north by Missouri 58 Highway, on the west by the *Cass County* Line, on the east by U.S. 71 Highway, and on the south by Harrelson Road and the unnamed County Road two miles north of the Mount Pleasant/Union Township boundary;

The three other significant growth areas in the northwest portion of Cass County:

- **Area 181** is the area in *Cass County* that is included within the Richards-Gebaur Air Force Base property limits;
- **Area 183** is the area included within the Raymore Township boundaries; and
- **Area 184** is the area included within the Big Creek Township boundaries.

These areas combined are witnessing the county's most substantial growth and include the City of Belton. MARC used a cohort-component demographic model, a statistical method which uses individual rates for each of the three components of population change, fertility, mortality and migration, to project population growth. The MARC figures calculate a migration rate based on the assumption that migration is related to current labor force participation and future employment opportunities. Migration refers to the number of people that move in and out of an area and is the most critical component which is factored into the projection equation. This is because it is the most volatile and least predictable of the three components of population change.

Regional Analysis Area 180, which includes the northern half of Belton, is expected to increase 16.8% from 10,821 individuals in 1990 to 12,637 individuals in 2010. Regional Analysis Area 182, which includes the southern part of Belton, is expected to increase 31.0% from 6,100 individuals in 1990 to 7,989 individuals in 2010 (Table 1.5).

The Regional Analysis Areas in northwest Cass County are projected to increase significantly with Area 184, which includes Lake Winnebago, showing a 136% increase by the year 2010. Area 183, which includes all of the City of Raymore, shows a 127.5% increase by the year 2010. Area 181 (Richards-Gebaur) is expected to lose 311 people.

The two sets of population projections for Cass County which have been included in this report were generated by the Missouri Office of Administration (MOA) and by the Mid-America Regional Council's (MARC) Research Data Center in 1988. MARC and MOA are in general agreement as to their projections for the future population of *Cass County*. The two sets of figures generated by these organizations all project a steady increase in population of between 41% and 42% between 1980 and 2010. (Table 1.5)

City of Belton Population Projection

The City of Belton population projection is presented in Table 1.5. The population was projected by a combination of techniques:

- First, population was projected from 1980 and 1990 census data by a cohort-survival method which projects the existing population trend into the future based upon the three components of population change-fertility, mortality, and migration. The population base and new live births between 1980 and 1990 are separated into male and female cohorts and into five year age groups. Infant mortality rates, survival rates and sex ratios at birth are calculated and applied to each group.

This method generates a migration rate for the population during the past decade. In the case of Belton, population has increased both from natural replacement (births exceeding deaths) and from migration into the city.

- Second, Bucher, Willis & Ratliff calculated longer term population trends since the 1970 by linear regression to factor-in longer term data.

**Table 1.5
 Population Projections
 Belton and Regional Area
 1990 - 2010**

	1990 ¹	2000	2010	% Change 1990-2010
Belton² (Long Term Trend)	18,150	22,688	27,679	52.5%
Belton³ (Short Term Trend)	18,150	24,287	31,328	76.6%
Regional Analysis Areas⁴				
Area 180 (Belton Northern Half)	10,821	12,047	12,637	16.8%
Area 182 (Belton Southern Half)	6,100	7,063	7,989	31.0%
Cass County				
MARC	60,001	67,522	72,055	20.1%
MOA ⁵ (recent migration)	60,155	67,566	72,433	20.4%
KC Metro Area	1,511,707	1,607,386	1,690,193	11.8%

Source: ¹Census Preliminary Count, 1990

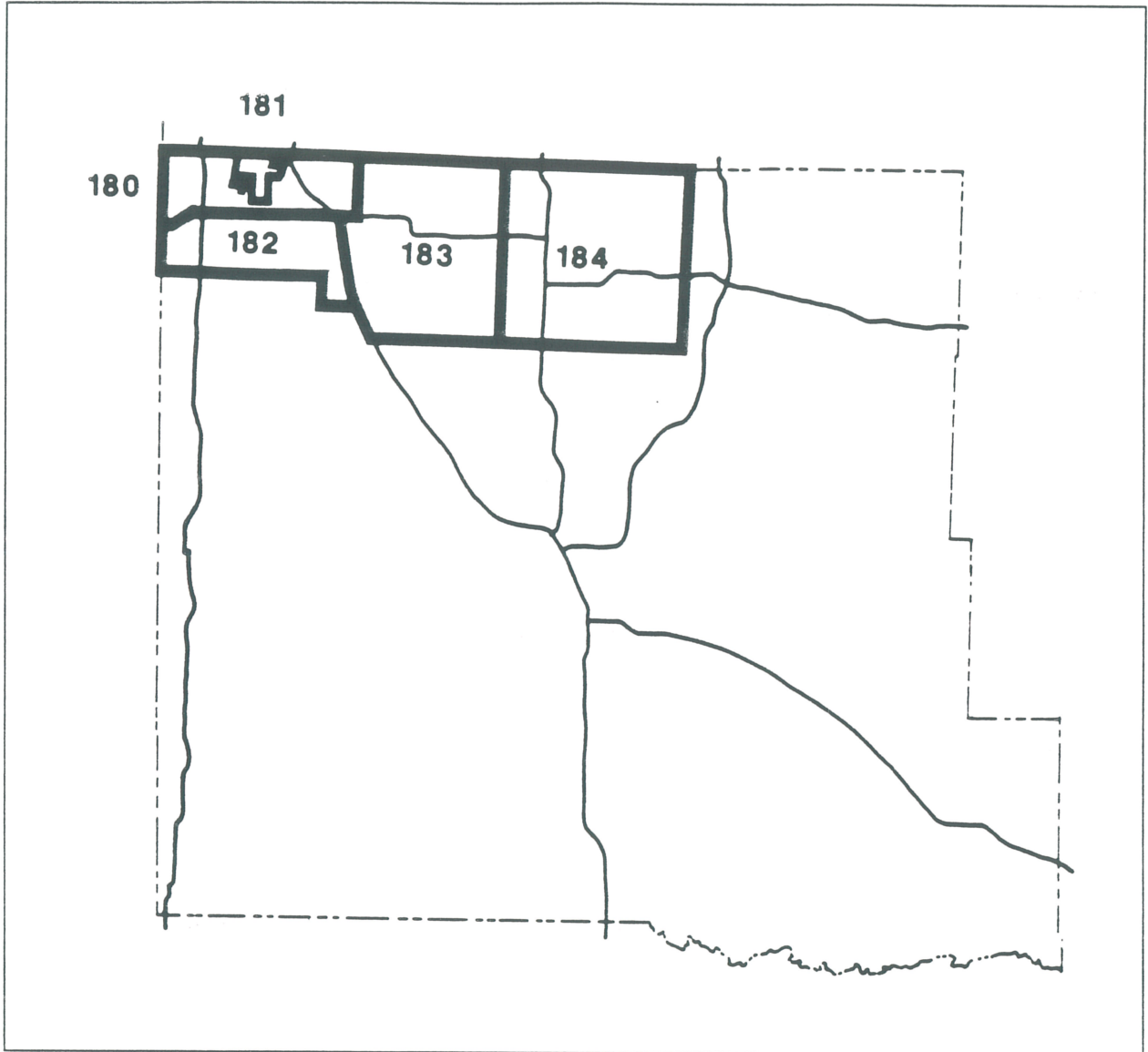
²Belton population projection by Bucher, Willis & Ratliff by an age-cohort survival population projection for Belton, averaged with linear regression.

³Belton population projection by Bucher, Willis & Ratliff by age-cohort survival method based on past decade data, only.

⁴MARC 1988 Projection

⁵MOA: Missouri Office of Administration

Figure 1-1
MARC REGIONAL ANALYSIS AREAS
BELTON REGIONAL AREA



Source: Mid-America Regional Council/Research Data Center, January 1988.

Cass County has had the greatest increase in number of households of any neighboring county in Missouri between 1980 and 1990. The percentage increase in households as compared to the State of Missouri was significant. (Table 1.6)

**Table 1.6
Change in Household Composition**

County	Number Households 1980	Number of Households 1987	Persons/ Household 1987	Percent Change In Number Households 1980-87	Percent Change In Total Population 1980-87
Cass	17,900	20,200	2.9	12.9	16.0
Clay	51,000	55,700	2.7	9.2	8.8
Jackson	243,500	253,000	2.5	3.9	1.4
Platte	17,000	18,900	2.8	11.2	14.5
Ray	7,700	8,200	2.7	6.5	4.4
Missouri	1,820,600	1,910,900	2.8	5.0	3.8

Source: Office of Social and Economic Data Analysis, University of Missouri

Social and Economic Data

Total personal income in Cass County increased at a faster rate than other nearby Missouri counties during the past decade. Total personal income in the county increased by 64.2%--a faster rate than the state as a whole. (Table 1.7)

Cass County is becoming more and more a place of residence for commuters. In 1980 more than one half of residents in Cass County were employed outside the county. This pattern is typical for the suburban counties in the Kansas City Metropolitan Area. In effect, Cass County has emerged during the past twenty years in the same commuting pattern as Metropolitan Area counties. (Table 1.8)

Table 1.7
Income Change and Inflation Adjusted
Per Capita Income

County	Personal Income 1980 (\$000)	Personal Income 1986 (\$000)	Percent Change 1980-86	Per Capita Income 1980	Per Capita Income 1986	Inflation Adjusted Per Capita Income 1986
Cass	\$ 484,681	\$ 795,884	64.2	\$ 9,449	\$13,895	\$10,924
Clay	1,467,495	2,296,687	56.5	10,721	15,854	12,464
Platte	508,441	802,717	57.9	10,921	15,749	12,381
Ray	187,584	283,372	51.1	8,756	12,814	10,074
Missouri	\$45,778,702	\$70,502,935	54.1	\$ 9,298	\$13,916	\$10,940

Source: Office of Social and Economic Data Analysis, University of Missouri

Table 1.8
Percent of Workers Employed Outside
County of Residence

County	Percent Commuting 1960	Percent Commuting 1970	Percent Commuting 1980
Cass	27.3	48.8	54.3
Clay	42.1	47.8	47.9
Jackson	8.1	11.4	15.1
Platte	50.4	56.6	53.9
Ray	34.0	47.4	52.4

Source: Office of Social and Economic Data Analysis,
University of Missouri

Retail sales in Cass County are relatively low on a per capita basis, reflecting the fact that neighboring counties have more retail businesses per capita. The rate of change, however, in Cass County during the past decade has been great compared to other metropolitan area counties. (Table 1.9)

**Table 1.9
Change in Retail Sales**

County	Retail Sales 1982 (\$000)	Retail Sales 1987 (\$000)	Change 1982-87	Per Capita Retail Sales 1987
Cass	\$ 166,814	\$ 255,152	53.0	\$4,309
Clay	806,215	1,142,385	41.7	7,692
Jackson	3,424,679	4,625,848	35.1	7,251
Platte	130,509	254,124	94.7	4,791
Ray	53,140	65,452	23.2	2,934
Missouri	\$21,655,411	\$30,175,565	39.3	\$5,913

Source: Office of Social and Economic Data Analysis, University of Missouri

**CHAPTER TWO
DEVELOPMENT PATTERNS**

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ANNEXATIONS

In the last nine years the City of Belton has incorporated a significant amount of new land into its city limits. This increase of 805 acres brings the amount of land area in the City to a total of 7,762 acres representing an increase of 11.6% since 1982. All three of the recently annexed areas are located in the northwest corner of the City within the vicinity of Richards-Gebaur Air Base. The eastern-most of these three areas is an area that was, prior to Belton's annexation, included within the Base property.

Two additional areas are proposed to be annexed into the City in the near future. One of these areas, almost completely surrounded by the present city limits, is located in the City's southwest corner and is 159 acres in size. The other, much larger area, contains the 744 acres of land which extends to the south along 71 Highway.

EXISTING LAND USE SURVEY

This section examines the pattern of existing land uses which has developed in the City of Belton since 1982. The inventory of existing land uses describes both the amount of land in each land use category and the distribution of uses throughout the City. Before an updated future land use plan for the City of Belton can be generated, it is necessary to have a full understanding of the existing land use pattern and the development which has occurred since the last Comprehensive Plan in 1982. The location and character of these additional existing uses will have an obvious impact on the location and character of future uses.

Land Use Survey

A survey of the number and type of building permits issued since 1982, cross-referenced with aerial photographic information and a windshield survey field check, was conducted by Bucher, Willis & Ratliff with help from Belton city staff. The land use inventory is a current identification of the uses of land throughout the study area. Land use classifications are as follows:

1. Residential
 - a. Single-Family Dwellings
 - b. Two-Family Dwellings
 - c. Multi-Family Dwellings
 - d. Mobile Homes
 - e. Farmsteads
2. Commercial
3. Public and Semi-Public
4. Industrial
5. Parks and Recreation
6. Agricultural or Vacant

These categories can be defined in the following manner:

1. Residential: That land which is occupied by one or more dwelling units, including accessory buildings, the primary use being for sheltering individuals, families, or groups of persons. *Examples: single-family residences, duplexes, apartments, mobile homes, farmsteads and nursing homes.*
2. Commercial: That land occupied by buildings or merchandise, the primary purpose of the land being a location for the wholesale or retail sale of goods and services. *Examples: grocery stores, clothing, car sales and service, farm equipment sales.*
3. Public and Semi-Public: Land or buildings occupied by agencies of the government or by religious, educational or civic groups, excluding lands used for recreational purposes. *Examples: schools, churches, cemeteries, city buildings, fire stations.*
4. Industrial: That land occupied by buildings, materials or equipment, the primary use being for storage, transportation, or manufacturing of a product. *Examples: manufacturing, construction yards, heavy equipment or material storage, warehousing.*
5. Parks and Recreation: Land used for both active and passive recreational activities.
6. Agricultural or Vacant: Land on which none of the above uses are performed.

The results of the survey are presented in both graphic form as a map and tabular form as acreage calculations. The land use map is not a plan, but rather a representation of the inventory data to be referenced throughout the planning process. To keep the map current, the inventory should also be kept current. It is recommended that the City conduct a periodic¹ land use survey, or update the map and adjust the inventory calculations as new building permits are issued, or as tax records are changed. By keeping the land use data current, the City can always assess where it is in relation to its development objectives and goals as outlined in following chapters of the Comprehensive Plan.

Table 2.1
Existing Land Use
Belton, Missouri
1982 - 1991

<u>Land Use Category</u>	<u>1982 Acres</u>	<u>% of Total Developed Land</u>	<u>1991 Acres</u>	<u>% of Total Developed Land</u>	<u>% Increase in Acreage 1982 - 1991 % Change</u>
Residential	1,084	44.9%	1,527	50.1%	40.9%
<i>Single-Family</i>	822	34.1%	1,075	35.2%	30.7%
<i>Two-Family</i>	115	4.8%	208	6.8%	80.9%
<i>Multiple-Family</i>	34	1.4%	47	1.5%	38.2%
<i>Mobile Home</i>	93	3.9%	177	5.8%	90.3%
Farmstead	20	0.3%	20	0.6%	0.0%
Parks and Recreation	206	2.1%	228	7.5%	9.2%
Public and Semi-Public	199	8.2%	241	7.9%	21.1%
Commercial	138	5.7%	198	6.5%	43.5%
Industrial	31	1.3%	51	1.7%	64.5%
Streets and Highways	710	29.4%	760	25.0%	7.0%
Railroad R.O.W.	45	1.9%	45	1.5%	0.0%
Total Developed Acreage	2,413	100.0%	3,050	100.0%	26.4%
Agricultural and Vacant	4,544	----	4,723	----	3.9%
Annexations (1982-1991)			805		
TOTAL	6,957	----	7,773	----	

Source: Bucher, Willis & Ratliff

¹It is recommended that new building permits be recorded annually.

Survey Results

Table 2.1 displays a summary of existing land uses within Belton. Overall, 637 acres or 8.2% of the City's total land area has been developed in some way since 1982. This increase raises the amount of developed land in the City to 3,050 acres which is 39.2% of the City's total land area. In 1982, the amount of developed land as a percentage of the total land area was less, at 34.7%. These figures indicate that the City of Belton is gradually becoming more densely developed even with the addition of the 806 newly annexed areas most of which are currently vacant or agricultural land.

Residential Development Patterns

The City of Belton added a total of 443 acres of residential land uses to its total developed land area. This represents a 40.9% increase in the amount of residential land since 1982.

The results of the land use survey show that, in terms of acreage, the City's predominant land use continues to be the single-family residence. Since 1982, 251 new acres of land were developed for single-family use. The majority of this development occurred within platted subdivisions located throughout the City of Belton. It appears from the figures that the greatest amount of single-family development is occurring in the northeast portion of the City. The subdivisions in this area of the City, combined, accounted for 43% of the total increase in single-family development. From this group, the Martinwood subdivision added 75 acres to its total developed land area which represents the greatest increase in any single subdivision area in the City of Belton. Second to Martinwood was West Belton, in the far southwest portion of the City, showing an increase of 32 acres in single-family uses since 1982.

Two-family residential units continue to increase in significance in the City of Belton. The number of acres of two-family uses increased 93 acres, increasing this use as a percentage of the total developed land from 4.8% in 1982 to 6.8% in 1991. The largest percentage of this increase was due to the incorporation of the former Richards-Gebaur Base housing development.

The increase in multi-family residential uses in Belton was significantly low. The number of acres of this use increased from 34 to 47 over the last nine years.

An 84 acre area of land was added to the City's 1982 total of mobile home residential uses increasing this use as a percentage of the total developed land to 5.8%.

Commercial and Industrial Development

The City of Belton added 60 acres of land to its developed commercial totals. It is clear that the commercial area witnessing the greatest amount of growth is in the vicinity of the 71 Highway/M-58 interchange which has added 35 acres of new commercial uses. Commercial development along North Scott increased by 15 acres while only 7 acres of land within the Tax Increment Financing District (TIF) was developed for commercial use.

In the category of industrial uses, the location of the 8 acre Quick 'N Tasty was included in the 20 additional acres of Belton industrial development. All industrial development which occurred in the City of Belton since 1982, occurred within the boundaries of the City's Tax Increment Financing District.

Park Land

Three new areas of park and recreation land were added to the City's total of open space resources. One of these is included within the land area which was annexed from the Richards-Gebaur Air Base and is being used as a temporary park. An approximately eight-acre parcel of land will extend the limits of the existing Memorial Park and an eight-acre park has been established in West Belton. Bicentennial Park which was included as one of the 1982 park areas is no longer owned by the City of Belton. This brings the City to an approximate total of 228 acres of park land within its jurisdiction.

THOROUGHFARE IMPROVEMENTS

There are a number of thoroughfare improvements planned and recently completed within the boundaries of the Belton city limits which are expected to impact the future pattern of growth. They are as follows:

Completed Projects

- Widen M-58 from Mullen Road to the Belton/Raymore city limits to five-lanes.
- Interchange improvements at M-58 and 71 Highway.

Funded Projects

- Widen M-58 from Route Y to Mullen Road to five-lanes.
- Build 71 Highway/Route Y interchange south on and off ramps.

Recommended Improvements

- Widen M-58 from Route D to west of Route Y to three-lanes.
- Widen 71 Highway from 155th Street to M-58 to six-lanes.

Federal Aid to Urban Systems

- Widen North Scott from Route 58 to Markey Road to four-lanes.
- Widen North Scott from Markey Road to 155th Street to four-lanes.
- Widen M-58 from Scott Avenue to Route Y to four-lanes.
- Kentucky Road from M-58 to 155th Street
- Mullen Road from Route Y to Cambridge Road
- M-58 through its Belton extent
- Route Y from the southern city limits to 71 Highway
- Prospect Avenue from Cambridge to M-150
- Cambridge Road from Prospect to Mullen Road
- County Line Road from Kentucky Road to 71 Highway
- 71 Highway through its Belton extent

Sources: City of Belton
MARC Draft Year 2010 Transportation Plan
Missouri Highway & Transportation Department
Cass County Comprehensive Plan

REGIONAL DEVELOPMENT PATTERNS

The results of the land use survey which was conducted in 1990 for the recently adopted Cass County Comprehensive Plan show that, in terms of acreage, the county's predominant land use is agricultural. Despite the fact that Cass County includes large areas of suburban

concentrations, 95% of the total land area is either agricultural or vacant. The county's predominant residential use is the farmstead. This use occupies 4,004 acres or 18 percent of the county's total developed land area. The percentage of farmsteads far exceeds those of any of the other residential uses; however, a substantial suburban pattern of growth extending southward from the Belton-Raymore area and around Harrisonville may conflict with agricultural operations.

Several planned residential developments have been developed in the County within the vicinity of the City of Belton. Immediately to the south of the Belton city limits, lying adjacent to the 71 Highway corridor, is a planned development designed for older adult living which when complete will consist of 600 attached garden homes. Another large-scale residential planned development is Loch Lloyd which lies immediately to the west of the Belton city limits across D Highway. This planned community when fully developed, will consist of low density single-family residential surrounding a recreational lake and golf course area.

A development plan for the 836 acres of land which was once occupied by the Air Force at Richards-Gebaur Air Base has been prepared for the City of Kansas City. The master plan outlines areas for light industrial, retail, office/warehouse and institutional uses as well as some areas to be reserved for recreation and open space.

To the northwest of the City of Belton is an extended area of open space including a number of contiguous park areas which follow the course of the Little Blue River. This area provides the regional area with valuable recreation and open space opportunities.

CASS COUNTY URBAN RESERVE AREA

The Cass County Planning Commission adopted a new comprehensive plan at the end of 1990 after considerable public participation and debate. The City of Belton and other Cass County communities contributed directly to the debate surrounding the new county-wide land use plan. The City of Belton and others submitted resolutions of support for the county plan, which, among other objectives, strives to encourage urban growth to concentrate within the corporate limits of cities, or within the "Urban Reserve Area" near cities.

The following is excerpted from the Cass County Comprehensive Plan and describes the Urban Reserve Area concept that has been adopted.

The Cass County Future Land Use Plan encourages the concentration of urban land uses so as to maximize the benefits from land already within the urban area through in-fill development on under-utilized sites and in areas within proximity of municipal services. Development (or the type of development) can be encouraged or discouraged by designating zones of development each with its own design standards and representing development standards which are more compatible with city standards.

Urban Area Reserve

An area one mile surrounding each of the incorporated areas has been defined as an urban area reserve and is the area within which the urban-oriented land uses in the County will be encouraged to locate. The land within the boundaries of this zone is intended to be developed in such a way that the transition from rural to urban uses occurs in an efficient manner and a pattern of inefficient "leap-frog" development is avoided.

Primary Residential Area

The first one-half mile of the urban reserve has been designated as the primary residential area. This urban area reserve would include, as well, any areas that are included within both a resolution and a plan of intent to annex. It is within this area that the following policy will be enforced.

Only one "sell-off" parcel of not less than five acres in area per quarter of a quarter section of land provided sewage disposal requirements may be met. However, developer or subdividers may exceed this requirement within this zone if they petition the adjacent city for annexation and develop to their standards.

Secondary Residential Development Area

The area within the one-mile urban area reserve, but outside of the one-half (1/2) mile primary residential area, has been designated as the secondary residential area. This would include, as well, those land areas that are within one-half (1/2) mile of an urban area, but are not available for

annexation due to the fact that they are not contiguous to present city limits. It is within this area that the following policy will be enforced.

Only one "sell-off" parcel of not less than five acres in area per quarter of a quarter section of land provided sewage disposal requirements may be met. However, developers or subdividers may exceed this requirement within this zone if the subdivision design, including the construction of roadways and water service, is provided to the nearby city's standard, and the provision for sewage disposal on a system other than conventional septic tanks is incorporated within the improvement. (Cass County Comprehensive Plan, 1990)

REGIONAL THOROUGHFARE IMPROVEMENTS

There are a number of major regional thoroughfare improvements that are expected to have an effect on Belton and the surrounding area. The completion of the Bruce R. Watkins Drive, well outside of the immediate vicinity of Belton, is, nevertheless, expected to have an effect on the development in northern Cass County. The Missouri Highway and Transportation Department is in the process of evaluating alternative routes for the relocation of Missouri Highway 150 which will connect with Kansas Route 150. In addition, there has been discussion among a number of groups in the south Kansas City Metropolitan Area regarding two significant and long-term thoroughfare plans. The first concerns the realignment and widening of Missouri 58 Highway to the south of the City of Raymore and connecting with 187th Street at the southern extent of the Belton city limits. This would include the construction of a new interchange at 71 Highway. In addition there has been discussion surrounding the idea of reserving the right-of-way through a portion of the county to the south of Belton for the future alignment of what has been called the South Belt Highway. This segment of a freeway loop would connect with thoroughfares to the east and west and eventually encircle the entire metropolitan area. Another recommended major thoroughfare improvement within the vicinity of the City of Belton is to widen Missouri Highway D from M-150 to M-58 to four lanes.

PROPOSED ANNEXATIONS

The City of Raymore has made public its plans to annex a portion of land bounded by its current southern and western extent and extending south along 71 Highway.

The City of Kansas City is in the initial stages of proposing to annex an area of land to the west of the City of Belton. This land area extends from the Jackson County/Cass County line toward the south to the section line which separates Sections 17 and 20 and is bounded by Holmes Road on the east and State Line on the west. A second portion of this proposed annexation is the area of land which lies between the Belton city limits which extend through Section 4 and the railroad right-of-way adjacent to and west of the Richards-Gebaur runway area.

**CHAPTER THREE
PUBLIC FACILITIES**

CHAPTER THREE PUBLIC FACILITIES

Public facilities such as water and sewer systems, educational facilities, parks and recreational facilities are vital components of the operation of a city. This chapter will inventory the availability and condition of existing public facilities to determine if they meet the needs of the present and future population of the City of Belton.

SANITARY SEWER FACILITIES

To promote health, safety and environmental quality, as well as growth, an adequate sanitary sewer system must be in place to serve the community. The efficiency and capacity of the system will strongly influence the future well-being of the community. Because the municipal wastewater system is both a technical and capital intensive operation, its oversight, as well as its consideration in the comprehensive plan are crucial so as to avoid potential service and environmental problems.

Sanitary sewer service in Belton is provided by both the City and the Little Blue Valley Sewer District. The City's sewage treatment plant, located in south Belton on the West Fork of East Creek, services the East Creek watershed north of 183rd Street. The land in the Oil Creek watershed which is north and east of the railroad tracks in Belton, is served by the Little Blue Valley Sewer District. A sewer project was completed in 1982 which provided sanitary sewer service to the Martinwood and Dikewood Subdivisions in northeast Belton, previously on individual septic systems.

The City's sanitary sewer system primarily operates by gravity flow to the City's treatment plant or to the Little Blue Valley Sewer System. However, lift stations are employed in some areas to assist in the flow of wastewater where physical constraints make gravity flow prohibitive. Since the 1983 Comprehensive Plan, four lift stations have been abandoned in the Little Blue Valley Sewer District Watershed. The following six lift stations are presently used in Belton:

- 1) Bel-Ray (Mobile Home Park)
- 2) Cedar Tree Shopping Center
- 3) Southview Ford at Markey Road and Frontage Road
- 4) Cimarron West at Markey Road and C.B. Road

- 5) Cimarron East at Markey Road and Cimarron Trail
- 6) Markey Meadows in Markey Meadows Subdivision

The Feasibility Study for Wastewater Interceptor and Treatment Facilities, completed in 1989, estimated the 1987 average daily flow through the City's treatment plant to be .91 million gallons per day (mgd). The peak average measured during this study was 2.86 mgd. Significant inflow and infiltration are experienced throughout Belton's sewage system which contribute to high peak flows. The City is currently pursuing a program of lining defective sewer lines, although these problems will most likely continue given the age of the system and the soil and rock conditions throughout the City.

In 1992, construction will begin on a new treatment plant for the City of Belton. The plant, which will be located at 211th Street and Mullen Road near the confluence of the West Fork and the main channel of East Creek, will be capable of treating 2.45 mgd of wastewater. The plant will also be designed to handle a peak flow of 4,940 gallons per minute (7.1 mgd). A pump station will combine the flow from the 22,300 linear feet of new 27 inch and 30 inch gravity sewer line from the old wastewater treatment facility along the west branch of East Creek and 16,500 linear feet of new 12 inch and 15 inch gravity sewer line along the main channel of East Creek. An 8 inch linear force main will connect the pump station to the new treatment facility.

Wastewater treatment at the City's new treatment facility will be by activated sludge through a sequencing of batch reactor process which include a sequencing of oxidation and settling basins. This operation will alternate between aeration and mixing followed by sludge removal and treated water discharge. In addition, tertiary treatment will be provided by ultraviolet disinfection prior to discharge of the treated water into the main channel of East Creek.

The new treatment facility will be designed to accommodate a projected population of 22,220 in the year 2012. This population will not include those Belton residents that are and will be served in the future by the Little Blue Valley Sewer District facility. The treatment facility will provide service to the proposed annexation areas plus the unincorporated area within the East Creek watershed above 211th Street.

WATER FACILITIES

As with the sanitary sewer system, an abundant source of water together with an efficient distribution system are essential to the growth and development of Belton. A municipal water system consists of three main components: supply, storage and distribution. The integration of these components creates the overall system which is responsible for providing the community's supply of potable water and firefighting capability.

The City of Belton contracts with Kansas City, Missouri to purchase potable water. Two pump stations serve the City in distributing water. The Holmes Street pump station is located south of 155th Street on Holmes Road and contains three 1,000 gallons per minute (gpm) pumps. A second pump station is located south of 155th Street on North Scott. This pump station uses one 1,700 gpm pump, two 1,000 gpm pumps and two 350 gpm pumps.

During 1990, the North Scott pump station and the Holmes Street pump station each pumped 475.6 million gallons and 101.7 million gallons of water respectively for a total of 577.3 million gallons of water used in Belton for the year. The average daily flow in the City of Belton is 1.58 mgd, although in August of 1990, water usage peaked at 60.1 million gallons for the month or an average of 2 mgd.

The City of Belton currently has three water storage facilities in use: a 2 million gallon surface storage tank at the Holmes Street pump station, a 1.5 million gallon elevated tank located southwest of Highway 71 and 58 Highway and a 500,000 gallon elevated tank located west of North Scott, one block north of 58 Highway. A 75,000 gallon elevated storage tank is located adjacent to City Hall, but is currently not in use.

Extensive improvements have been made in the Old Town area to upgrade water main size to a minimum of eight inches. Future improvements will include installing larger pipe to replace the principal mains and closing the loops within the distribution system. Additional extensions of the distribution system will also be needed to meet growth in the future annexation areas.

Undersized lines, particularly in the Lacy Estates development area and the Hargis Gardens area, present water distribution problems. Four inch lines in these areas are particularly sensitive to water use demands and pressure variations. Additional fire flow is also needed to serve the commercial development near the U.S. 71 Highway and 58 Highway

interchange, the schools and nursing home adjacent to South Scott Avenue and Cambridge Avenue and the commercial establishments along North Scott Avenue.

PARKS AND RECREATION

One of the most visible measures of the quality of life in a community is the park system. Parks and recreational facilities provide opportunities for rest and relaxation as well as a measure of quality of life in the community. This section includes an inventory of existing parks and recreational facilities in the City of Belton. The inventory is compared with national, state and regional standards to establish recommendations for park system improvements.

Different types of parks serve different functions in a community, each having different spatial, locational and equipment needs. Three basic types of parks generally serve a community: regional, community and neighborhood parks.

Regional Parks serve an area consisting of one or more counties and contain at least 100 acres. The primary attraction of a regional park is a large-scale recreational amenity such as a lake or wilderness area.

Community Parks provide separate facilities for quiet and active play. Competitive sports, passive entertainment, large group gatherings, and individual usage are characteristics of city-wide, community parks.

Neighborhood Parks serve the local residents of a specific area of the City. These parks are generally less than eight acres in size and contain relatively unstructured facilities such as playground equipment, picnic tables and basketball courts.

Obviously, there is some overlap between these categories. In particular, community parks often double as neighborhood parks for the immediate surrounding area. It is also common for a park to be in one category based on its size but another category based on its function.

For a city the size of Belton, the National Recreation and Park Association recommends at least 18 acres of neighborhood parks, 90 acres of community parks and 90 acres of regional parkland. Four neighborhood parks in Belton make-up a total of 43.5 acres which meets the standard number of acres for this park classification. Belton Memorial Park includes 29

A comparison to the National Recreational and Park Association standards shows that the City of Belton is currently deficient in the amount of land dedicated to parks. The long term trend population projection also shows that significant efforts should be made to plan for additional park land to meet future needs. Not only is the amount of park land an important planning need, but so to is the location of future parks. Currently, Belton's City parks are located on the west side of Highway 71. Future park facilities should be planned for the east side of the highway to serve residents there. The City of Belton has reserved approximately five acres of land near the Belton Police Station for a future park. Development plans for the Northeast Ward Park include a playground, shelter houses and athletic fields.

The National Recreation and Park Association has also set standards for recreational facilities based on the population of the community. Table 3.2 uses these standards in addition to state and regional facility standards, to compare with Belton's recreational facilities. A comparison to these standards shows that the City is deficient in the provision of several types of recreational facilities including tennis courts, basketball courts, picnic areas and playgrounds. These types of facilities should be incorporated into future park plans for Belton.



Table 3.2
Standards and Existing Facilities for Recreational Uses
Belton, Missouri

Recreational Facility Type	STANDARDS			BELTON	
	National ¹ Facility: Pop.	State ² Facility: Pop.	Metro Region ³ Facility: Pop.	Facilities Needed By Standards*	Existing ⁴ Facilities
Hand/Racquetball Courts	1:20,000	1:5,000	1:5,000	3	0
Ball Fields	1:5,000	1:1,500	1:1,500	3	7
Soccer/Football Fields	1:10,000	1:4,000	1:4,000	3	4
Tennis Courts	1:2,000	1:1,500	1:1,500	1	4
Volleyball Courts	1:5,000	1:3,000	1:3,000	3	0
Basketball Courts	1:5,000	1:3,000	1:1,000	3	2
Horseshoe Pits	N/A	1:2,000	1:2,000	9	3
Swimming Pools	1:20,000	800 ft. ²	1:5,000	0	1
Picnic Shelters	N/A	1:2,000	1:2,000	9	6
Picnic Tables	1:125	1:125	1:125	145	40
Playgrounds	N/A	1:1,000	1:1,000	18	3
Public Golf Course (18 holes)	1:50,000	1:25,000	1:20,000	0	2

*Comparisons are made to the lowest standard.

Sources: ¹National Recreation and Park Association

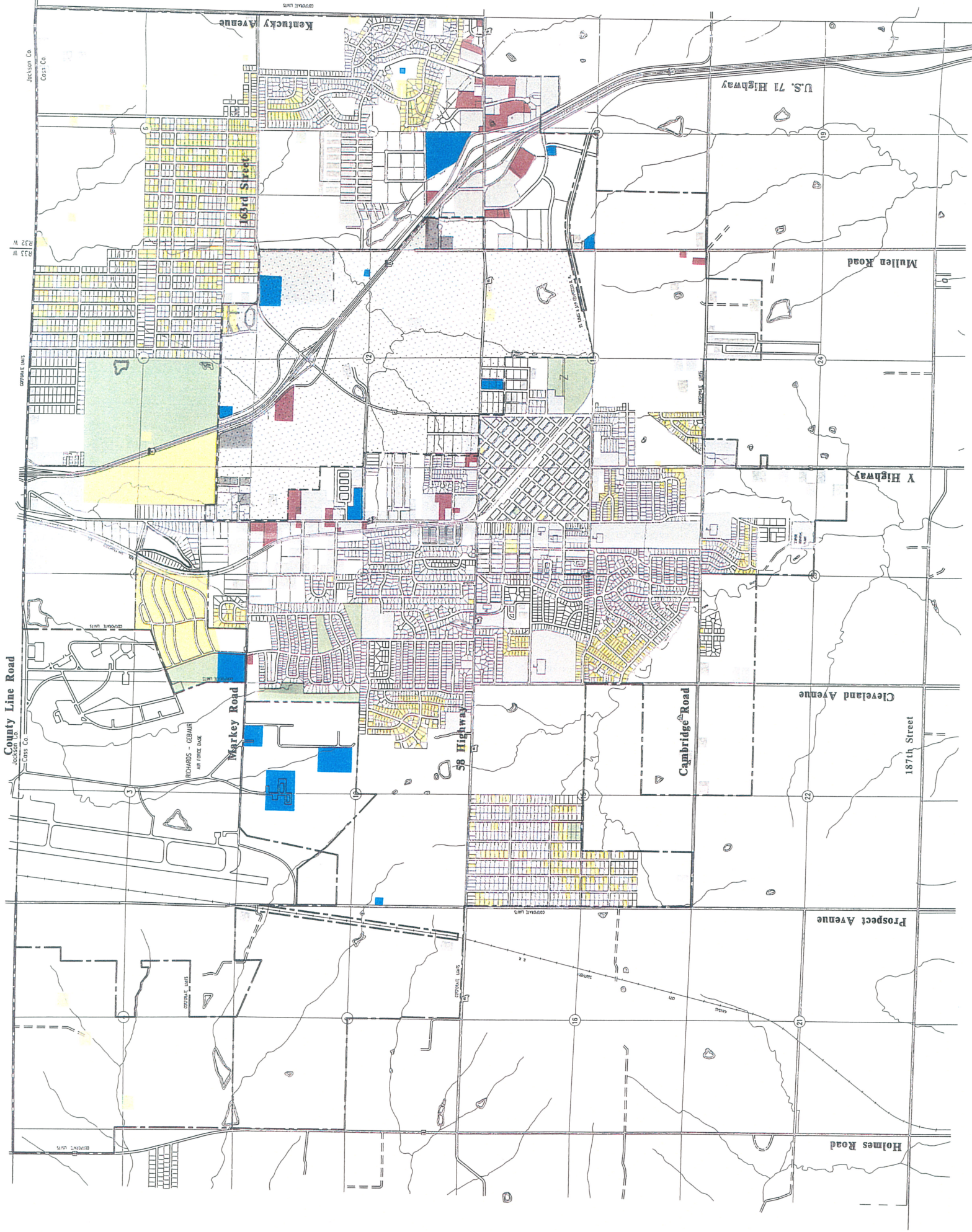
²State of Missouri, Department of Natural Resources

³The Open Space, Heritage & Review Committee (Kansas City Metropolitan Region)









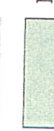

⁴City of Belton, Missouri

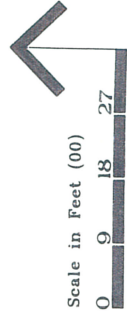
DEVELOPMENT TRENDS

1982 - 1991



LEGEND

-  1982 City Limits
-  1991 City Limits
-  Tax Increment Finance District (TIF)
-  Developed Area Prior to 1982
-  Residential
-  Commercial
-  Industrial
-  Public and Semi-Public
-  Parks and Recreation
-  Vacant or Agricultural



Scale in Feet (00)
0 9 18 27

Comprehensive Plan Update

City of Belton, Missouri

BUCHER, WILLIS & BATLIF
ENGINEERS, PLANNERS & ARCHITECTS

7200 West Parkway, Suite 100
Kansas City, Missouri 64114-2021
913-894-0004
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March 1991

CHAPTER FOUR
GOALS, OBJECTIVES AND POLICIES

CHAPTER FOUR GOALS, OBJECTIVES AND POLICIES

GROWTH AND LAND USE

GOAL: CONTINUE TO PROVIDE OPPORTUNITIES FOR URBAN DEVELOPMENT WHILE ENCOURAGING ORDERLY AND EFFICIENT GROWTH AN RESPONDING TO COMMUNITY NEEDS FOR BASIC SERVICES.

Objective G1: Direct the location of new development and design of new subdivisions in order to minimize initial and future public and private costs.

Policy G1.1: New development should be encouraged to locate in areas where municipal services are already present or where utility extensions are planned in the capital improvements program.

Policy G1.2: Curb cuts on arterial streets should be kept to a minimum in intensive commercial areas such as North Scott.

Policy G1.3: New development should be required to meet minimum site design criteria for rights-of-ways, drainage, road construction, utility connections and landscaping.

Objective G2: Establish an overall program for the continual maintenance program for the continual maintenance of the City of Belton's infrastructure

Policy G2.1: Water and sewer lines, roads, bridges and other city services should be maintained in order to adequately serve the existing and future resident and business population in Belton.

Policy G2.2: A Capital Improvement Program should be established and implemented to provide an inventory and schedule for maintaining city infrastructure relationship with private developers while planning development projects.

Objective G3: Establish a working relationship with private developers while planning development projects.

Policy G3.1: Amend the Belton Zoning Ordinance to establish site plan review of all new developments.

Policy G3.2: Amend the Belton Subdivision Regulations to require preliminary meetings with developers to review plat proposals, to ensure compatibility with surrounding land uses and to determine compliance with land use policies and regulations.

Objective G4: Encourage economic growth by guiding development plans toward high quality projects and controlling the costs of public improvements in Belton.

Policy G4.1: Invest in new public infrastructure in areas where other public improvements are present or can be most cost-effectively extended.

Policy G4.2: When appropriate financing mechanisms such as the Neighborhood Improvement Program and Tax Increment Financing District should be used to assist in the costs of public improvements due to urban development.

Policy G4.3: Commercial and industrial development proposals shall incorporate landscaping improvements as part of the site to improve its aesthetic and environmental appearance.

Objective G5: Continue to seek the involvement of local community leaders, public officials and other jurisdictions in the planning process.

Policy G5.1: Whenever possible coordinate with the Cass County Planning Commission on land use matters within the urban fringe of Belton to ensure that urban land uses are appropriately served and made compatible with rural land uses.

Policy G5.2: Include school districts, utilities and other governmental entities in planning for urban growth.

Policy G5.3: Establish a Growth Commission of public and private partners to improve Belton's competitive position in the market place.

Objective G6: Plan for annexation of land to provide for community growth.

Policy G6.1: Areas to be annexed should be accessible to cost-effective public service extensions and not possess natural hindrances to these extensions.

Policy G6.2: Land use and capital improvement plans should be formulated for any area to be annexed by the City of Belton.

Objective G7: Encourage quality development through the use of the City's land use policies and controls.

Policy G7.1: Strengthen the implementation and enforcement of the Belton building and other property codes to ensure approved plans are carried out and that violations are corrected.

Policy G7.2: Strengthen the Belton Zoning Ordinance by adopting site plan review procedures to ensure high quality development in accordance to the stated Goals and Objectives of the Belton Comprehensive Plan.

HOUSING

GOAL: PROVIDE A VARIETY OF HOUSING CHOICES WHILE MAINTAINING EXISTING NEIGHBORHOODS AND ENCOURAGING REHABILITATION OF DETERIORATING NEIGHBORHOOD "POCKETS".

Objective H1: Maintain and upgrade the character of existing and developing residential neighborhoods.

Policy H1.1: Develop a plan to extend basic public utilities to existing neighborhoods and new subdivisions and to replace old utility lines.

Policy H1.2: Develop and implement a plan for extensive sidewalks, curbs and gutters throughout neighborhoods developed prior to the adoption of subdivision regulations.

Objective H2: Encourage new residential development to incorporate high quality housing standards and subdivision design into projects.

Policy H2.1: Provide areas for large lot single family residential neighborhoods which encourage the use of open space, common areas and neighborhood parks.

Policy H2.2: Provide areas for single-family subdivision development near schools and other public and semi-public facilities.

Objective H3: Minimize negative impacts of medium- to high-density residential and low-density residential land use mix, while providing opportunities for all housing types.

Policy H3.1: Discourage the incremental conversion of existing single-family dwellings to multi-family dwellings.

Policy H3.2: Locate high and medium density residential development on the perimeter of the city, conveniently located near employment centers and major arterials.

COMMERCIAL

GOAL: PROVIDE FOR COMMUNITY-WIDE AND NEIGHBORHOOD SHOPPING AND BUSINESS ESTABLISHMENTS TO BE EFFICIENTLY DISTRIBUTED THROUGHOUT THE COMMUNITY, WHILE ENCOURAGING INFILL AND MODERNIZATION OF EXISTING COMMERCIAL DISTRICTS.

Objective C1: Provide opportunities for regional shopping and business establishments.

Policy C1.1: U.S. 71 Highway interchanges should be used to attract regional business interests, such as office parks and large retail chains.

Policy C1.2: Encourage the location of stable, quality regional commercial establishments in prime commercial areas.

Objective C2: Plan for orderly commercial growth.

Policy C2.1: An organized economic development program should be used as a means for attracting business to Belton.

Policy C2.2: Specialty shopping centers (e.g. building supplies, home furnishings and automobile sales and accessories) should be allowed where the following criteria are met:

1. Location on arterial street;
2. Maximum size of 10 acres;
3. No vehicular access through residential areas; and
4. Adequate buffering between adjacent residential uses.

Policy C2.3: Large lot commercial uses shall be clustered to minimize their impact on surrounding uses and traffic patterns rather than allowed to form in a commercial strip.

Policy C2.4: Smaller commercial uses away from downtown Belton shall be encouraged to locate in shopping centers to minimize curb cuts.

Objective C3: Disallow strip development in commercial areas and promote cluster commercial development.

Policy C3.1: Strip commercial development, where single commercial developments are strung out along a street, shall not allowed.

Policy C3.2: A plan for improved access, parking and landscaping for the commercial strip along North Scott should be developed to minimize multiple curb cuts, provide for better traffic flow and improve the visual quality there.

Policy C3.3: Signs along commercial strips shall be limited in size according to the size of the commercial lot or structure. Signs shall not be of an obtrusive nature and shall conform to quality urban design guidelines.

Objective C4: Encourage the preservation of downtown Belton as a commercial district.

Policy C4.1: Office development for businesses serving localized interests shall be encouraged to locate in the downtown business district.

Policy C4.2: The character of the downtown should be preserved by maintaining some degree of design conformity. Structures of local historic or architectural significance should be preserved, whenever possible.

Policy C4.3: Parking and thoroughfare improvements should be implemented in the downtown business district.

Policy C4.4: Community centers and activities and government services shall be encouraged to locate in the downtown area.

INDUSTRIAL

GOAL: ENCOURAGE INDUSTRIAL GROWTH IN APPROPRIATE LOCATIONS BY PROMOTING BELTON'S INDUSTRIAL ATTRIBUTES.

Objective I1: Encourage industrial development in locations off of major arterials near points of exit and entry to U.S. 71 Highway to avoid industrial traffic in commercial and residential areas.

Policy I1.1: Encourage industrial development south of Missouri 58 and west of U.S. 71 Highway for beneficial use of rail and highway access.

Policy I1.2: Effective buffering shall be required to screen industrial development adjacent to other land uses.

Policy I1.3: Use incentives such as the Tax Increment Finance District, tax abatement and expansion of public facilities as incentives to attract outside industries to Belton's industrial districts and to reserve land for industrial development.

Objective I2: Industrial development shall be located so as to minimize negative environmental and land use impacts.

Policy I2.1: Heavy industrial development shall be located on the edges of the community away from existing or projected residential growth areas and opposite the prevailing winds.

Policy I2.2: Future industrial expansion areas shall be evaluated in terms of impacts on soil, slope, water, air, stormwater runoff, 100 year floodplain and depletion of vegetation on the site.

Policy I2.3: Landscaping, pedestrian access and parking features shall be required as part of new industrial development proposals.

TRANSPORTATION

GOAL: PROVIDE A SAFE AND EFFICIENT NETWORK OF STREETS IN BELTON, WITH THE SIZE, SPACING AND ALIGNMENT TO ACCOMMODATE BOTH EXISTING AND ANTICIPATED TRAFFIC VOLUMES.

Objective T1: Use the planning process and an update of the Adopted Major Street Plan to provide adequate rights-of-way, property line setbacks and infrastructure improvements for future transportation development.

Policy T1.1: Require developer dedication of roadway rights-of-way in accordance with both the design and classification of the roadway.

Policy T1.2: Cooperate with regional and state agencies in planning for links between Belton and regional thoroughfares, such as the south circumferential between Cass County and Johnson County, Kansas.

Objective T2: Provide a thoroughfare system which allows safe and efficient travel from one place to another without crossing residential areas.

Policy T2.1: Develop a thoroughfare plan with accompanying scheduled improvements and costs for reducing congestion and improving inadequately constructed roadways.

Policy T2.2: Provide for new alignment, signalization and access improvements which allow greater travel ease throughout Belton.

Policy T2.3: Through the planning process, designate a roadway which is subject to uniform design criteria so as to provide continuity between the east and west sectors of Belton.

Policy T2.4: Through the platting and site plan review process, provide for pedestrian access along all major roadways experiencing new development.

Policy T2.5: Direct access onto major thoroughfares shall be carefully controlled by minimizing the number of curb cuts and the use of frontage roads for adjacent commercial and residential land uses.

Objective T3: Provide a means of public transportation for both inter city travel and travel beyond the city boundaries.

Policy T3.1: Establish ties with the Metropolitan Kansas City Transit Authority to provide service to and within Belton.

PARKS AND RECREATION

GOAL: CONTINUE TO PROVIDE AND EXPAND RECREATIONAL AND CULTURAL OPPORTUNITIES TO ALL RESIDENTS OF THE CITY OF BELTON.

Objective P1: Continue development of a community-wide park system.

Policy P1.1: Plan for building upon the good park system while increasing the recreation activities available for children and adolescents.

Policy P1.2: Provide for more parks and recreational opportunities in the western sector of Belton including sports facilities, picnic areas and neighborhood parks.

Policy P1.3: Plan for new park land in growth areas of Belton when adopting the amended Future Land Use Map.

Policy P1.4: Designate open space where environmental constraints deter development and favor park land dedication.

Objective P2: Support community-based recreation and quality of life services.

Policy P2.1: Establish funding for a Belton Parks and Recreation Department staff to develop, coordinate and implement parks programs and activities.

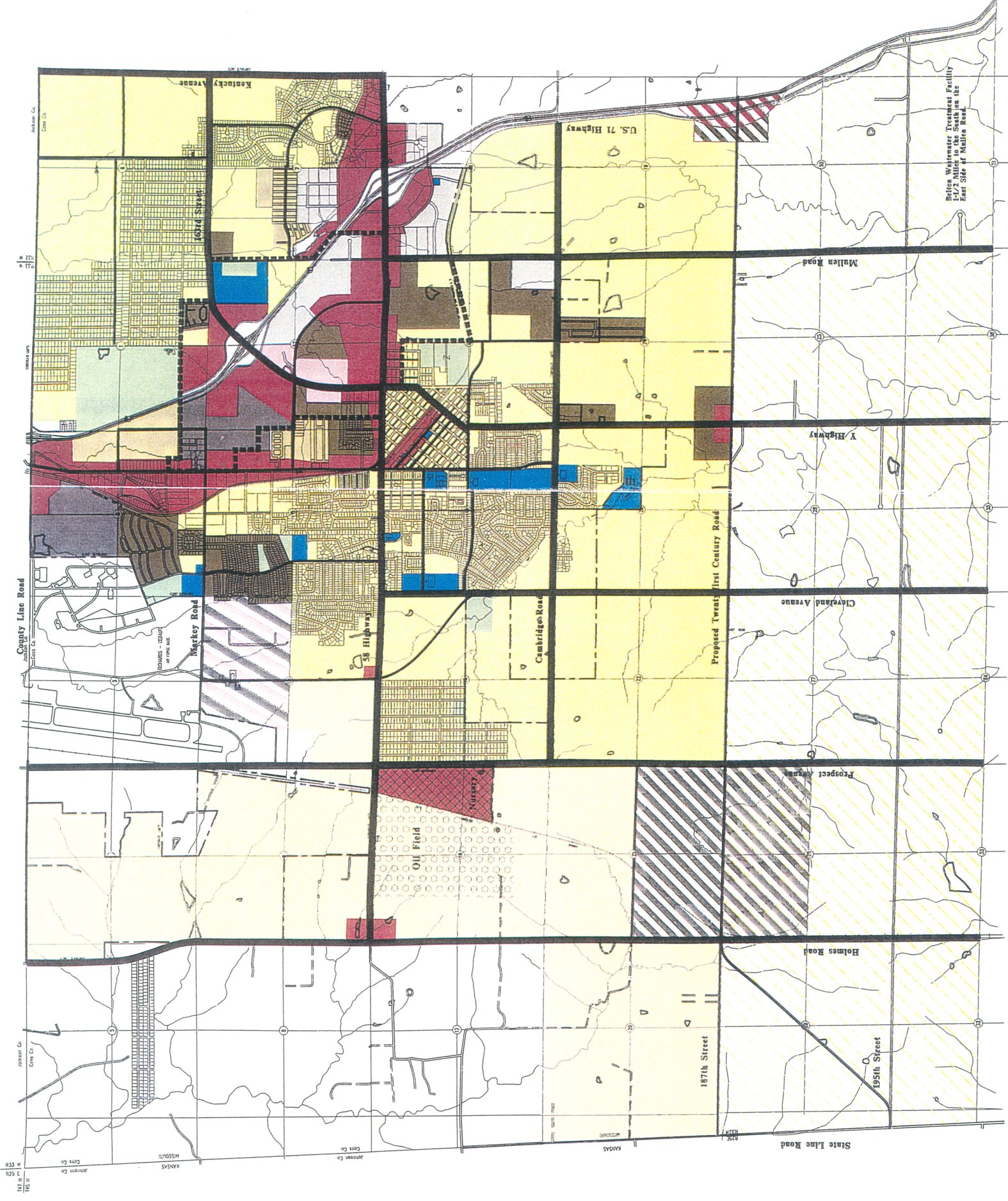
Policy P2.2: Develop strategic plans for recreation funding and planning.

Policy P2.3: Expand adult recreational programs, particularly for senior citizens.

Policy P2.4: Incorporate plans for parks and recreation facilities with school district plans in order to meet common objectives and to share costs.

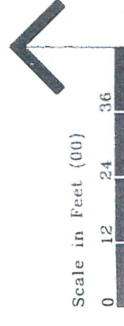
**CHAPTER FIVE
FUTURE LAND USE**

FUTURE LAND USE



LEGEND

- Single-Family Residential
- Large-Lot Single-Family
- Mobile Home
- Multi-Family Residential
- Office
- Commercial
- Light Industrial/Warehouse
- Industrial
- Public/Semi-Public
- Parks & Recreation
- Long-Range Development
- Secondary Future Annexation Area
- Tax Increment Finance District (TIF)
- Arterials
- Collectors



Comprehensive Plan Update

City of Belton, Missouri

CHAPTER FIVE FUTURE LAND USE

The Belton Future Land Use Plan is the step in the planning process where the community develops a framework for the future growth and development of the City. The background information on the demographic make-up, facility availability and the land use patterns of the community provide the needed tools with which decisions are made on the Community's future direction.

The future land use component of the Belton Comprehensive Plan not only uses the background information on the community profile, but it considers other issues which the City is facing such as annexation potential of outlying areas, financial capacity to provide services, national economic trends which effect local employment and statutory ability of a city to effectively achieve planning objectives.

Both qualitative and quantitative considerations are weighed together in developing the future land use plan. The ultimate considerations, though, are the preferences and objectives of the community which are based upon informed choices.

As stated in Belton's 1982 Comprehensive Plan, "existing conditions, planning principles and local attitudes are incorporated to yield a future land use plan for Belton." The following text and map is the Future Land Use Plan which must be considered in tandem as individual land use decisions are made. The principles and policies presented are more important than the map itself, as the map is not meant to establish the proper land use for each individual parcel of land. It is, however, meant to give a general overview of the total community's future development.

Finally, the Future Land Use Plan is in fact a plan for growth and development in Belton over the next twenty years. As in the 1982 plan, more land uses than were needed at that time were indicated on the map. Since 1982, most land use development has occurred as in-fill development while growth has slowly spread out into the periphery of existing development. The allotment of areas indicated are not the required amount of land uses necessary to meet the current demand. Some areas may not be needed for 15 to 20 years. They do, however, indicate the City's desire to use the available resources and locational advantages of the community in the most logical way given the appropriate conditions exist.

Competition among private sector initiatives is also an important consideration given in the development of the map. While the amount of uses in some categories may seem excessive, it gives the private market the ability to operate more efficiently while keeping the areas of specific uses under the ownership of more than a few property owners. However, the community should use a step-by-step approach in making land use decisions. Opening up all areas on the map for immediate development could result in an inefficient scattering of development and a financial burden on the City for the extension and maintenance of public utilities.

LAND PLANNING PRINCIPLES

As Belton responds to new urban growth the principles by which the City administers zoning regulations will help implement the Comprehensive Plan. The process is one by which the City can influence change--in the public interest--as it responds to development proposals. In order for a community to attain the goals it has set for its physical form and future growth, it is helpful to review the principles of planning presented in the plan for the City of Belton in 1982.

Land Use Externalities

One of the most basic factors affecting the use of a given parcel of land is the land use impact from adjoining parcels. Economists refer to this impact as a "land use externality" because it is generally not included in the property owner's decision-making process. As an example of land use externalities, a residential district which fronts an arterial street, and faces a commercial strip, has less value than a similar district integrated within a residential neighborhood. In effect, the land use incompatibility creates a cost imposed by the commercial owners on the residential owners. The best way to minimize these external costs is to a) develop the multiple land uses as a planned mixed-use of residential and commercial activity, or b) separate incompatible land uses with effective urban design and buffers.

Development in the TIF District along the highways leading from U.S. 71 Highway should be carefully planned to allow the major thoroughfare roads to continue carrying traffic; while at the same time, commercial, office and residential areas can develop in an attractive manner. Subdivisions along the arterial roads must be designed to minimize conflicts.

Characteristics which most people seek in a residential area--quiet, serenity, stability--can be protected by promoting sound neighborhoods. Non-residential uses can be made

compatible through sensitive screening and other mitigating design features. Positive externalities can develop, as well. A concentrated shopping district will attract customers from a wider market area than will commercial uses dispersed along a street. Clustering retail and commercial uses where arterial roads intersect, for example, benefits the commercial use, while protecting residential districts from commercial strips.

Transportation Access

A second factor which influences the planning of future urban 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 commercial activities are most sensitive to accessibility since their survival depends upon customers travelling to their location.

Clustering land uses along 58 Highway will enhance the arterial capacity to carry traffic. The clustering of commercial uses is critical to facilitate the efficient channelling of traffic onto arterial streets. Clustering also creates an image of commercial districts which is more easily remembered by the consumer than scattered commercial uses, and allows the joint use of parking facilities.

Distribution of Public Services

Certain urban 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 into the East Creek and West Fork East Creek basins from the north. Compact growth to the south can be achieved by encouraging development adjacent to the existing built-up areas rather than allowing "leap-frog" development over large tracts of undeveloped land.

A second means of increasing service delivery efficiency is to cluster those land uses which have the greatest need for fire and police protection, such as high value commercial uses. This clustering will allow the concentration of protection efforts where they are most needed.

Neighborhood Design

The concern about urban design can be summarized by focusing on neighborhood design. Good urban design can help new developments relate to adjacent developments to

form strong neighborhoods. The City derives strengths from residential neighborhoods. The physical and social structure of these neighborhoods add to the community character. The land use pattern of a neighborhood plays a major role in determining its strengths and weaknesses.

Ideally, neighborhoods should be centered around schools and parks which serve as the recreational and cultural, as well as educational hubs of the district. Consideration should be given to allow both efficient and safe corridors to the school for vehicular, bicycle and pedestrian traffic. The Future Land Use Map indicates parks on arterial roads for access, and in emerging neighborhoods. A neighborhood generally covers an area of about one square mile and contains a population of 2,500 to 6,000 people. This size is necessary to have sufficient population to warrant provision of a neighborhood school, parks and convenience shopping.

FUTURE LAND USE NEEDS

After establishing both the principles used to determine the best pattern of future development in Belton and the community's objectives, the amount of land needed to achieve this pattern can be calculated. Chapter Two presented the existing conditions with respect to land uses in Belton in 1990. This information, combined with the current population, land use acreages per capita are calculated. (Table 5.1) To estimate future land use needs, the acreage per capita in 1990 is then multiplied by the projected population.

From Table 1.5, several population projections are presented for the City of Belton. The short-term approach yields a "high end" figure since it is based on the City's high growth rate during the 1980's. The long-term approach yields a "low end" figure. These approaches are used to determine a range in the need for future land uses.

Table 5.1
Acreage Per Capita
By Use
1991

	<u>1990¹</u>	<u>Acreage Per Capita²</u>
Residential	1,527	.084
Commercial	198	.011
Industrial	51	.003
Public/Semi-Public	241	.013
Parks and Recreation	228	.013
Streets	<u>760</u>	<u>.042</u>
TOTAL	3,005	.166

Source: Bucher, Willis & Ratliff.

¹ 1990 existing land use acreage from Table 2.1

² Acres per capita were derived by dividing the number of acres in each land use category by the 1990 population of Belton to yield acres per person.

Table 5.2
Projected Land Use Needs to 2010
(Acres)

	Long-Term ¹ <u>2010</u>	Long-Term Incremental Need <u>1991 - 2010</u>	Short-Term ² <u>2010</u>	Short-Term Incremental Need <u>1991 - 2010</u>
Residential	2,325	798	2,631	1,104
Commercial	302	104	341	143
Industrial	83	32	94	43
Public/Semi-Public	360	119	407	166
Parks and Recreation	360	132	407	179
Streets	<u>1,162</u>	<u>402</u>	<u>1,316</u>	<u>556</u>
Total	4,592	1,587	5,196	2,191
Square Miles Needed		2.5		3.4
Total Square Miles Needed (Multiplier)³		6.25		8.5

Source: Bucher, Willis & Ratliff

¹ Land uses were projected using the long-term population projection for Belton (Table 1.5).

² Land uses were projected using the short-term population projection for Belton (Table 1.5).

³ A multiplier of 2.5 times the projected development for 2010 is applied for planning purposes to allow for both the dispersed pattern of development at the urban fringe and for competition.

Long-Term Population Trends

As shown in Table 5.2, **long-term past trends** indicate that development within the next twenty years will follow certain patterns:

- 9,529 additional persons will be expected to be living in Belton;
- 798 acres of land will be developed as residences in low-to moderate-density patterns, predominantly as single family and two family homes;

- A total of 1,587 acres of land, or approximately 2.5 square miles, will develop by 2010 in the City of Belton.

For planning purposes the City of Belton may expect up to 6.25 square miles of land area to experience urban growth during the next twenty years. A multiplier is applied to account for competition and market inefficiencies which tend toward incremental and dispersed development at the "urban fringe", rather than more compact development.

Patterns of development are expected to spread in three configurations:

- Compact in-fill development in the northeast portion of the City, and in the southwest portions of the existing city limits, where major streets are improved to serve developers;
- Dispersed where the City extends water and sanitary sewer interceptors south of the existing corporate limits in the East Creek and West Fork East Creek basins; and
- More dispersed in large lot, low-density single family developments served by septic tanks or public systems, rather than municipal sewers, west of the existing corporate limit, where the City has initiated a plan of intent to annex.

Short-Term Population Trends

Based upon **short-term population trends**, the land use pattern will become more extensive in the next twenty years as follows:

- 13,178 additional persons will be expected to be living in Belton;
- 1,104 acres of land will be developed as residences in low-to moderate-density patterns, predominantly as single family and two family homes;
- A total of 2,191 acres of land, or approximately 3.4 square miles, will be expected to develop by 2010 in the City of Belton.

For planning purposes the City of Belton may expect up to 8.5 square miles of land area to experience marginal urban growth during the next twenty years under the assumption that development will reflect patterns of the 1980's.

DISTRIBUTION OF PROJECTED GROWTH

For purposes of projecting land use in the Comprehensive Plan Update, the short term population trends will be considered so that the "high-end" land use scenario may be anticipated. Further, it is assumed for planning purposes that Belton and northwest Cass County will continue to capture a disproportionate share of Kansas City Metropolitan Area development, as outlined in Chapter One.

Distribution of Residential Growth

The "Future Land Use Map, 1991" has been prepared by distributing residential population into four areas, based on trends and recent development:

- In existing platted subdivisions in the northeast, such as Martinwood Subdivision, and the southwest area, such as in the West Belton Addition and Villa Estates;
- In the Tax Increment Finance (TIF) District at Y Highway and 58 Highway, West of U.S. 71 Highway;
- In the "Primary Future Annexation Area" as follows:
 - All of the unincorporated portions of section 22, 23 and 24 south of the existing corporate limits;
 - South and west of the existing corporate limit in the following areas where a "Plan of Intent to Annex" has been initiated;
 - All of sections 18 & 19, west of 71 Highway;
 - All of the incorporated portion of section 15, which lies west of Cleveland Avenue and north of Cambridge; and
 - All of sections 16, 20 and 21 west of the existing corporate limit to the state line; and
- A nine square mile area has been designated as residential in the Long Range Development Area, south of 187th Street. This surplus area should not be opened

to development until other areas adjacent to and within the existing developed portions of Belton are occupied. This area is considered for long range development and is not needed to accommodate growth until the latter part or beyond the planning period.

The planning area will accommodate the projected "high-end" growth. The far west portions of the projected annexation area would not be served by the planned municipal sewer interceptors in the West Fork East Creek basin, unless regional pump stations are constructed. Therefore, the far west region would have to develop as large lot, low density residential uses on incremental public systems or individual septic tanks.

Another area for annexation has been identified by the City of Belton as a "Long Range Development Area" two miles south of 187th Street, between U.S. 71 Highway on the east and the state line on the west.

DISTRIBUTION OF COMMERCIAL LAND USES

Based upon past allocations of commercial land in the City of Belton, the City should expect future commercial land use developments in amounts of 100 to 143 acres by the year 2010. Commercial land uses in 1991 comprise approximately 6.5% of all developed land in Belton. For planning purposes, a multiplier of 2.5 is applied to account for competition, inefficient market selection and land development at the emerging urban fringe. As a result, the city should plan for up to 357 acres of new commercial land. The areas of expected commercial growth are as follows:

- Expansion of commercial uses from existing retail areas at the interchanges of U.S. 71 Highway and 58 Highway, including development of new commercial clusters along 58 Highway and Y Highway as part of the TIF Area;
- Selected in-fill of commercial along North Scott Avenue to a marginal extent; and
- Isolated "Neighborhood Centers" at the intersection of future arterial roads south of the existing corporate limit in the primary future annexation area, spread approximately two miles apart.

The Comprehensive Plan Update projects retail development based upon an Urban Land Institute analysis of retail commercial patterns, summarized as follows:

The *Neighborhood Center* provides for the sale of convenience goods (food, drugs, and sundries) and personal services, those which meet the daily needs of an immediate neighborhood trade area.

A supermarket is the principal tenant in the neighborhood center. Consumer shopping patterns show that geographical convenience is the most important factor in the shopper's choice of supermarkets. The customer usually chooses such stores from among those most conveniently located, usually those nearest the shopper's home. Only as a secondary consideration does wide selection of merchandise or service come into play.

The neighborhood center has a *typical* gross leasable area of about 50,000 square feet but may range from 30,000 to 100,000 square feet. For its site area, the neighborhood center needs from 3 to 10 acres. It normally serves a trade area population of 2,500 to 40,000 people within a 6-minute drive.

The *Community Center* is built around a junior department store or variety store as the major tenant, in addition to the supermarket. Such a center does not have a full-line department store, although it may have a strong specialty or discount store as an anchor tenant.

The community center has a typical gross leasable area of about 150,000 square feet but may range from 100,000 to 300,000 square feet. For its site area, the community center needs from 10 to 30 acres and normally serves a trade area population of 40,000 to 150,000 people.

The *Regional Center* is a mall development with multiple retail vendors and enclosed shops, serving a trade population in excess of 150,000 persons.

**Table 5.3
Characteristics of Shopping Centers**

Center Type	Leading Tenant (Basis for Classification)	Typical GA	General Range in GLA	Usual Minimum Site Area	Minimum Support Required
Neighborhood Center	Supermarket or drug store	50,000 sq. ft.	30,000-100,000	3 acres	2,500-40,000 people
Community Center	Variety, discount, or junior department store	150,000 sq. ft.	100,000-300,000 sq. ft.	10 acres or more	40,000-150,000 people
Regional Center	Mall development	800,000 + sq. ft.		50 acres+	150,000 people+

SOURCE: Urban Land Institute

**Table 5.4
Typical Suburban
Cluster Retail Development**

	<u>Clusters Per Population</u>	<u>Land Area</u>	<u>Gross Leasable Area (GLA)</u>	<u>Employment</u>
Neighborhood Center	1:5,000	6 acres	50,000	1.8/500 GLA
Community Center	1:35,000	20 acres	100,000	1.8/500 GLA
Regional Center	1:150,000	60 acres	800,000	1.8/500 GLA

Source: Urban Land Institute

Office Land Use Category

To better plan for business development as compatible land uses with neighboring residential districts, an office use has been introduced in the plan update to distinguish retail commercial from less intense business uses. The Future Land Use Map indicates office uses as buffers between residential and commercial uses. Further, the land use designation helps plan for a break in commercial retail strips. Office uses will be particularly evident in the TIF District where commercial, industrial and residential uses are heavily concentrated.

Access to Commercial/Office Centers

In developing commercial land uses along 58 Highway and Y Highway, as well as along other arterial roads, it is critical to the future development of Belton that access be controlled in the public interest. The state of Missouri reviews access permits to highways and controls access to Y Highway through acquired easements west of 71 Highway. Existing and proposed site traffic conditions, highway traffic volume, speed on the highway and anticipated traffic generated by new development must be analyzed to determine their effects on the highway traffic.

By implementing traffic management techniques, vehicle conflicts can be minimized, safety can be improved, delays reduced and major capital expenditures postponed or eliminated. The following outlined criteria are based on standard acceptable policies.

The key to successful utilization of this policy will be to determine the uniform spacing of driveways by implementing the criteria which relates the posted highway speed limit with the average daily traffic on the highway. The actions that can be taken while providing the abutting land owner reasonable access to the public road system fall mainly into four categories:

1. Limiting the number of conflict points. (Reducing number of driveways);
2. Separating basic conflict areas. (Spacing of driveways);
3. Limiting vehicular deceleration requirements along the highway (Improve geometrics); and
4. Remove turning vehicles or queues from sections of the through lanes on the highway. (Provide separate turning lanes).

The recommendations of this policy should be followed in developing City of Belton guidelines for access control so that the objectives of the plan update may be implemented, particularly along 58 Highway west of U.S. 71 Highway.

Extent of Commercial Development

The low-to moderate-density residential patterns of development in Belton indicate that in the next twenty years, three retail Neighborhood Centers are proposed in the commercial areas indicated on the Future Land Use Map. However, development of a retail Community Center with a junior department store is unlikely for the following reasons:

- A retail Community Center has already been developed at the Interchange of U.S. 71 Highway and 58 Highway;
- The projected population of Belton is not great enough to sustain an additional Community Center; and

Competing centers north of the City along U.S. 71 Highway serve the shopping demands of area residents for larger centers, as will planned developments such as Southport Center at the redeveloped Richards-Gebaur Air Force Base site.

DISTRIBUTION OF INDUSTRIAL DEVELOPMENT

Based upon low to moderate residential growth patterns and industrial trends for the City of Belton, the City should expect up to 43 acres of additional industrial land uses by the year 2010. Industrial land uses in 1991 comprise 51 acres which is 1.7% of the developed area in the City. Relatively little industry is located in Belton presently. A multiplier of 2.5 for planning purposes brings the total projected amount of industrial land use to 108 acres for which the City should plan. The areas of expected industrial growth are as follows:

- Marginal incremental in-fill of industry West of North Scott Avenue, south of 155th Street;
- In the southwest quadrant of the U.S. 71 Highway and 58 Highway interchange near the Belton water tower;

In the TIF District along the frontage roads as outlined in the TIF land use plan;

- South of the existing corporate limit, along U.S. 71 Highway frontage roads expected to be developed in the next twenty years, as well as at the northwest

corner of Cambridge and Mullen Road, where land is currently zoned industrial;
and

- In the southern one-half of section 21 in the primary future annexation area and the northern one half of section 28 in the long-range development area. This area is considered for industrial development in the latter part of the planning period or beyond because of its accessibility to rail and a future arterial.

Land use distribution of light industrial growth was developed in more detail on the future land use map by the following Urban Land Institute analysis:

Industrial Park Site Selection

- The site should be served by either an existing expressway system or one slated for construction;
- Locate sites in areas of population growth, taking into consideration direction and composition of growth;
- Locate sites based upon direction and type of industrial growth near such areas as highways, and airports;
- Ascertain both community attitudes toward industry and economic pressures in a given area; and
- Determine types of industries which are expanding and might be moving into the region.

When selecting the specific site it is further important to:

- Estimate amount of land required through a study of local absorption rates for a five-year period (acres absorbed per year by type of industrial parks), and numbers of transactions;
- Seek sites which are either immediately accessible to major highway routes or have highway frontage; are adjacent to the main line of a railroad, or near an airport;

- Watch topography: acquire land with minimum of ledge rock, water, and peat of soft ground; however, land which is easy to develop may not be the best location for industry; and
- Ascertain that water, gas, electricity, telephone, and, if possible, sewer can serve the site, at competitive rates with appropriate capacity.

The City of Belton has followed the Urban Land Institute recommendations by extending utilities to the TIF site and the highway interchange and frontage roads to accommodate expansion of industrial land uses. The City needs to further refine zoning regulation of site plan submittals to ensure compatibility between industrial and residential land uses in the future, particularly where in-fill industrial development is anticipated.

Should the publicly owned land south and north of Markey Road become the responsibility of the City of Belton to redevelop, then innovative cooperation between the public and private sectors would be needed to accommodate the interests of existing land uses. The issue of access east and west would be critical to the redevelopment of this land area south of the soon-to-be abandoned military base.

REGIONAL DEVELOPMENT INFLUENCES

The development of Belton will be influenced by several regional plans which have not yet progressed far enough to be accounted for with certainty. The regional plans include:

- Closing of Richards-Gebaur AFB and relinquishing of adjacent public land ownership to the City and/or other parties;
- Proposed Southport Center Development at Richards-Gebaur AFB, to include light industrial and office campuses;
- The south circumferential highway which is proposed at either 187th Street, 199th Street or a nearby location; and
- Additional interchanges on U.S. 71 Highway in conjunction with major regional developments.

Effectuation of these developments and improvements will indicate a "high-end" development potential for the City of Belton in the near term. Delay of these projects will lead to the stalling of development potential and indicate a more conservative growth scenario for the City.

FUTURE LAND USE RECOMMENDATIONS

Future Land Use Plan recommendations must be developed as the final aspect of the City of Belton Comprehensive Plan Update. The land planning principles presented should be followed in recommending policies to be implemented. The goals and objectives in the plan--already prepared in draft form--will be referenced in this task. Following are key issues to be considered in recommending future land use policies for the plan update:

- Transportation access through the City must be planned to provide better linkages between the developing areas in the far west portions of the City and the development along the 71 Highway corridor;
- Access to major roads must be regulated with driveway policies to protect the capacity of the thoroughfares to carry traffic through the City;
- Site plan review of new development, particularly in-fill development, must be undertaken to ensure compatibility among land uses, particularly in the TIF District, where mixed-use development will occur, and where projected light-industrial districts will emerge;
- Commercial land uses along the highways leading from U.S. 71 Highway must be clustered, rather than strung-out along Y and 58 Highways;
- The TIF district, with its mix of land uses, should be reconsidered periodically to incorporate residential and office uses along the arterials, rather than continuous commercial strips;
- Publicly owned land should be redeveloped in conformity with the objectives of the plan update, as well as regional plans, such as the Southport Center proposal; and

- Regional developments, such as new interchanges at 71 Highway and the envisioned regional circumferential highway should be considered, so that appropriate rights-of-way are dedicated and/or acquired coterminous with regulatory approval.

CHAPTER SIX
THOROUGHFARE PLAN

CHAPTER SIX THOROUGHFARE PLAN

The ability to transport people and goods from one place to another is one of the basic components of the economic and social system upon which a community depends. Consequently, the adequacy of the major street system will have a substantial impact on the rate and pattern of its future growth. To ensure that the street system is able to expand efficiently and that it remains consistent with the Future Land Use Plan requires careful, long-range planning.

This section will review the street and highway system of Belton. This examination will include an explanation of the various types of streets and the designation of the major street system.

STANDARD STREET CLASSIFICATIONS

Street classifications are based on the functions of a hierarchy of vehicle origin-destination movements. Movement from one section of the City to another is carried on arterials which are, ideally, uninterrupted corridors designed for the smooth flow of a large volume of traffic. Sub-section movement occurs on collector streets which connect residential areas with arterials and local traffic generators. The lowest level of the system, local streets, carries the traffic flow to abutting properties.

The following is a further explanation of these classifications and their design standards.

Arterial Streets

Arterial streets should function to connect areas of principal traffic generation and important rural highways. They provide for distribution and collection of traffic to and from collector streets and local streets. The arterial street is given preferential treatment over collector and local streets in signing and signalization of intersections. It is preferable that local streets do not have direct access to arterials, but are provided access to the arterial through the collector street system. Parking on arterials should be restricted in all cases where it interferes with traffic flow.

Access to private property along an arterial should be controlled to avoid hazards and the interference of traffic flow due to ingress and egress traffic movements. Access control can

be achieved at differing levels through subdivision design, street design, and curb cut regulations. Two such methods include backing-up of lots along the arterial and utilization of a frontage road or access street. A landscaped buffer along the arterial will help maintain the viability of abutting land for residential purposes.

The following criteria are recommended for arterial streets:

Right-of-Way Width	80-100 feet
Pavement Width	48- 60 feet
Moving Lanes	2-4 (12-foot moving lanes)
Parking Lanes	0-2 (10 feet wide)
Volume	6,000-20,000 vehicles per day
Driving Speeds	20-45 miles per hour (20 in CBD)

Collector Streets

Collector streets serve traffic desiring to travel between major arterials and local streets and are used mainly for traffic movement within residential, commercial and industrial areas. Collector routes provide the combined services of through traffic service or are developed to discourage any long distance of continuous through traffic.

For safe accommodation of local traffic movement and effective preservation of the character of residential areas, experience has shown that collector streets should be spaced at intervals of about one-half mile in cities like Belton which have a low to moderate density.

The following criteria are recommended for collector streets:

Right-of-Way Width	70-80 feet minimum
Pavement Width	24-44 feet
Moving Lanes	2 (12-foot moving lanes)
Parking Lanes	0-2 (10 feet wide)
Volume	1,000-6,000 vehicles per day
Driving Speeds	20-30 miles per hour

Local Streets

The primary function of local streets is to provide access to abutting property. Continuity of local streets is not important and through traffic should be discouraged. Local streets should be designed to intersect with a collector street and provide easy access to adjacent property.

The following criteria are recommended for local streets:

Right-of-Way Width	50-60 feet minimum
Pavement Width	28-36 feet
Moving Lanes	2 (10-foot moving lanes)
Parking Lanes	0-2 (8 feet wide)
Volume	Up to 1,500 vehicles per day
Driving Speeds	10-30 miles per hour

Rural Arterials

The purpose of a rural arterial is to serve as a temporary link in the circulation system until development warrants constructing the road to urban standards. Frequently, it is necessary to complete such a link years before the adjacent areas develop; therefore, their interim use is to connect presently developed areas with existing highways, commercial areas, etc. In addition, by designating these roads as rural arterials, sufficient right-of-way width can be acquired as an area develops. Rural arterial construction is similar to that of urban arterials except that curb and gutter is absent.

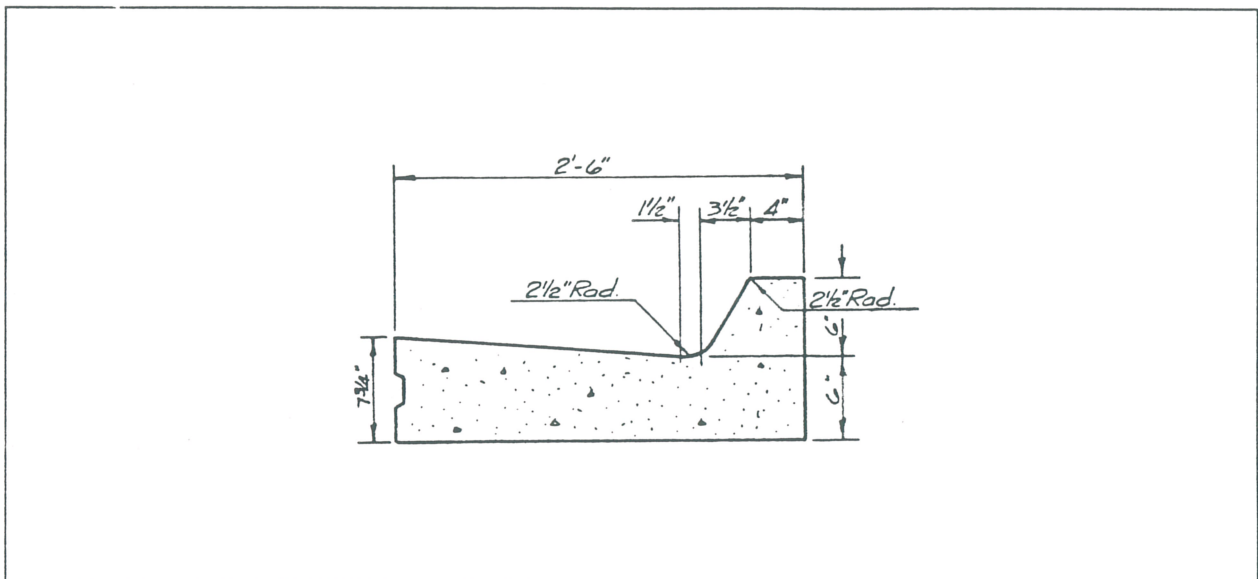
The following criteria are recommended for rural arterial streets:

Right-of-Way	100-120 feet
Pavement Width	24 feet
Moving Lanes	2 (12-foot moving lanes)
Parking Lanes	0
Volume	6,000-20,000 vehicles per day
Driving Speeds	30-45 miles per hour

Curbs and Gutters

A typical curb and gutter design is shown below. The integral curb and gutter system serves two functions. First, it provides a surface drainage channel along the side of the street. Second, access control is improved with the use of a 6" curb. All urban streets should include curbs and gutters.

Figure 6-1
INTEGRAL CURB AND GUTTER



DESIGNATION OF THE MAJOR STREET SYSTEM

The various types of streets described above fit together to form a network of streets to service the needs of each land use throughout the City. How well the transportation needs are met depends upon how closely the street network can be matched to the existing land use pattern. As the City of Belton grows, however, the demands made upon the street network could change. Therefore, it is important that the future land use pattern be considered along with the existing pattern when decisions regarding street classifications are made.

As a general rule, arterials should be located at one-mile intervals and collectors locate midway between arterials. This general rule, however, must often be modified to accommodate land uses with high traffic demand, the existing street system or natural features which disrupt the normal street pattern. For example, additional streets are often needed leading to or within the CBD because of the unusually high volume of traffic which is generated.

Given the probable traffic demand of the future land use pattern as discussed in the previous section and the existing street network, it is possible to develop a street classification system. This system is shown on the Future Land Use Map and is listed below.

Arterials:

- (1) Holmes Road
- (2) Prospect
- (3) Cleveland
- (4) North Scott
- (5) Y Highway
- (6) Mullen Road
- (7) Kentucky Road
- (8) County Line Road (155th Street)
- (9) 163rd Street
- (10) Markey Road
- (11) 58 Highway
- (12) Cambridge Road
- (13) Frontage Road (58 to Cambridge)

Collectors:

- (1) Walker Road (Markey to Cambridge)
- (2) Westover
- (3) Scott Avenue
- (4) Main Street
- (5) Second Street*
- (6) Section 13 Cambridge - 58 Interconnect
- (7) Frontage Road (Cambridge to 195th Street)
- (8) Harris Avenue
- (9) Spring Valley Road (163rd to Bel-Ray Drive)
- (10) Springer Street
- (11) Springdale Lane/Bel-Ray Drive/Bel-Ray Blvd.
- (12) Turner County Road
- (13) Mill Street
- (14) 175th/Sunrise Drive/South Avenue

* As stated in the 1983 Plan, Second Street is maintained as a collector at this time; however, once the intersection of North Scott and 58 Highway is improved, Commercial should be the collector paired with Main Street.