

*Janet Burlingame
Cass County Clerk*

*Deputy Clerks:
Kathy Lambert
Lisa Francy
Arrin Crust*

FILED³

MAY 11 2006

State of Missouri

ss.

County of Cass

Missouri Public
Service Commission

*I Janet Burlingame, County Clerk within and for Cass County Missouri, do hereby certify that the foregoing
Cass County Comprehensive Plan, Zoning Ordinance,
Subdivision Regulations & Procedural Manual date February
1991*

is a full, true and accurate copy of an instrument of writing, as the same is found in the Records of my Office.

IN WITNESS WHEREOF, I hereunto set my hand and affix my seal at my Office in Harrisonville, Missouri, this 28th day of April, A.D., 2006.

Janet Burlingame County Clerk

(Seal)



Exhibit No. 103
Case No(s). EA-2004-0309
Date 5-3-06 Rptr RT

**CASS COUNTY
MISSOURI**

**Comprehensive Plan
Zoning Ordinance
Subdivision Regulations
Procedural Manual**

February 1991

BUCHER
WILLIS
RATLIFF
CONSULTING ENGINEERS,
PLANNERS & ARCHITECTS

7920 Ward Parkway, Suite 100 • Kansas City, Missouri 64114
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CASS COUNTY, MISSOURI

COMPREHENSIVE PLAN

February 1991

**A RESOLUTION BY THE PLANNING COMMISSION
ADOPTING THE COMPREHENSIVE PLAN, OR
MASTER PLAN, FOR CASS COUNTY, MISSOURI.**

WHEREAS, Cass County has a duly constituted Planning Commission as required by law;
and

WHEREAS, the Planning Commission has caused a Master Plan to be prepared for Cass
County; and

WHEREAS, the Master Plan includes the report prepared by Bucher, Willis & Ratliff,
Consulting Engineers, Planners and Architects, and titled the Cass County Comprehensive Plan,
and all maps included therein; and

WHEREAS, proper notice was published in at least one newspaper having general
circulation within the county, and notice of such hearing was also posted at least fifteen days in
advance of the hearing in one or more public areas of the Courthouse of Cass County; and

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

WHEREAS, the Chairman called the meeting to order and declared the Public Hearing
open; and

WHEREAS, the Master Plan and maps therein were discussed; and

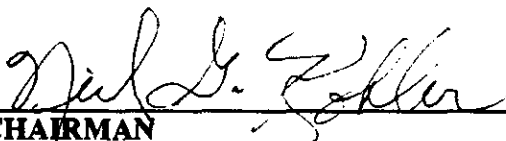
WHEREAS, the Public Hearing was closed and the meeting continued to the next
regularly scheduled Planning Commission meeting; and

WHEREAS, it was moved and seconded that the report titled Cass County Comprehensive
Plan, and all maps included therein, be approved as the Master Plan for Cass County, Missouri,
and that copies be certified to the County Commission, the Recorder of Deeds and to the clerk
of each incorporated area covered by the Plan or part thereof, and

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

NOW, THEREFORE, be it resolved by the Planning Commission of Cass County,
Missouri, that said Master Plan and all maps included therein are hereby approved.

**PASSED AND APPROVED BY THE PLANNING COMMISSION OF CASS
COUNTY, MISSOURI, THIS 27TH DAY OF NOVEMBER, 1990.**



CHAIRMAN

ATTEST:



SECRETARY

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INTRODUCTION

INTRODUCTION

Cass County is composed of a variety of physical, environmental and economic conditions. The comprehensive planning process identifies many of these conditions and the relationship of these to the functioning of the County as a whole. The planning process begins by reviewing existing conditions and continues by attempting to forecast anticipated changes to the County. Understanding these changes and their impacts establishes a framework with which to coordinate these changes in the best interest of the County.

The Comprehensive Plan, then, is a guidebook to aid the County in reviewing or initiating changes. It attempts to give a total perspective of the County. It establishes the necessary principles, criteria, and policies with which to make logical decisions.

It is important to emphasize that the Comprehensive Plan is not an end, but a means. It is a reference document of facts, relationships, and attitudes to help in the decision-making process. The Plan is not a dictation of what must be nor an answer book for complicated questions. It is merely a manual and a source of information to help the County derive its own answers.

Toward this purpose, the Plan establishes a process through which the County may evolve in a coordinated manner. As shown on the following pages, it allows for an understanding of existing conditions and accepted planning principles. It then provides for an evaluation of these conditions and principles with respect to the attitudes of the community in terms of local goals, objectives and policies. Local attitudes, existing conditions and the configuration of future services are then incorporated into the Future Land Use Plan. As an item of change is proposed, it would be carried through this process, as well. What is the relationship of this change to existing conditions? Would the change conform to established principles or current community policies? Is the change in general agreement with the growth objectives as graphically represented on the Future Land Use Map?

With the aid of this Plan, the decision-makers will approve or discourage adoption of these incremental items of change. Individual decisions may result in new conditions or changes in objectives or policies. The Plan must be amended to reflect these changes so that a current document will again be available for the evaluation of future change. Step by step, then, *Cass County* can continue to grow in an efficient manner.

CHAPTER ONE
POPULATION AND ECONOMICS

CHAPTER ONE POPULATION AND ECONOMICS

POPULATION

A reliable estimate of future population trends is an important component of the Comprehensive Planning process. As changes occur over time in a county such as *Cass County*, 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 chapter includes an examination of the major population trends which have occurred in *Cass County*, as well as a review of existing population projections. Figures for the State of Missouri and for the eight-county Kansas City Metropolitan Area have been included in the discussion for comparison in an effort to determine *Cass County's* position within the regional and metropolitan context.

Trends

According to both the Mid-America Regional Council (MARC) and the Office of Social and Economic Data Analysis at the University of Missouri-Columbia (OSED), *Cass County* has been, and continues to be, one of the fastest-growing counties in the State. Within the last 50 years, *Cass County* has increased steadily and significantly in population. The figures in Table 1-1 indicate that the population of *Cass County* has increased over 200%, from 19,534 in 1940 to 61,400 in 1988. This growth would appear to be a direct result of its relationship with and access to the Kansas City Metropolitan Area. There is an indication that this rate of growth may be slowing slightly as it has dropped from 32.8% between 1960 and 1970, to 29.4% between 1970 and 1980, and then to 20.3% between 1980 and 1988. However, the absolute change in population has remained relatively consistent during this time; increasing by 9,746, 11,581 and 10,371, respectively for each of the above-described time periods.

During the 1980's, the number of households in *Cass County* increased at a slightly slower rate than the rate of population growth (Table 1-2). The number of households increased from 17,900 in 1980 to 20,200 in 1987, a 12.8% increase.

Both natural increases and net-migration account for the County's change in population as indicated in Table 1-1. 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 1-1
Historic Population Trends
Cass County and Missouri
1940-1988

	Cass County	Missouri
1940	19,534	3,784,664
1960	29,702	4,319,793
1970	39,448	4,677,623
1980	51,029	4,916,766
1986*	57,300	5,066,000
1988*	61,400	5,141,000
1990**	63,570	5,079,385
% Change 1970-80	29.4	5.1
% Change 1980-90	24.5	3.3
Net Migration 1980-88	6,900	6,000

Source: Office of Social & Economic Data Analysis, University of Missouri-Columbia, 1989

Note: * Interim figures represent population estimates.

** Preliminary 1990 census estimates.

TABLE 1-2
Number of Households
Cass County, Missouri
1980-1987

	1980	1987*	% Change
<i>Cass County</i> Households	17,900	20,200	12.8

Source: Office of Social Economic Data Analysis, University of Missouri-Columbia, 1989

Note: * Interim figures represent population estimates.

CASS COUNTY, MISSOURI

COMPREHENSIVE PLAN

Table 1-3 shows that in 1988, 69% of the people living in *Cass County* lived within the County's incorporated areas with the remaining 31% of the people living in the County's rural and unincorporated areas. In addition, between 1980 and 1988, growth within the incorporated areas of the County accounted for 88.7% of the County's total growth in population.

TABLE 1-3
Population of Incorporated Areas
Cass County, Missouri
1980-1988

Incorporated Area	1980	1986*	1988*	% Change 1980-1988	% of County Total Change 1980-1988
Archie	753	830	800	6.2	.50
Baldwin Park	126	150	150	19.0	23.0
Belton	13,533	15,790	17,820	31.7	41.3
Cleveland	485	580	540	11.3	.53
Creighton	301	330	350	16.3	.47
Drexel (partial)	781	770	750	-31 people	-
East Lynne	286	350	380	32.9	.90
Freeman	485	470	470	-15 people	-
Garden City	1,021	1,060	1,050	2.8	.28
Gunn City	58	60	60	3.4	0.2
Harrisonville	6,372	7,200	7,410	16.3	10.0
Kansas City (partial)	3	3	3	0.0	0.0
Lake Annette	94	100	100	6.4	0.6
Lake Winnebago	681	820	900	32.2	2.1
Lee's Summit (partial)	50	60	70	.40	.19
Peculiar	1,571	2,030	2,360	50.2	7.6
Pleasant Hill	3,301	3,380	3,570	8.1	2.6
Raymore	3,154	4,630	5,450	72.8	22.1
Strasburg	170	150	150	-20 people	-
West Line	<u>109</u>	<u>140</u>	<u>150</u>	<u>37.6</u>	<u>.40</u>
Total Incorporated Area	33,334	38,903	42,533	27.6	88.7
Total Unincorporated Area	<u>17,695</u>	<u>18,397</u>	<u>18,867</u>	<u>6.6</u>	<u>11.3</u>
Total County	51,029	57,300	61,400	20.3	100.0

Source: U.S. Bureau of the Census

Note: * Interim figures represent population estimates.

While this report is concerned with planning for the use of the land in the unincorporated areas of *Cass County*, it is, obviously, important to look at the changes that are occurring within the incorporated areas of the County in an effort to get a sense of what urban "fringe" land areas are likely to be impacted by future growth. The greatest percentage of this growth is occurring in Belton, Raymore and Harrisonville (41%, 22% and 10% of the County's total growth, respectively). The cities of West Line, Peculiar, Lake Winnebago, East Lynne and the portion of Lee's Summit which lies within *Cass County*, however, have all witnessed substantial population growth of over 30% since 1980. Three cities declined in population: Drexel (*Cass County* portion) lost 31 people, Freeman lost 15 people, and Strasburg lost 20 people.

Regional and Metropolitan Context

Within the context of the Kansas City Metropolitan Area,¹ *Cass County* ranks 6th in population, followed only by Leavenworth and Ray Counties. *Cass County's* 1980 population of 51,029 represents 3.7% of the population within this eight-county area (see Table 1-5).

Concentration

It is clear from looking at the 1980 distribution of individuals and households throughout the entire County, as shown in Table 1-7, that the majority of the growth which has occurred in the County has been concentrated within the northwest corner of the County, an area which includes the cities of Belton, Raymore, Lake Winnebago and portions of Lee's Summit and Pleasant Hill. According to the population figures collected by MARC's Research Data Center, 21,166 (41.5%) of the residents of the County lived in its northwest corner in 1980 with the remaining 29,863 (58.5%) of the residents distributed throughout the rest of the County.

Age Profile

Consistent with a national trend, the population of *Cass County* is gradually aging. As indicated in Table 1-4, there has been a decline in the percentage of individuals under the age of 5 from 7.8% in 1980 to 7.1% in 1986, as well as a decline in the percentage of individuals between the ages of 6 to 19 from 27.6% in 1980 to 22.8% in 1986. At the older end of the spectrum, however, the percentage of individuals in the 65 and older category increased from 9.4% in 1980 to 10.4% in 1986.

¹The Kansas City Metropolitan Area includes eight Counties: Johnson, Leavenworth and Wyandotte Counties in Kansas, and *Cass*, Clay, Jackson, Platte and Ray Counties in Missouri.

**TABLE 1-4
Population-Age Profile
Cass County, Missouri
1980-1986**

Age Group	1980	% of County Total Population	1986*	% of County Total Population
Under 5	3,998	7.8	4,087	7.1
6 to 19	14,108	27.6	13,024	22.8
20 to 34	11,740	23.0	14,139	24.7
35 to 54	12,237	24.0	15,390	26.9
55 to 64	4,160	8.2	4,611	8.1
65 and older	<u>4,786</u>	<u>9.4</u>	<u>5,949</u>	<u>10.4</u>
Total	51,029	100.0	57,200**	100.00

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 19893
U.S. Bureau of the Census

Note: * Interim figures represent population estimates.

** The OSEDA figure used differs from the U.S. Bureau of the Census population figure for 1986 used in Table 1-3.

Projections

Three sets of population projections for *Cass County* have been included in this report. One projection was generated by the Missouri Office of Administration (MOA) in 1988; another was generated by the Mid-America Regional Council's (MARC) Research Data Center in 1988; and the third was generated by the Office of Social and Economic Data Analysis at the University of Missouri-Columbia (OSEDA) in 1989. All three of these 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 three sets of projections differ, however, in the assumptions that were made regarding future county migration rates. Migration is the number of people that move in and out of an area and is the most critical component which is factored into this projection equation. It is the most volatile and least predictable of the three components of population change.

CASS COUNTY, MISSOURI

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The MOA figures (Table 1-5) illustrate three scenarios, each of which employs a different set of assumptions about migration: Scenario L (long-term migration) assumes that migration trends over the period 1975-1985 will continue through 2010; Scenario R (recent migration) assumes that 1980-1985 migration trends will continue throughout the projection term; and Scenario Z (zero migration) illustrates future population change with the assumption that no migration will occur. They determined that, using the long-term migration rate, the population of the County will increase 45.9% by the year 2010. Using a recent migration rate, the population will increase 41.9% over the same period of time and, with no migration, the population will increase 28.3%.

TABLE 1-5
Population Projections
Cass County, Missouri
1980-2010

	1980	1985	1990	1995	2000	2005	2010	% Change 1980-2010
<i>Missouri Office of Administration</i>								
Long-Term Migration	51,029	55,588	60,635	65,128	68,921	72,022	74,450	45.9
Recent Migration	51,029	55,588	60,155	64,189	67,566	70,307	72,433	41.9
Zero Migration	51,029	55,588	57,859	60,046	62,101	63,930	65,493	28.3
<i>Mid-America Regional Council</i>								
Cass County	51,029	--	60,001	--	67,522	--	72,055	41.2
Metropolitan Area*	1,381,915	--	1,498,881	--	1,607,386	--	1,690,193	22.3
Cass County as a % of the Metropolitan Area	3.7		4.0		4.2		4.3	--

Source: Mid-American Regional Council/Research Data Center, January 1988
Missouri Office of Administration, May 1988

Note: * The Kansas City Metropolitan Area includes Johnson, Leavenworth, and Wyandotte Counties in Kansas and Cass, Clay, Jackson, Platte, and Ray Counties in Missouri.

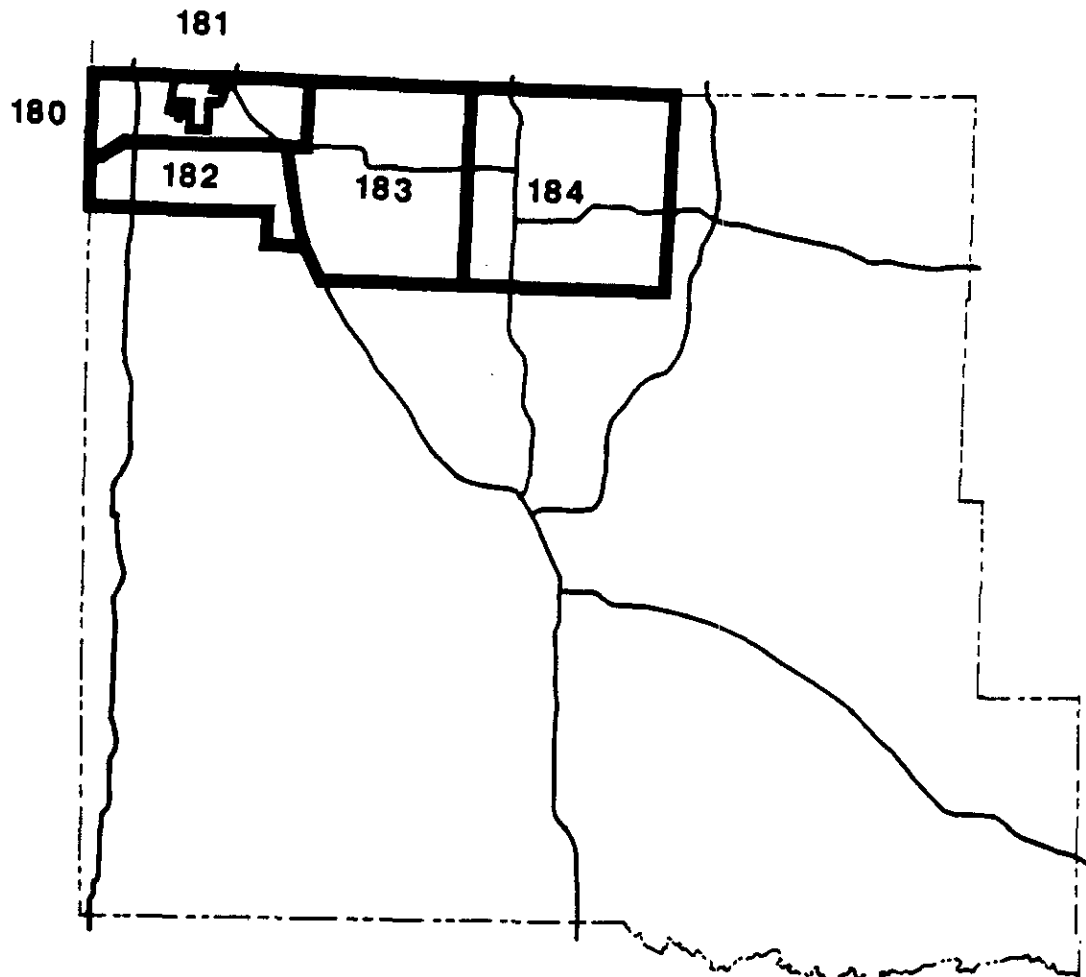
The MARC figures (Tables 1-5, 1-6) calculate a migration rate based on the assumption that migration is related to current labor force participation and future employment opportunities. The MARC figures also differ from the rest in that they include Metropolitan Area figures as well as isolated figures for specific areas within the northwest portion of the County, the areas which, as previously stated, are witnessing the County's most substantial growth. The areas which they chose to isolate are called Regional Analysis Areas (Figure 1-1) and are as follows:

- **Area 180** is that area bounded on the north and west by the *Cass County Line*, on the south by Missouri Highway 58, and on the east by the Belton/Raymore city limits;
- **Area 181** is the area in *Cass County* that is included within the Richards-Gebaur Air Force Base property limits;
- **Area 182** is that area bounded on the north by Missouri Highway 58, 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;
- **Area 183** is the area included within the Raymore Township boundaries; and
- **Area 184** is the area included within the Big Creek Township boundaries.

The MARC figures show an increase in population of 41.2% from 1980 to 2010 with *Cass County* representing 6.8% of the total projected growth within the Kansas City Metropolitan Area. The figures also show that *Cass County* will maintain a relatively constant percentage of the Metropolitan Area population at close to 4% from 1980 to 2010. The MARC figures which isolate the northwest portion of the County show that the areas within the northwest corner combined will increase 72.1% between 1980 and 2010. They will continue to increase in significance in terms of population concentration reaching 50.6% of the County's total population in 2010. All of the areas, individually, are projected to increase significantly with Area 184, which includes Lake Winnebago, showing a 136% increase by the year 2010 and Area 183, which includes all of the City of Raymore, showing a 127.5% increase by the year 2010. Area 182, which includes the southern part of Belton, will increase 29.6%; and Area 180, which includes the northern half of Belton, will increase 68.1%. Area 181 (Richards-Gebaur) will lose 311 people.

The number of households is projected to increase at a rate significantly higher than the figure for the Metropolitan Area (Table 1-7). While there is a national trend toward a decline in household size and a corresponding increase in the number of households, the County's increase of 63% in the number of households by the year 2010 is significant.

Figure 1-1
Regional Analysis Areas
Cass County, Missouri



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

CASS COUNTY, MISSOURI

COMPREHENSIVE PLAN

The OSEDA figures assume that a recent migration rate will continue and suggest that the population of *Cass County* will increase 41.9% by the year 2010 (Table 1-8). Included in this set of figures is a projection of how the age profile in *Cass County* will change over time. OSEDA has projected that the population will gradually age. According to the figures, all age group categories under the age of 35 will continue to decrease in number through the year 2010, and all age group categories over the age of 55 will continue to increase as a percentage of the whole throughout the same period.

TABLE 1-6
Population Projections
Cass County, Missouri
1980-2010

Regional Analysis Area	1980	% of County Total Population	1990	2000	2010	% of County Total Population	% Change 1980-2010
180	7,517	14.7	10,821	12,047	12,637	17.5	68.1
181	828	1.6	764	673	517	.7	-311 people
182	6,163	12.1	6,100	7,063	7,989	11.1	29.6
183	4,960	9.7	7,554	9,664	11,282	15.7	127.5
184	<u>1,698</u>	<u>3.3</u>	<u>2,471</u>	<u>3,295</u>	<u>4,007</u>	<u>5.6</u>	<u>136.0</u>
Total	21,166	41.5	27,710	32,742	36,432	50.6	72.1
Balance of the County	<u>29,863</u>	<u>58.5</u>	<u>32,290</u>	<u>34,780</u>	<u>35,623</u>	<u>49.4</u>	<u>19.3</u>
Total	51,029	100.0	60,000	67,522	72,055	100.0	41.2

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

CASS COUNTY, MISSOURI

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TABLE 1-7
Projection of the Number of Households
Cass County and Kansas City Metropolitan Area*
1980-2010

	1980	1990	2000	2010	% Change 1980-2010
<i>Cass County</i>	17,424	21,331	25,262	28,441	63.2
<i>Metropolitan Area*</i>	510,523	594,221	675,412	735,940	44.2
<i>Cass County as a % of the Metropolitan Area</i>	3.4	3.6	3.7	3.9	--

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

Note: * The Kansas City Metropolitan Area includes Johnson, Leavenworth, and Wyandotte Counties in Kansas, and Cass, Clay, Jackson, Platte and Ray Counties in Missouri.

TABLE 1-8
Population Projections by Age
Cass County, Missouri
1980-2010

Age Group	1980	% of County Total Population	1990	2000	2010	% of County Total Population
Under 5	3,998	7.8	4,514	4,350	4,308	6.0
6 to 19	14,108	27.6	14,191	15,007	14,520	20.1
20 to 34	11,740	23.0	13,699	13,183	13,343	18.4
34 to 54	12,237	24.0	15,509	18,790	19,844	27.4
55 to 64	4,160	8.2	5,263	6,708	7,925	10.9
65 and Older	<u>4,786</u>	<u>9.4</u>	<u>6,979</u>	<u>9,528</u>	<u>12,493</u>	<u>17.2</u>
Total	51,029	100.0	60,155	67,566	72,433	100.0

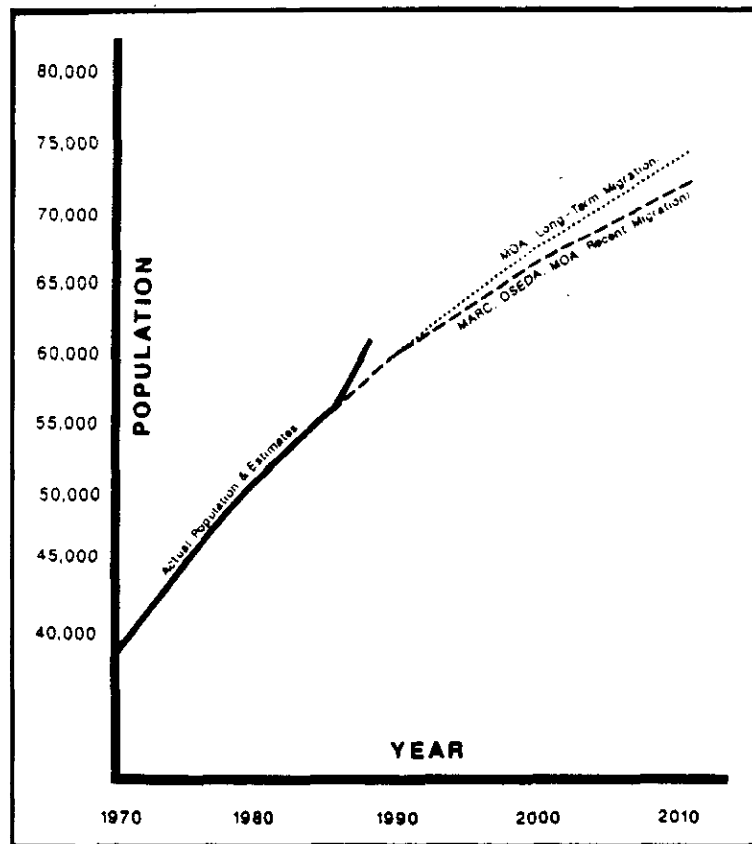
Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

Summary

MARC, OSEDA and MOA are in agreement as to their projections for the future population of *Cass County*. The three sets of figures generated by these organizations all project a steady increase in population of between 41% and 42% between 1980 and 2010. MOA long-term migration figures vary somewhat from the others and show a greater percentage increase during this same period of time (nearly 46%), if migration trends between 1975 and 1985 continue through the year 2010.

Figure 1-2

**Summary of Population Projections
Cass County, Missouri
1980-2010**



Source: U.S. Bureau of the Census
 Missouri Office of Administration (MOA)
 Mid-America Regional Council/Research Data Center (MARC)
 Office of Social and Economic Data Analysis
 University of Missouri-Columbia (OSEDA)

ECONOMICS

It is necessary to arrive at a general understanding of the County's existing and potential economic structure by investigating the economic trends which have been taking place in *Cass County*. The objective in such an investigation is to translate the existing and potential economic profile which includes employment, income, business development and construction trends into projections of future land use needs and issues.

In 1989, the Office of Social and Economic Data Analysis at the University of Missouri-Columbia undertook a study which resulted in a report outlining a social and economic profile of *Cass County*. The general conclusions which were reached are included in the following discussions.

Employment

One of the best and most available indicators of economic activity is employment. The distribution of labor in *Cass County* by broad economic category is shown in Table 1-9. The vast majority of employed persons in *Cass County* are working within the service sector of the economy. The percentage of service sector employed individuals grew from 53.7% of the County's total labor participation in 1980 to 55.2% in 1986. The two areas which shared equally in 1980 in employing the next greatest percentage of individuals are the government sector, 15.3%, and farming, 15.4%. Both of these sectors dropped as a percentage of the total between 1980 and 1986. While the percentage of farm workers dropped during this period, farming, nevertheless, represents a significant percentage of the County's total economic activity. *Cass County's* percentage of farm workers in 1986 (11.8%) is twice the percentage of State farm workers. The manufacturing sector employed the least number of people both in 1980 and in 1986.

The OSEDA figures on commuting patterns (Table 1-10) substantiate the fact that the communities within the County are continuing to develop and expand as "bedroom" communities. The attraction of these communities, which are being built upon large tracts of former farmland, is that they offer the benefit of a rural quality of life within easy access of the Kansas City Metropolitan Area. This trend should continue with the completion of the Bruce R. Watkins Drive and other highway improvements improving access to the area.

**TABLE 1-9
Employment by Industry
Cass County and Missouri
1980-1986**

Year	Total	Farm	Mfg.	Services	Government	Other
<i>Cass County</i>						
1980	14,298	15.4	6.6	53.7	15.3	9.0
1986	18,354	11.8	7.0	55.2	14.0	12.0
% Change 1980-1986	28.4					
<i>Missouri</i>						
1980	2,510,662	6.0	17.9	55.9	14.7	5.5
1986	2,812,793	5.1	15.5	59.6	13.7	6.1
% Change 1980-1986	12.0					

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

**TABLE 1-10
Commuting Patterns
Cass County, Missouri
1960-1980**

	1960	1970	1980
% of Population working outside of County	27.3	48.8	54.3

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

The Office of Social and Economic Data Analysis reached the following general conclusions regarding employment in *Cass County*:

- Between 1980 and 1986 total employment in *Cass County* increased by more than twice the State rate. Employment grew from 14,298 in 1980 to 18,354 in 1986 - a 28.4% gain. Only Clay and Platte counties had larger relative increases. (Table 1-11)
- Like other parts of the State, in *Cass County* non-farm proprietors (self-employed small business owners) grew at a much faster rate than wage and salary employment. Between 1980 and 1986 non-farm proprietors increased 53.8% to 5,720. Wage and salary employment increased 25% to 10,469. (Table 1-11)
- The proportion of *Cass County* employment engaged in farming declined from over 15% in 1980 to under 12% in 1986. There was also a decline in the proportion of jobs in government. The service and manufacturing sectors recorded slight relative increases over 1980 levels. (Table 1-9)
- Commuting is extensive among workers in *Cass County*. The proportion of *Cass County* residents commuting outside the County to work, doubled from 27% in 1960 to 54% in 1980. (Table 1-10)

TABLE 1-11
Non-Farm Employment
Cass County and Missouri
1980-1986

	1980	1986	Percent Change
<u>Total Employment</u>			
<i>Cass County</i>	14,298	18,354	28.4
Missouri	2,510,662	2,812,793	12.0
<u>Total Non-Farm</u>			
<i>Cass County</i>	12,095	16,189	33.8
Missouri	2,361,167	2,669,361	13.1
<u>Wage and Salary</u>			
<i>Cass County</i>	8,377	10,469	25.0
Missouri	2,065,300	2,262,460	9.5
<u>Non-Farm Proprietors</u>			
<i>Cass County</i>	3,718	5,720	53.8
Missouri	295,867	406,901	37.5

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

Employment Projections

The Mid-America Regional Council (MARC) has collected 1980 employment figures and generated a set of employment projections for *Cass County* through the year 2010 (Table 1-12). These figures represent the number of jobs that existed within the County in 1980 and the number of employment opportunities that are expected to exist in the future. This investigation used the same five Regional Analysis Areas that were used in generating population projections for the northwest corner of the County. In 1980, over half (55.9%) of the jobs in the County were located within this northwest area with the majority of these located in and around the City of Belton. MARC predicts that by the year 2010, the number of jobs will be redistributed throughout the County with the total number of jobs within the five Regional Analysis Areas combined dropping as a percentage of the total number of jobs in the County (55.9% in 1980 to 53.2% in 2010). The greatest percentage gain, however, within the six areas is projected to be within the eastern most of these areas, the area adjacent to the Pleasant Hill city limits and including Lake Winnebago. The number of jobs in this area is projected to increase 70.2%. The number of jobs in the rest of the County, excluding this northwest corner, is expected to increase from 44.1% to 46.8% of the total jobs in the County.

TABLE 1-12
Employment Projections
Cass County, Missouri
1980-2010

	1980	% of County Total Employment	1990	2000	2010	% of County Total Employment	% Change 1980-2010
<i>Regional Analysis Area</i>							
180	2,780	22.1	3,040	3,197	3,225	20.1	16.0
181	307	2.4	345	385	426	2.7	38.8
182	2,564	20.4	2,828	2,983	2,955	18.4	15.2
183	1,091	8.7	1,229	1,353	1,432	8.9	31.3
184	<u>292</u>	<u>2.3</u>	<u>334</u>	<u>399</u>	<u>497</u>	<u>3.1</u>	70.2
Areas Combined	7,034	55.9	7,776	8,317	8,535	53.2	21.3
Balance of the County	<u>5,552</u>	<u>44.1</u>	<u>6,240</u>	<u>7,053</u>	<u>7,506</u>	<u>46.8</u>	35.2
County Total	12,586	100.0	14,016	15,370	16,041	100.0	27.5

Source: Mid-America Regional Council/Research Data Center, 1989

Income

Another component of the County's economic structure is income. *Cass County's* apparent substantial growth in income as indicated in Table 1-13 along with the strong population growth, as has been determined in the previous section, indicates the potential for increased retail activity and commercial land use demands. OSEDA has described the *Cass County* income profile as follows:

- Compared to Missouri overall, *Cass County* has fewer lower income households, more middle income households, and about the same proportion of higher income households. In *Cass County*, the 1987 median household effective buying income (income after taxes) was \$27,673. The comparable Missouri level was \$24,169. (Table 1-14)
- Total personal income in *Cass County* increased at a faster rate than other nearby Missouri counties. Total personal income in the County increased from about \$485 million in 1980 to nearly \$796 million in 1986 - a 64.2% gain. Over the same period, Missouri total personal income increased 54.1%, Jackson County increased 47.7%, and Clay County increased 56.5%. (Table 1-13)
- *Cass County's* 1986 per capita income of \$13,895 was just \$21 less than the State level. It was about \$2,000 less than the per capita incomes of Clay or Platte counties and about \$1,500 less than Jackson. (Table 1-13)

TABLE 1-13
Personal and Per Capita Income
Cass County and Missouri
1980-1986

	Personal Income 1980 (000)	Personal Income 1986 (000)	Percent Change 1980-86	Per Capita Income 1980	Per Capita Income 1986	Per Capita Income 1986 in 1980 Dollars
<i>Cass County</i>	\$484,681	\$795,884	64.2	\$9,449	\$13,895	\$10,924
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-Columbia, 1989

Note: * 1986 income adjusted by a factor of 1.272.

TABLE 1-14
Distribution of Households
by Income
Selected Missouri Counties
1987

County	Number of Households 1987**	Median Household EBI* 1987	% of Households in Each EBI* Category				
			Under \$10,000	\$10,000- \$19,999	\$20,000- \$34,999	\$35,000- \$49,999	\$50,000 & Over
Cass	20,200	\$27,673	15.5	20.1	28.4	20.1	15.9
Clay	55,700	\$33,431	9.9	16.2	26.8	24.0	23.1
Jackson	253,000	\$26,679	16.7	20.9	25.8	18.4	18.2
Platte	18,900	\$29,233	12.6	19.1	30.3	23.1	14.9
Ray	8,200	\$21,852	21.5	24.4	29.8	16.5	7.8
Missouri	1,910,900	\$24,169	19.2	22.7	25.7	16.6	15.8

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

Note: * EBI = Effective Buying Income.

** Interim figures represent population estimates.

With the 1986 figures adjusted to 1980 dollars, the per capita income in *Cass County* increased 15.6%. While this represents a significant increase and is an indication of economic well being, the figures show that per capita income for *Cass County* did not increase as rapidly as per capita income for Missouri. It should be noted that U.S. Bureau of the Census figures for personal and per capita income vary significantly from the OSEDA figures. This is a result of differences in both the definition of personal income and in the method of calculating per capita income. The U.S. Bureau of the Census figures indicate that *Cass County* per capita income increased at about the same rate (15.8%) as the OSEDA figures from 1979 to 1985, but show that the County per capita income remained higher than the State's in both 1979 and 1985.

According to MARC, the number of lower income households will drop from 5,748 in 1980 to 5,729 in 2010 while the number of upper income households will increase by 163.1% between 1980 and 2010 (Table 1-15).

TABLE 1-15
Income Range Projections
Cass County and Kansas City Metropolitan Area*
1980-2010

	1980	1990	2000	2010	\$ Change 1980-2010
<i>Cass County</i>					
Income Range - (Households)					
Lower	5,748	5,720	5,777	5,729	-19 Households
Lower Middle	2,660	3,097	3,576	3,973	49.4
Upper Middle	4,457	5,388	6,324	6,742	51.3
Upper	4,559	7,126	9,585	11,997	163.1
<i>Metropolitan Area</i>					
Income Range - (Households)					
Lower	169,162	169,202	171,801	170,978	1.1
Lower Middle	78,131	81,528	86,441	89,597	14.7
Upper Middle	122,870	132,936	143,505	143,194	16.5
Upper	140,360	210,555	273,665	332,171	136.7

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

Note: *The Kansas City Metropolitan Area includes Johnson, Leavenworth, and Wyandotte Counties in Kansas, and Cass, Clay, Jackson, Platte, and Ray Counties in Missouri.

Business Development

OSEDA reached the following conclusions regarding business development:

- The number of businesses in *Cass County* increased by 43.8% between 1980 and 1986 -- twice the Missouri rate over the same period. The number of small businesses (less than 20 employees) increased from 666 to 972; the number of mid-size businesses (20 to 100 employees) increased from 61 to 71; and the number of large businesses (over 100 employees) increased from 2 to 5. (Table 1-16)
- Retail sales in *Cass County* increased 53% between 1982 and 1987 to \$255 million. The Missouri rate of increase was 39%. *Cass County's* retail sales per capita is about average for Missouri. Clay (\$7,692) and Jackson (\$7,251) counties have much higher per capita sales than *Cass County* (\$4,309). (Table 1-17)

CASS COUNTY, MISSOURI

COMPREHENSIVE PLAN

TABLE 1-16
Number of Businesses
Cass County and Missouri
1980-1986

	Small Businesses		Mid-Size Businesses		Large Businesses		% Change 1980-84 All Businesses
	1980	1986	1980	1986	1980	1986	
<i>Cass County</i>	666	972	61	71	2	5	43.8
Missouri	85,988	106,634	11,128	12,868	2,374	2,685	22.8

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

TABLE 1-17
Retail Sales
Selected Missouri Counties
1982-1987

County	Retail Sales 1982 (\$000)	Retail Sales 1987 (\$000)	% Change 1982-87	Per Capita Retail Sales 1987
<i>Cass</i>	\$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-Columbia, 1989

CHAPTER TWO
COMMUNITY FACILITIES

CHAPTER TWO COMMUNITY FACILITIES

The answers to the County's future land use questions depend, to a large degree, upon the location and extent of public services and facilities and upon the adequacy of these to accommodate future growth and development. Within the Comprehensive Planning process, then, it is necessary to explore the relationship between development, services and facilities. It is important, as well, that even after a future plan is determined, the County continues to monitor its level of facilities and services to assure that new development is accommodated and that existing development is provided equal or better service as new growth occurs. The following section is a review of the facilities that are most critical to the future development of the County.

Water Districts

(Water district boundaries are illustrated on Figure 2-1.)

Rural Water District #1, the first district in the County, began serving customers in the early 1970s. Currently serving approximately 200 customers with water purchased from Pleasant Hill, the district is operating at close to its capacity as specified in its contract with the City of Pleasant Hill. The district is using approximately 1,000,000 gallons per month. The water is mostly free flowing from the Pleasant Hill supply; however, the district has a 100,000 gallon stand pipe if storage is needed.

Rural Water District #2 is currently serving 1,000 customers at an average monthly usage of 5,000,000 gallons per month. Water is purchased from the City of Belton; however, in 1991 the district will begin purchasing its water from Kansas City. Water is stored in a 500,000 gallon water tower located at Holmes Road and 204th Street.

Rural Water District #3 was organized in 1969, began supplying water in 1972 and currently serves approximately 500 customers. Water is purchased from Lee's Summit with which the district has a contract limiting it to 6,000,000 gallons per month. The district is currently operating at 1/4 of its capacity, about 2,500,000 gallons per month.

Rural Water District #4 purchases water from the City of Harrisonville and pumps it directly from the Harrisonville supply to its 520 customers at a rate of approximately 40,000,000 gallons per year. This is about 1/2 of its current capacity of 6,000,000 gallons per month as specified in its contract with the City of Harrisonville. The district is in the process of seeking another water supply in response to a recent 125% cost increase levied by the City of Harrisonville.

Rural Water District #5 purchases its water from Pleasant Hill and serves approximately 300 customers. The district is presently operating at 1,500,000 gallons per month which is close to its capacity of 1,750,000 gallons per month. There are approximately 40 miles of 2" - 6" lines. The district began selling water in 1975.

Rural Water District #6 services its 585 customers with water which flows directly from the Lee's Summit water supply. The district has a 250,000 gallon water tower for storage which is available if it should be needed. A monthly average flow of 4,000,000 gallons is pumped through the 100 miles of 2" - 8" pvc pipe lines. The district has a maximum capacity of 5,700,000 gallons per month.

Rural Water District #7 pumps water out of the South Grand River into a reservoir which is located north of Freeman. The district is 90 square miles in area with 300 miles of 2" - 8" lines serving 1,000 customers. It began selling water in 1982 and is operating at approximately 30% of its capacity.

Rural Water District #8 is a small district which serves the residents of the Holmes Hills Addition, a subdivision of approximately 99 homes located in the northwest corner of *Cass County*. It purchases water from the City of Belton, drawing water off of the 14" Belton line which runs along the east side of Holmes Road.

Rural Water District #9 has over 200 miles of 2" - 6" lines serving approximately 1,200 customers. In 1989, it delivered approximately 108,000,000 gallons of water which is close to its operating capacity of 12,500,000 gallons per month. The district buys its water from the City of Harrisonville and stores it in a 100,000 gallon stand pipe located off of Missouri Highway 2.

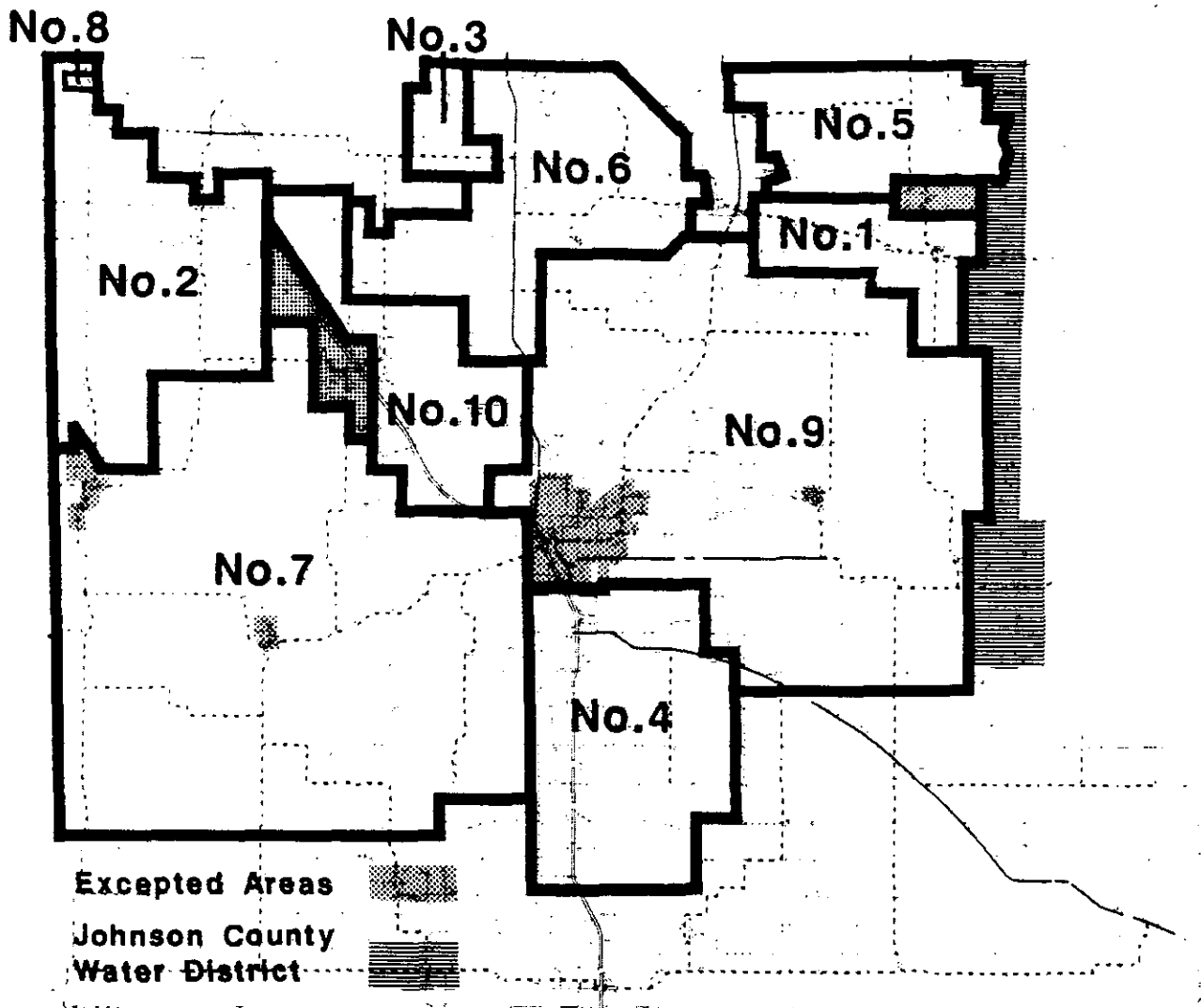
Rural Water District #10 purchases water from the City of Harrisonville, stores it in both a 100,000 gallon ground storage tank and a 150,000 gallon elevated tank and delivers it to its 426 customers via approximately 45 miles of 2" - 6" pvc pipe line. The district of 16,000 acres has been serving customers since 1983 and has adequate room for growth. The current usage of 2,000,000 gallons per month is well below the district capacity of 4,000,000 gallons per month.

A portion of the County adjacent to the *Cass County/Johnson County* Line is included within the Johnson County Rural Water District #2.

*CHAPTER THREE
ENVIRONMENTAL CHARACTERISTICS
AND EXISTING LAND USE*

Figure 2-1

Water Districts
Cass County, Missouri
1990



Fire Protection

Fire protection is an important factor to be considered in planning for the future of a county-wide area. In addition to the obvious necessity of ensuring adequate protection and disaster assistance to all residents of the County, the adequacy of fire protection equipment and personnel has a substantial effect upon insurance costs. The cost of fire insurance is determined by the fire rating zones established by the National Board of Fire Underwriters. Insurance rates are determined through the evaluation of many criteria including water supplies (availability and pressure in the vicinity of the structure), type and age of equipment, available personnel, training, building conditions and, more importantly, in rural areas, the distance from the station to the furthest point in the district.

The district fire facilities are summarized in Table 2-1 and the boundaries illustrated in Figure 2-2.

County Sheriff

The provision of law enforcement protection is an aspect of community services which requires county-wide coordination and cooperation. Intergovernmental agreements and the joint use of facilities by the County and various cities and towns are ways of adequately providing protection to all individuals throughout the *Cass County* area.

The *Cass County Sheriff's Department* operates out of one facility which is located in Harrisonville. This facility houses the County Jail as well. The department operates 17 vehicles, one of which is a jail van; all are radio-equipped. The department has 37 employees, 14 of which are sworn officers, including the County Sheriff. The 13 Deputies which the department currently employs is the maximum allowed by law at the present time (1 Deputy per 5,000 people); however, it is likely that the 1990 census figures will indicate the need for additional manpower to adequately serve the entire County area. The department operates within the unincorporated areas of the County except when circumstances necessitate entry into the County's incorporated areas. The *Cass County Sheriff's Department* has a formal mutual aid agreement with the City of Belton in the event that either of the parties should need to supplement its forces within its own jurisdiction.

Hospitals

Cass County is served by two hospitals. *Cass Medical Center* is located in Harrisonville and has a capacity of 50 beds. In 1989, 3,000 square feet of outpatient clinic was renovated and an additional area for ancillary services was constructed. *Belton-Research Hospital* has a capacity of 75 beds and currently has no plans for expansion in the near future.

CASS COUNTY, MISSOURI

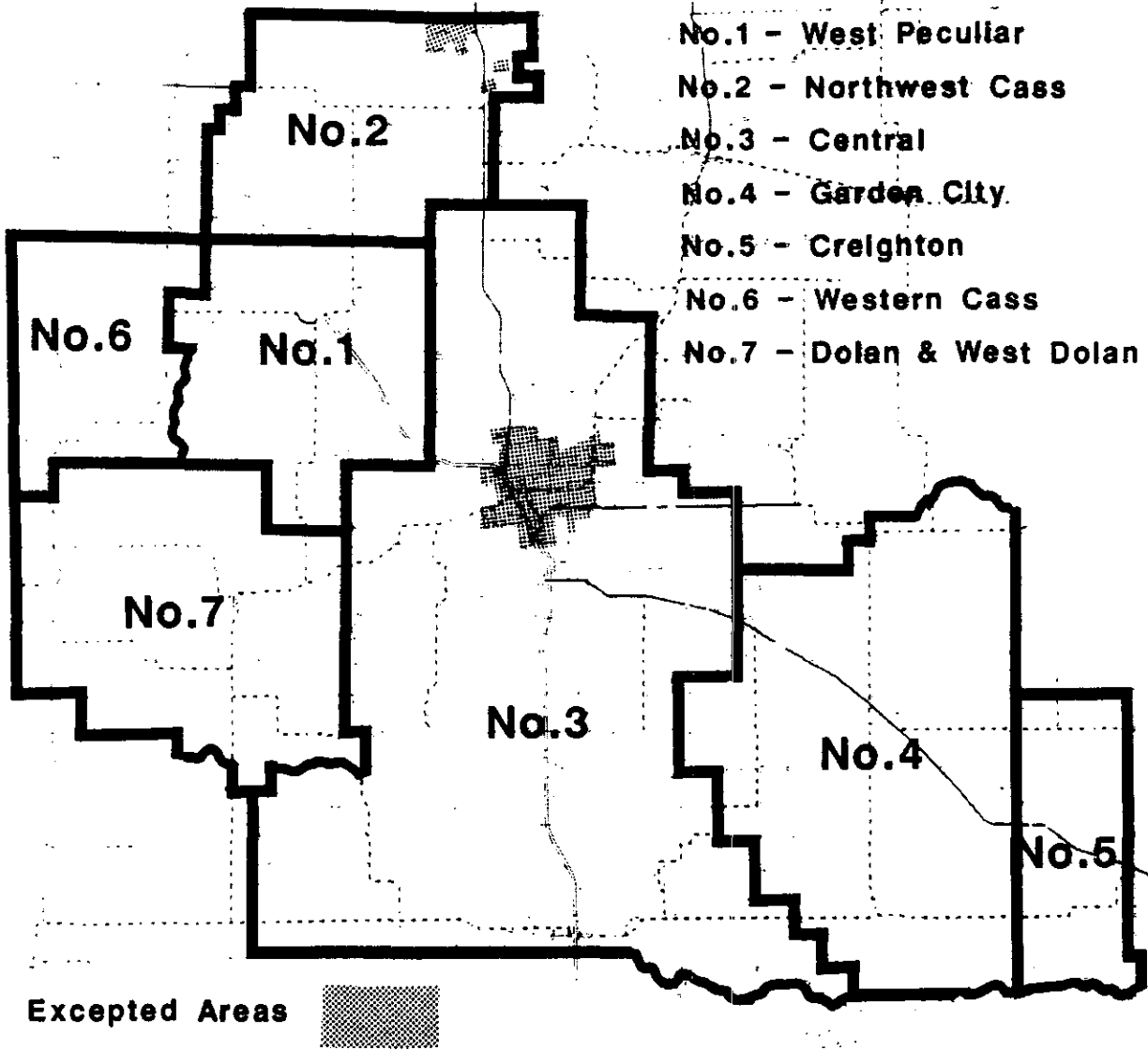
COMPREHENSIVE PLAN

TABLE 2-1
Fire District Facilities
Cass County, Missouri
1990

District	Paid Firefighters	Volunteer Firefighters	# of Trucks	Other Vehicles	Average Truck Tank Capacity	Average Pump Capacity
West Peculiar	3	25	6	1 medical vehicle	1,170 gal. 2,500 gal. maximum	582 gal/min. 1,250 gal/min. maximum
Northwest Cass	19	14	4	5	1,225 gal. 2,500 gal. maximum	1,060 gal/min. 1,250 gal/min. maximum
Central	0	42	8	0	1,900 gal. 4,500 gal. maximum	600 gal/min. 1,000 gal/min. maximum
Garden City	0	34	7	0	1,120 gal. 3,700 gal. maximum	550 gal/min. 1,000 gal/min. maximum
Creighton	--	--	3	0	980 gal. 2,000 gal. maximum	200 gal/min. 350 gal/min. maximum
Western Cass	0	22	6	2	1,480 gal. 4,300 gal. maximum	620 gal/min. 1,250 gal/min. maximum
Dolan & West Dolan	--	--	6	2	1,030 gal. 3,300 gal. maximum	300 gal/min. 1,000 gal/min. maximum

Figure 2-2

Fire Protection Districts
Cass County, Missouri
1990



CHAPTER THREE ENVIRONMENTAL CHARACTERISTICS AND EXISTING LAND USE

ENVIRONMENTAL CHARACTERISTICS

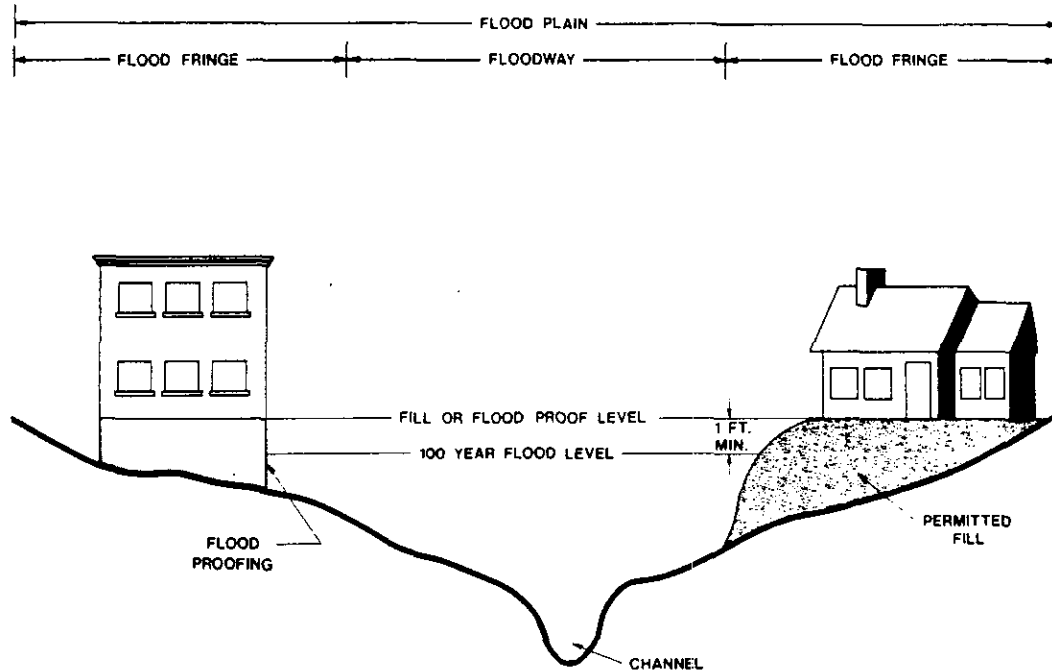
In order to make intelligent decisions regarding the location, intensity, and type of future development in *Cass County*, it is necessary to explore the possible limitations placed on urban growth by the environment. Although most developmental limitations can be overcome, the enormous additional cost in terms of both public and private investment makes this a very cost-inefficient alternative. Instead, it is preferable to encourage growth in those areas which can best accommodate urban development and discourage growth in those areas with the most severe limitations. By avoiding problem areas, the safety and convenience of the public can be increased and the public and private costs associated with development can be minimized.

This section will elaborate on the physical and environmental characteristics most relevant to development in *Cass County*.

Flooding

One of the most obvious and potentially most destructive environmental limitations to development is flooding and, consequently, is an extremely important issue in the planning process. The 100-year flood plain as defined by the Federal Emergency Management Administration (FEMA) is generally accepted as the determining area of flooding for the purposes of planning and development. Areas within the 100-year flood plain have a 1-in-100 chance of flooding in any given year. The extent of the land area which lies within the 100-year flood plains of the South Grand River and its numerous tributaries will limit the extent and location of future development within *Cass County*. The flood plain is the land that would be inundated with flood water after a 100-year flood and consists of two sections: the floodway and the flood fringe. The floodway includes the center of the channel of a creek, stream or river and that area which carries the majority of the flood waters. Under no conditions is construction permitted in the floodway. The flood fringe extends from the floodway to the outer edge of the flood plain. While it is preferable that urban development not occur in the flood plain altogether, development can occur in the flood fringe. Construction in the flood fringe must be at least one foot above the 100-year flood level and development within the flood fringe cannot increase the floodway 100-year flood elevation by a cumulative total increase of one foot or more. It is generally recommended that if any development is permitted in the flood fringe, it be confined to low density, non-residential uses. The relationship between the flood plain, floodway, and the flood fringe is illustrated in Figure 3-1.

Figure 3-1
Flood Plain Profile



Drainage Patterns

Drainage patterns within the County have implications for development and must be illustrated and discussed within the planning process. The availability of utilities, access to a sanitary sewerage system, in particular, significantly affects patterns of growth. To be cost-effective, a sanitary sewerage system should be gravity flow and drainage basins, therefore, become a key consideration in planning for the future of the area. The major drainage basins in *Cass County* have been designated on the Environmental Characteristics Map.

Two major drainage basins or watersheds in *Cass County* are formed by the ridgeline which runs continuously from the northwest to the southeast corners of the County passing through the east portion of Harrisonville. The area to the south of this ridge, approximately two-thirds of the County, drains into the South Grand River via its tributaries. The largest of these is the East Branch, a watershed which includes

Peculiar and parts of Harrisonville. The South Grand River flows toward the south-east and forms the County's southern boundary from just east of Archie to the Henry County line. The river eventually empties into the Harry S. Truman Reservoir just west of Clinton, Missouri. The area to the north of the County's major ridgeline drains into Big Creek, Crawford Creek and Camp Branch, all of which eventually empty into the South Grand River further to the south and east, outside of the County's boundaries.

EXISTING LAND USE

This section examines the pattern of existing land uses in *Cass County*. The inventory of existing land uses describes both the amount of land in each land use category and the distribution of uses across the County. Before the future land use pattern of *Cass County* can be determined, it is necessary to have a full understanding of the existing land use pattern. The location and character of existing uses will have an obvious impact on the location and character of future uses.

Land Use Survey

A field survey of the existing land uses in *Cass County* was conducted by Bucher, Willis & Ratliff in December of 1989. 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. Mobile Home Farms
 - f. Farmsteads
2. Commercial
3. Public and Semi-Public
4. Industrial
5. Parks and Recreation
6. Highways and Streets
7. Railroads
8. 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, mobile home farms, farmsteads and nursing homes. Farmsteads are considered as houses occupied by residents who are engaged principally in the farming of surrounding properties. Suburban acreages are not considered as farmsteads.
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. Highways and Streets: Rights-of-way for highways, streets and alleys opened for use as public thoroughfares.
7. Railroads: Land for railroad rights-of-way, train storage, switching, and freight and passenger depots.
8. 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 inventory is not a plan, but rather a portion of the necessary data which comprises a plan. To keep the plan current, this inventory should also be kept current. This can be accomplished by periodic² land

²It is recommended that new building permits be recorded annually.

use surveys, or by updating the map and adjusting the inventory calculations as new building permits are issued, or as tax records are changed. By keeping the land use data current, the County can always assess where it is in relation to its development objectives and goals as outlined in following chapters of the Comprehensive Plan.

Land Use Survey Results

Table 3-1 displays a summary of existing land uses within *Cass County*. Overall, 21,512 acres of the County's total land area has been developed in some way. This represents 5% of the County's total land area of 429,555 acres or 671 square miles. This figure does not include the approximately 32,115 acres or 50 square miles of incorporated area within the County. The largest of the 18 separate incorporated areas is the City of Raymore with 8,722 acres followed by Belton with 8,706 acres, Harrisonville, 5,207 acres and Pleasant Hill, 2,507 acres (Table 3-2).

The results of the land use survey 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 next most extensive use of the land is that amount, 2% of the total land area, reserved for the County's system of roads and highways. Two large areas, 4,370 acres of Missouri Conservation and Wildlife Areas in southern *Cass County* comprise 1% of the total land area. The rest of the land uses combined represent less than 3% of the total land area.

Residential

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 threaten agricultural operations. While residential farms are widely scattered throughout the County, concentrations of this use occur in the northwest corner around Belton and Raymore and the area surrounding Harrisonville.

Mobile homes and mobile home farms are both numerous and widely scattered throughout the County representing 3 percent of the developed land area. A significant concentration of mobile homes was located several miles south of Belton.

The only multi-family housing was located in the area south of Belton.

TABLE 3-1
Existing Land Use
Land Use Survey
Cass County, Missouri
1989

Land Use Category	Land Area** (Acres)	Percent of Developed Land	Percent of Total Land Area	Acres per 100 Persons*
Residential				
Single-Family	983	4.5	.23	1.6
Two-Family	5	.02	.001	.008
Multi-Family	108	.5	.03	.18
Mobile Home	455	2.1	.10	.74
Farmstead	3,999	18.3	.93	6.5
Mobile Home Farm	219	1.0	.05	.36
Commercial	350	1.6	.08	.57
Industrial	734	3.4	.17	1.2
Public and Semi-Public	620	2.8	.14	1.0
Parks and Recreation	4,370	20.3	1.0	7.1
Roads/Highways	9,322	43.3	2.2	15.2
Railroad	<u>656</u>	<u>3.0</u>	<u>.15</u>	<u>1.1</u>
Total Developed Land (Acres)	21,821	100.0	5.1	35.6
Vacant and Agricultural	<u>407,734</u>	<u>---</u>	<u>94.9</u>	<u>664.0</u>
Total Land Area (Acres)	429,555	---	100.0	699.6

Source: Bucher, Willis & Ratliff, 1989 Field Survey

Note: * Cass County Population, 61,400, 1988 Census Bureau Estimate

** In calculating the number of acres for each land use, it was assumed that each unit of single-family, two-family, mobile home, farmstead, and mobile home farm use occupies one acre of land. Commercial and public uses were calculated in the same manner except in the case of large continuous areas of either of these uses in which case the area was measured from the land use survey map. All industrial uses were measured. Roads and highways were calculated using the following average right-of-way widths: County Roads, 50'; State and U.S. Highways, 100'; U.S. 71 Highway, 300'; Railroads, 50'.

TABLE 3-2
Incorporated Land Areas
Cass County, Missouri

Incorporated Area	Land Area (Acres)	Percent of County Total Land Area
Archie	667	.16
Baldwin Park	85	.02
Belton	8,706	2.0
Cleveland	934	.22
Creighton	183	.04
Drexel (Partial)	535	.12
East Lynne	214	.05
Freeman	273	.06
Garden City	918	.21
Gunn City	68	.02
Harrisonville	5,207	1.2
Kansas City (Partial)	694	.16
Lake Annette	216	.05
Lake Winnebago	1,377	.32
Lee's Summit (Partial)	668	.16
Peculiar	848	.20
Pleasant Hill	2,507	.58
Raymore	8,722	2.0
Strasburg	170	.04
West Line	74	.02
Total Incorporated Area	33,066	7.5

Commercial

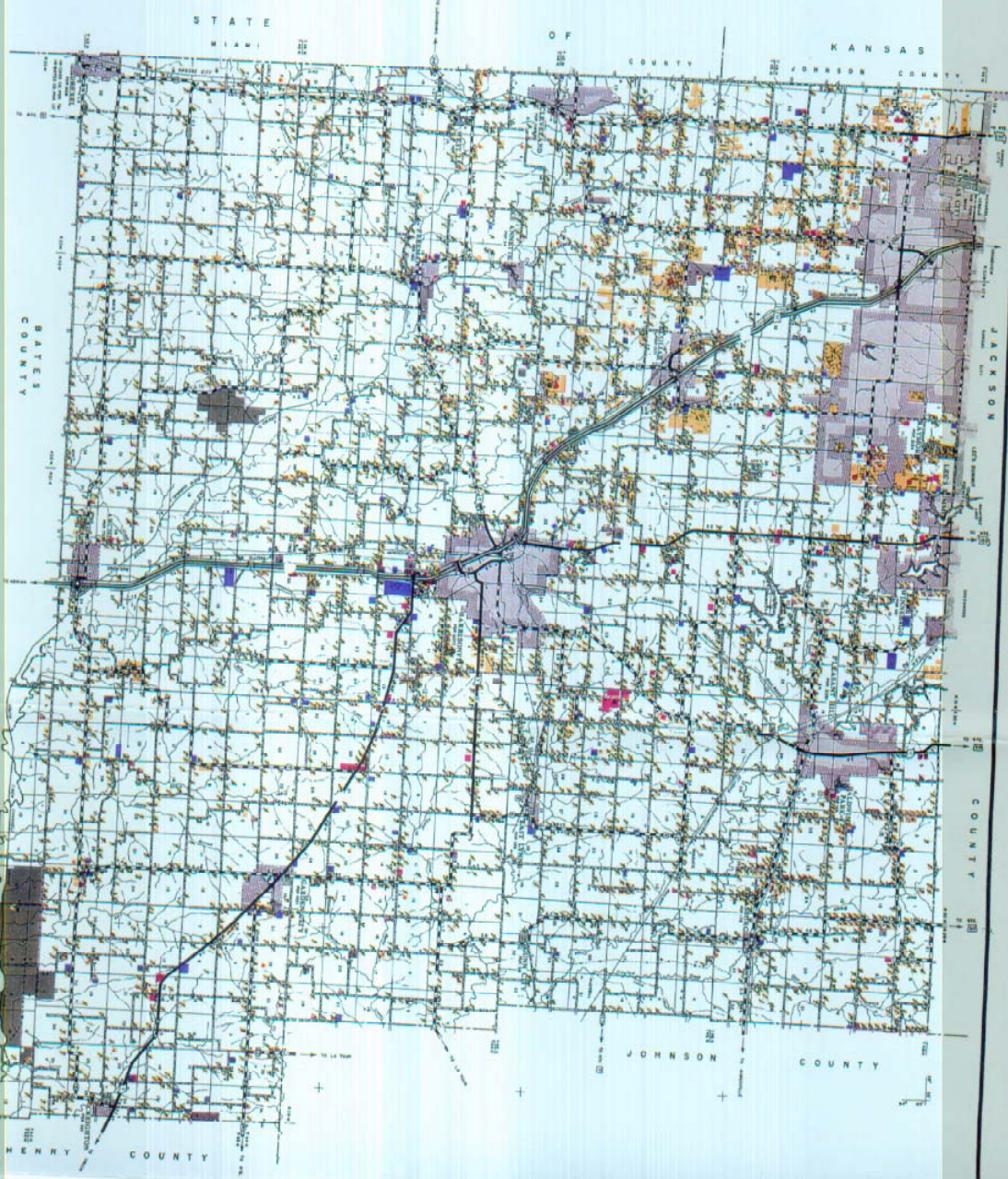
Commercial uses are, predictably, concentrated in the Belton-Raymore area and around the major highway corridors, specifically U.S. 71 Highway, Highway 291, Highway 7 and Highway 2. The largest concentration of commercial uses occurs south of Harrisonville in the area surrounding the intersection of Highway 2 and U.S. Highway 71. A significant number of commercial operations scattered throughout the County and outside of the highway corridors are located in association with either single-family residences or farmsteads.

Industrial

The amount of industrial land is small. Slightly more than 3% of the developed land area was classified as industrial. This industrial land is a combination of manufacturing uses as well as oil and gas storage and quarry operations.

Park and Recreation Land

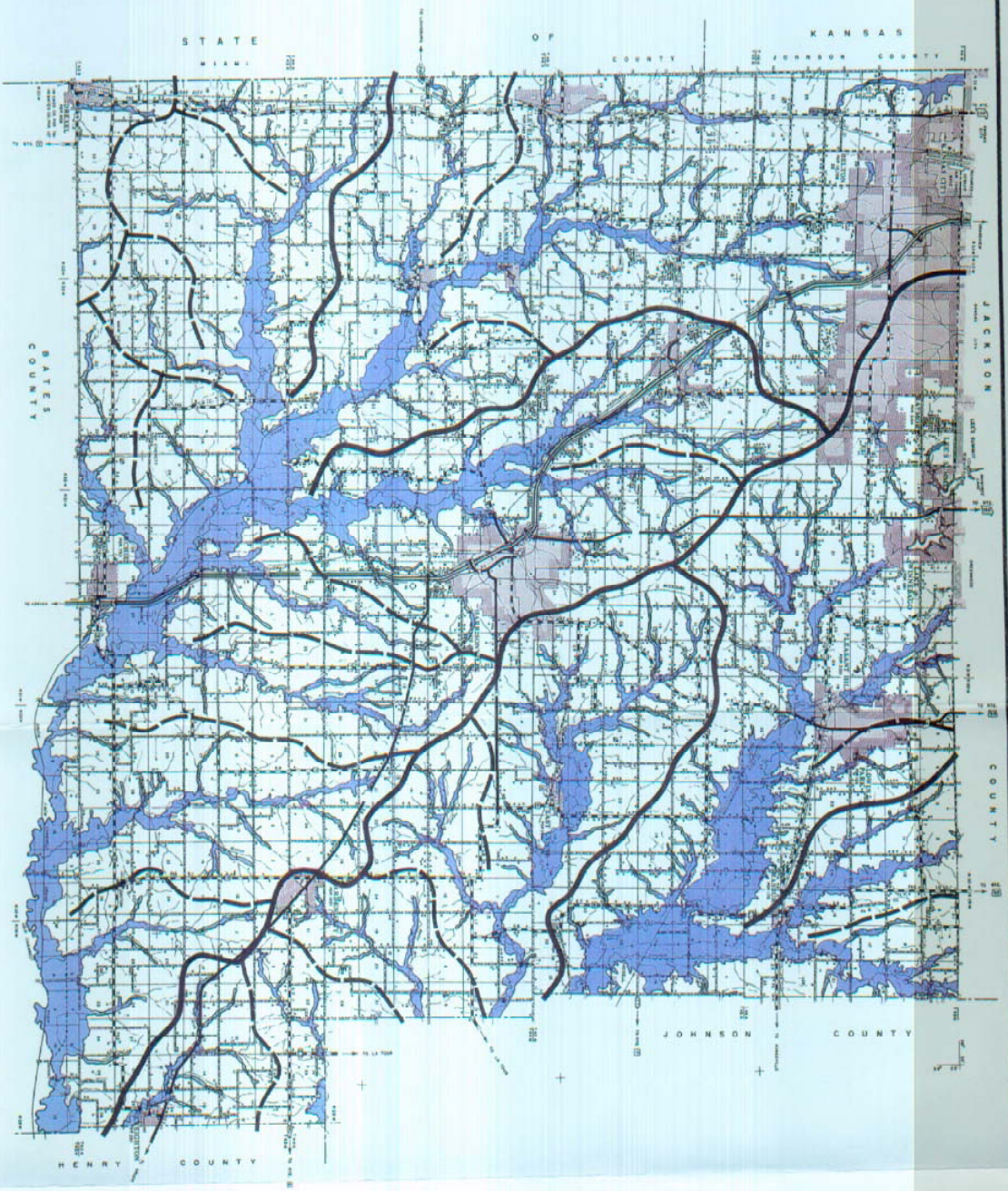
The Missouri Department of Conservation maintains two large areas of land in southern *Cass County*. Settle's Ford Wildlife Area, part of which is located in Bates County, occupies approximately 3,489 acres in *Cass County* and Amarugia Highlands Wildlife Management Area occupies 881 acres northwest of Archie, Missouri.



EXISTING LAND USE
December 1989




LEGEND

- Single-Family Residential
- Two-Family Residential
- Multi-Family Residential
- Mobile Home
- Farmstead
- Commercial
- Industrial
- Public & Semi-Public
- Parks & Recreation
- Vacant or Agricultural



**ENVIRONMENTAL
CHARACTERISTICS**

LEGEND

-  100-Year Flood Plain
-  Major Ridge Lines
-  Secondary Ridge Lines



**BOHRER
AND
PARTNERS**

CHAPTER FOUR
FUTURE LAND USE

CHAPTER FOUR FUTURE LAND USE

URBAN ISSUES

Due to the nature and intensity of development in its northern tier, *Cass County* is facing an increasing number of urban issues which have not, traditionally, been within the realm of County concerns. It is clear that the County's urban "fringe" areas are currently of primary concern and need to be protected. It follows that communication and coordination with and among the *Cass County* incorporated areas is critical. Representatives from six cities in *Cass County* were interviewed as to their concerns about land use and development within the County, particularly in the areas surrounding their city limits. The cities were: Belton, Raymore, Harrisonville, Pleasant Hill, Lake Winnebago and Peculiar. The following report is a summary of the key issues that were raised in the interviews which were conducted.

Perceived Barriers to Annexation

Subdivisions which are being developed adjacent to incorporated areas present problems which are hindering the growth of the cities in *Cass County*. Subdivisions constructed below the standards of city building and development codes present a potential financial burden for the surrounding cities. The cost of upgrading these developments to city standards, in the event that city limits are extended to include these areas, can be great. In addition, it is often not to the cities' advantage to incorporate large lot developments. The low increase in tax base which these areas represent does not offset the cost of acquiring, upgrading and providing municipal services. The Missouri Courts, in hearing cases regarding annexations, recognize the "beneficial effect of the uniform application and enforcement" of ordinances, regulations, codes and services in these fringe areas and support annexation if it can be proven to be necessary to the proper development of the municipality.

Municipal Services

The issue of self-sufficiency versus reliance on the Kansas City metropolitan area for municipal services is of concern to many of the cities. Issues deserving attention include:

- Should the incorporated areas in the northern half of the County develop their own facilities or should they rely on connecting to existing Kansas City area systems?
- At what point geographically does the connection with Kansas City become inefficient and too distant?

- Should the County develop its own solid waste treatment facilities?
- Should the County play a role in evaluating and coordinating its water resources, supplies and distribution?
- Should the County encourage the development of Sewer Districts?

Roads

Both road maintenance and design standards are a concern to communities in *Cass County*. As development proceeds, the County may be able to respond to increased development by ensuring that County roads will be upgraded to urban standards in order to handle increased capacities. Major paved roads should connect public and large commercial facilities such as schools and shopping areas.

Impact and User Fees

The concept of charging impact and user fees to more evenly and justly distribute the cost of maintaining facilities is now being considered by the City of Raymore; a financing mechanism which the County may want to consider in the future.

THE FUTURE LAND USE PLAN

In response to the discussions with the *Cass County* incorporated areas and in consideration of the issues and trends that have been identified in this report, the following Future Land Use Plan has been developed.

The *Cass County* Land Use Plan is a long-range perspective of future land use. It identifies broad general directions for future development and is not intended to establish the proper use of each and every parcel of land. In practice, as individual decisions need to be made, the conditions and principles discussed throughout this plan should be consulted and considered along with the summarized land use patterns on the map and the set of goals, objectives and policies which have been established. The Future Land Use Plan encourages directing growth in the following ways:

- Concentrating urban land uses
- Restricting development in specific areas
- Separating incompatible land uses

The County's role in implementing the plan and thus, in guiding its own development, is in directing growth to specific areas in order that the conservation of resources including natural, cultural, agricultural and past and private investments is assured and so that a managed urban growth pattern in the County is achieved.

It must be emphasized that the value of the Comprehensive Plan to the decision-making process is good only as long as the plan is kept current. On-going changes should be reflected in the inventories of man-made and natural characteristics presented in earlier chapters. A current tally of existing conditions will not only allow for an up-to-date analysis of needs, but will also allow for a measurement of success at achieving formally stated goals and objectives.

AREAS OF CONCENTRATED URBAN LAND USES

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 infill 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 area 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, developers 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 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 (½) 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.

Future Commercial Nodes

The majority of commercial uses should be encouraged to locate within the urbanizing areas of the County. Commercial nodes have been identified at the intersection of major arterials that occur within the urban area reserve.

AREAS OF RESTRICTED DEVELOPMENT

Rural Area Residential Development

In other areas of the County, outside of the urban area reserve, the following policy regarding residential development 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, should the developer or subdivider wish to exceed the two houses per forty-acre density in an area that is greater than one mile from an incorporated place, provisions must be made for acceptable standard streets, water service and sewer service including a maintenance fund for those systems. In addition, some provisions must be made for the maintenance of roadways leading to and from the development.

Exception: Any farmhouse existing at the adoption of the zoning regulations may be sold off on a parcel not less than five (5) acres in area provided sewage disposal requirements and lot split requirements may be met.

Open Space Resource Protection Area

All areas within the 100-year flood plain are encouraged to remain undeveloped. Construction should not be permitted in the floodway or that portion of the flood plain which includes the center of the channel of a creek, stream or river and the area which carries the majority of the flood waters. Development can occur, however, in the flood fringe which is the area that extends from the floodway to the outer edge of the flood plain. Construction in the flood fringe should not increase the floodway 100-year flood elevation by a cumulative total of one foot or more and it is generally recommended that if any development is permitted in the flood fringe, it be confined to low density, non-residential uses. In considering specific development proposals which occur in the flood plain, it is recommended that the members of the planning commission refer to maps generated by the Federal Emergency Management Agency to identify floodway and flood fringe boundaries for specific areas. Missouri Department of Conservation lands, and the area within one-half (½) mile of city water supply reservoirs, are also designated as resource protection areas and are encouraged to remain undeveloped.

SEPARATION OF LAND USES

One of the most basic factors affecting the use of a given parcel of land is the use of adjoining parcels. This is due to the fact that the use of land has an impact that goes beyond the boundary of the land being used. Economists refer to this impact as a "land use externality" because it is generally not included in the property owner's decision-making process since it is external to the efficiency and profitability of the property being used. As an example of land use externalities, a house surrounded by sand and gravel pits is less enjoyable to live in and has less value for residential purposes than the same house surrounded by similar houses. The noise, smoke and heavy truck traffic generated by the excavations are so incompatible with residential life that the value of the house declines. Yet the gravel pit owners have no economic incentive to lessen the impacts of their activities since the declining value of the house does not affect the profitability of their businesses. In effect, it is a cost imposed by the gravel pit owners on the owner of the house. In addition, there is often the undesirable side-effect of accelerated deterioration. The owner of the house, to continue the previous example, has little incentive to maintain or improve the condition of his house because it is likely that only a small fraction of the cost of the improvements can be recovered when the house is sold. The best way to minimize these external costs is to separate incompatible land uses or buffer them from each other.

On the other hand, it is equally important to realize that community design can create positive externalities. A recreational or tourist-related business, for example, will frequently do better if it is located adjacent to other similar businesses than if located

by itself. This is because each business benefits from the traffic attracted by the other businesses. The increase in business is an example of a positive land use externality.

In general, residential land uses are the most sensitive to adjacent land uses. This is because the characteristics which most people value in a residential area – quiet, serenity, stability, to name but a few – are the most difficult characteristics to find and maintain. Most urban uses are intensive enough to disrupt these characteristics unless they are sufficiently buffered from residential areas.

Finally, it is important not to think of land use externalities solely in terms of economic effects. Minimizing negative externalities and creating positive externalities can lead to a variety of benefits. Not only will property values be increased and stabilized, but social values can be reinforced, safety and convenience can be improved, and psychological stress can be lessened.

THOROUGHFARE PLAN

The objective of the *Cass County* thoroughfare plan is to create a continuous and efficient network of roads which provide an easy, safe and efficient vehicular flow through the incorporated areas and within the unincorporated areas of the County. Major and minor arterial road systems constitute the high speed, high volume network for travel in both rural and urban areas.

Rural Arterials

Long distance movements throughout the County are typically accommodated on arterial roads which range from two-lane roadways to multi-lane, divided, controlled-access arterials. Ideally, arterial roads provide uninterrupted connection between areas of principal traffic generation. On a County-wide scale, arterial roads are the equivalent of the major highway routes such as Federal-Aid Interstate or Federal-Aid Primary roads.

Proposed Arterial Network

Cass County's network of major arterials including U.S. 71 Highway, Highway 291, Highway 7 and a proposed east/west arterial in the northern tier of the County will adequately serve the needs of the County through the planning period. Highway 291, the northern portion of Highway 7 and the proposed east/west arterial running south of Belton and Raymore will serve the rapidly urbanizing northern half of the County. U.S. 71 Highway will continue to function as the most important link connecting the County from north to south. The current network of minor arterials through the County, however, is disjointed and in places inefficiently aligned. In generating the plan, portions of both highway and County road right-of-way have

been connected to create continuous thoroughfares in both the east/west and north/south directions. The following minor arterials have been connected and to some extent realigned: Highways Y and O; Highways A and B; Highways F, Z, M and E; Highway 2 (realigned north of Freeman).

The alignment of urban area major and minor arterial roads as indicated on the Future Land Use Map were transferred from the Belton, Raymore, Pleasant Hill and Harrisonville Comprehensive Plans.

Acquisition of Right-of-Way

For most of the County, two-lane arterials will adequately serve the future traffic demands; however, in the more urbanized portions of the County, two-lane arterials will require ultimate development to a higher type to handle the expected traffic. These changes need to be anticipated so that provisions can be made to acquire the necessary right-of-way.

The required right-of-way width is the sum of the widths of all the various cross-sectional elements which vary according to ultimate traffic requirements, topography, land use, cost and intersection design. The cross-section of an arterial road includes traffic lanes, median, auxiliary lanes, shoulders, borders and where required, frontage roads, outer separations, side slopes and retaining walls. The width of right-of-way should be based on the preferred dimensions of each of these elements to the extent that it is possible. Illustrated in Figures 4-1 to 4-3 are the desirable dimensions for a 4-lane divided rural arterial with and without a frontage road and for a 4-lane rural freeway.

**Figure 4-1
4-Lane Rural Arterial**



Figure 4-2
4-Lane Rural Arterial with Frontage Road

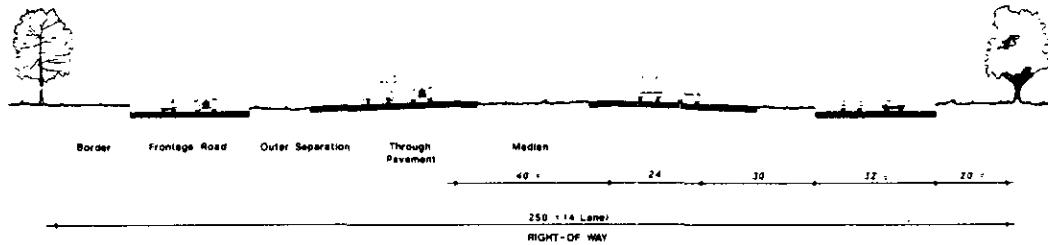
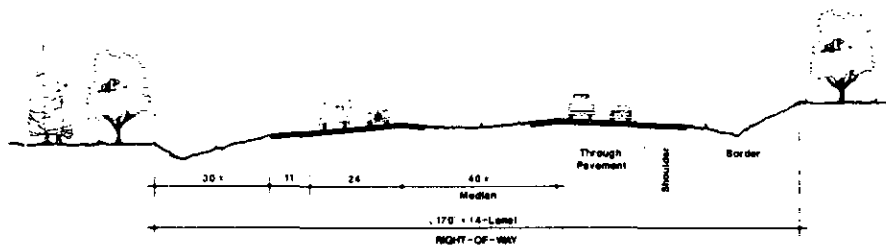


Figure 4-3
4-Lane Rural Freeway



GOALS, OBJECTIVES AND POLICIES

Goals, objectives and policies are statements which represent the generalized framework of the desires of the community. This set of written criteria identifies the County's key issues and will, eventually, supplement the Future Land Use Plan by more specifically defining what the County desires in terms of growth and development. The relationship between goals, objectives and policies is as follows: Goals are broad statements which describe what the County aspires to provide for its residents and its communities and what it hopes to achieve. Objectives are more specific statements which outline methods of accomplishing these goals. Policies are specific actions or standards designed to implement an objective.

The following set of goals, objectives and policies have been prepared for use in the planning work sessions. They represent a preliminary set of development criteria and it is expected that the Planning Commission will want to add to, revise and refine these as they see fit. As the land use goals of *Cass County* are revealed in the planning process, the Planning Commission must work to articulate the specific objectives and policies for the development of the area.

General Development and Land Use Relationships

GOAL: TO PROVIDE THE OPPORTUNITY FOR DEVELOPMENT OF URBAN, SUBURBAN AND RURAL LAND USES WHILE PROVIDING FOR THE APPROPRIATE LOCATION AND RELATIONSHIP AMONG THESE THREE LAND USES.

OBJECTIVE G1 Manage the location and design of new subdivisions and developments in order to minimize initial and future public and private costs.

POLICY G1.1 New urban development should be encouraged to locate in and around incorporated communities where municipal services and public facilities are already present. These new developments should be encouraged to connect to such services.

POLICY G1.2 New urban development should be encouraged to be contiguous to existing development to avoid the inefficient "leap-frog" pattern of growth.

POLICY G1.3 Rural development within the unincorporated portion of the County should be encouraged to occur only on a limited scale to prevent the inefficient use and distribution of public facilities and services, and to prevent the County's rural development from becoming urban in nature which would, thereby, create urban demands on the County.

POLICY G1.4 The general policy is to allow only one "sell-off" parcel of not less than five acres in area per quarter of a quarter section of land provided sewage requirements may be met. However, developers or subdividers may exceed this requirement in certain circumstances, as follows:

- a. If within one-half mile of and adjacent to an incorporated city in *Cass County*, they petition that city for annexation and develop to their standards.

This policy shall also apply to areas which are included within an official "Plan of Intent" to provide services for annexation.

- b. If within one mile of an incorporated city in *Cass County*, and not adjacent to an incorporated city, subdivision design, including the construction of roadways and water service is provided to the nearby city's standard, and the provisions for sewage disposal on a system other than conventional septic tanks is incorporated within the improvement.
- c. Lastly, should the subdivider wish to exceed the two houses per forty-acre density and is greater than one mile from an incorporated place, then provisions must be made for acceptable standard streets, water service and sewer service; including a maintenance fund for those systems. In addition, charges for increased demand for police and fire protection, as well as other services, may be passed directly to the subdivider or property owners.
- d. Exception: Any farmhouse existing at the adoption of the zoning regulations may be sold off on a parcel not less than five (5) acres in area provided sewage disposal requirements and lot split requirements may be met.

POLICY G1.5

Over-zoning or zoning to meet a greater than five-year development demand should be avoided to prevent a scattering of uses and a reduced marketability of land within the County.

POLICY G1.6

Subdivisions shall have direct access to a paved collector or arterial road.

POLICY G1.7

All utilities for new development shall be mapped and approved prior to installation.

OBJECTIVE G2

Minimize conflicts between rural and urban land uses.

POLICY G2.1

Residential, commercial or industrial land uses should be encouraged to develop in areas where they are not likely to interfere with or become a nuisance to normal farming operations.

- POLICY G2.2 Residential, commercial or industrial land uses should be encouraged to develop in areas where they are not likely to generate an amount or type of vehicular traffic which exceeds the design standards of the existing road system.
- POLICY G2.3 Uses such as commercial or industrial land uses should not be permitted in rural areas if they are likely to interfere with or become a nuisance to normal farming operations.
- POLICY G2.4 The bulk storage of agricultural chemicals or petroleum products which are flammable or toxic should not be allowed adjacent to residential areas nor shall residential development be allowed adjacent to existing storage facilities.
- POLICY G2.5 Uses such as commercial feedlots which create sustained periods of noise, dust and odor should not be allowed to locate adjacent to urban areas.
- OBJECTIVE G3 Restrict development to areas with few environmental hazards and minimize the loss of natural resources due to urbanization.
- POLICY G3.1 New developments should be encouraged to locate in areas which are relatively free of environmental problems relating to soil, slope, bedrock and water table. Proposed development should be reviewed by the appropriate staff or consultants to identify site-specific environmental problems.
- POLICY G3.2 Residential development should be discouraged within the 100-year flood plain. Under no circumstances should development be allowed in the floodway or that area which includes the center of the channel of a creek, stream or river and that area which carries the majority of the flood waters during a flood.
- POLICY G3.3 New development should be encouraged to be located so as to avoid disturbing significant natural resources including prime agricultural land and potential quarry sites.
- POLICY G3.4 Increased storm water runoff attributed to new development should not adversely affect downstream properties or structures.
- POLICY G3.5 The County should be granted drainage easements for all major drainage ways.

Agricultural

GOAL: TO PRESERVE THE UTILIZATION OF PRIME FARM LAND FOR AGRICULTURAL PURPOSES.

OBJECTIVE A1 Discourage the premature subdivision and development of agricultural land for urban purposes.

POLICY A1.1 Follow general development policies outlined above which encourage growth around existing incorporated areas and which encourage the separation of urban and rural land uses.

Residential

GOAL: TO ENSURE DECENT AND AFFORDABLE HOUSING AND TO ALLOW FOR A WIDE RANGE OF HOUSING TYPES.

OBJECTIVE R1 Encourage the construction of housing subdivisions according to reasonable design and development standards.

POLICY R1.1 Enforce development regulations through routine and consistent inspection.

POLICY R1.2 Encourage development of residential units located within close proximity of incorporated areas to meet city design standards.

Commercial

GOAL: TO PROVIDE SUFFICIENT OPPORTUNITY FOR COMMERCIAL DEVELOPMENT AT APPROPRIATE LOCATIONS.

OBJECTIVE C1 Encourage the development of the majority of commercial establishments within the urban and urbanizing areas of Cass County.

POLICY C1.1 Encourage the development of retail businesses in the urban and urbanizing areas of the County.

POLICY C1.2 Allow for retail facilities in those areas of the County not served by retail centers only when sufficient market area populations are present or planned.

POLICY C1.3 Office development should be encouraged to locate in the urban and urbanizing areas of the County.

OBJECTIVE C2 Control strip commercial development.

POLICY C2.1 Strip commercial development should be limited to those uses directly serving the motoring public such as motels, service stations and restaurants.

POLICY C2.2 Strip commercial development should be limited to specifically identified areas on the plan and should be provided vehicular access via frontage roads wherever possible.

POLICY C2.3 Those areas containing large commercial land uses should be located on major arterial streets with careful access controls and sufficient buffers from any adjacent residential uses.

Industrial

GOAL: TO PROVIDE SUFFICIENT OPPORTUNITIES FOR INDUSTRIAL DEVELOPMENT AT LOCATIONS WITH SUITABLE ACCESS AND ADEQUATE MUNICIPAL SERVICES.

OBJECTIVE I1 Industrial development should be located so as to maximize efficient usage of the municipal services necessary for this type of development.

POLICY I1.1 Industrial sites should have access to arterial roads, preferably those leading directly to major highways.

POLICY I1.2 Industrial development should be located or designed so as to be afforded adequate water and sewer services and police and fire protection.

POLICY I1.3 Industrial development should be located so as to minimize the negative impact on the environment and on other less intensive uses.

POLICY I1.4 New industrial uses should be separated or buffered from surrounding non-industrial uses. Heavy industrial uses should be located away from existing or projected residential growth areas and opposite the prevailing winds.

- POLICY I1.5 Future industrial uses should not be allowed in areas where substantial, long-term environmental damage is likely to occur.
- POLICY I1.6 Industrial uses such as salvage yards should be located and screened so as to minimize their visual impact on the County landscape.
- POLICY I1.7 Area of potential industrial land should be reserved and discouraged from being developed as residential.
- POLICY I1.8 Industrial uses, other than those of an agricultural nature or operations which need to be in remote locations, should be encouraged to locate within existing cities.

Public and Semi-Public

GOAL: TO PROVIDE ADEQUATE GOVERNMENTAL, RELIGIOUS, EDUCATIONAL AND CIVIC FACILITIES IN APPROPRIATE LOCATIONS THROUGHOUT THE COUNTY.

OBJECTIVE P1 Encourage County-wide coordination in locating governmental, religious, educational and civic facilities.

POLICY P1.1 Public facilities such as governmental offices should be located so as to maximize their accessibility.

POLICY P1.2 Public facilities such as City, County and State maintenance yards should be located in industrial areas which contain similar types of users.

Municipal Services

GOAL: TO ENSURE THAT RESIDENTS ARE ADEQUATELY SUPPLIED BY MUNICIPAL SERVICES OR RURAL SERVICE DISTRICTS.

OBJECTIVE M1 Encourage County-wide coordination and cooperation regarding resources, supply, facilities and distribution of utility services.

POLICY M1.1 Encourage watershed protection.

POLICY M1.2 Encourage shared facilities where practical and feasible.

Transportation

GOAL: TO PROVIDE AN EASY, SAFE AND EFFICIENT VEHICULAR FLOW WITHIN AND THROUGH THE UNINCORPORATED COUNTY AREAS.

OBJECTIVE T1 Provide a thoroughfare system which allows safe and efficient travel from one place to another.

POLICY T1.1 Major roads should link all employment, shopping and educational centers.

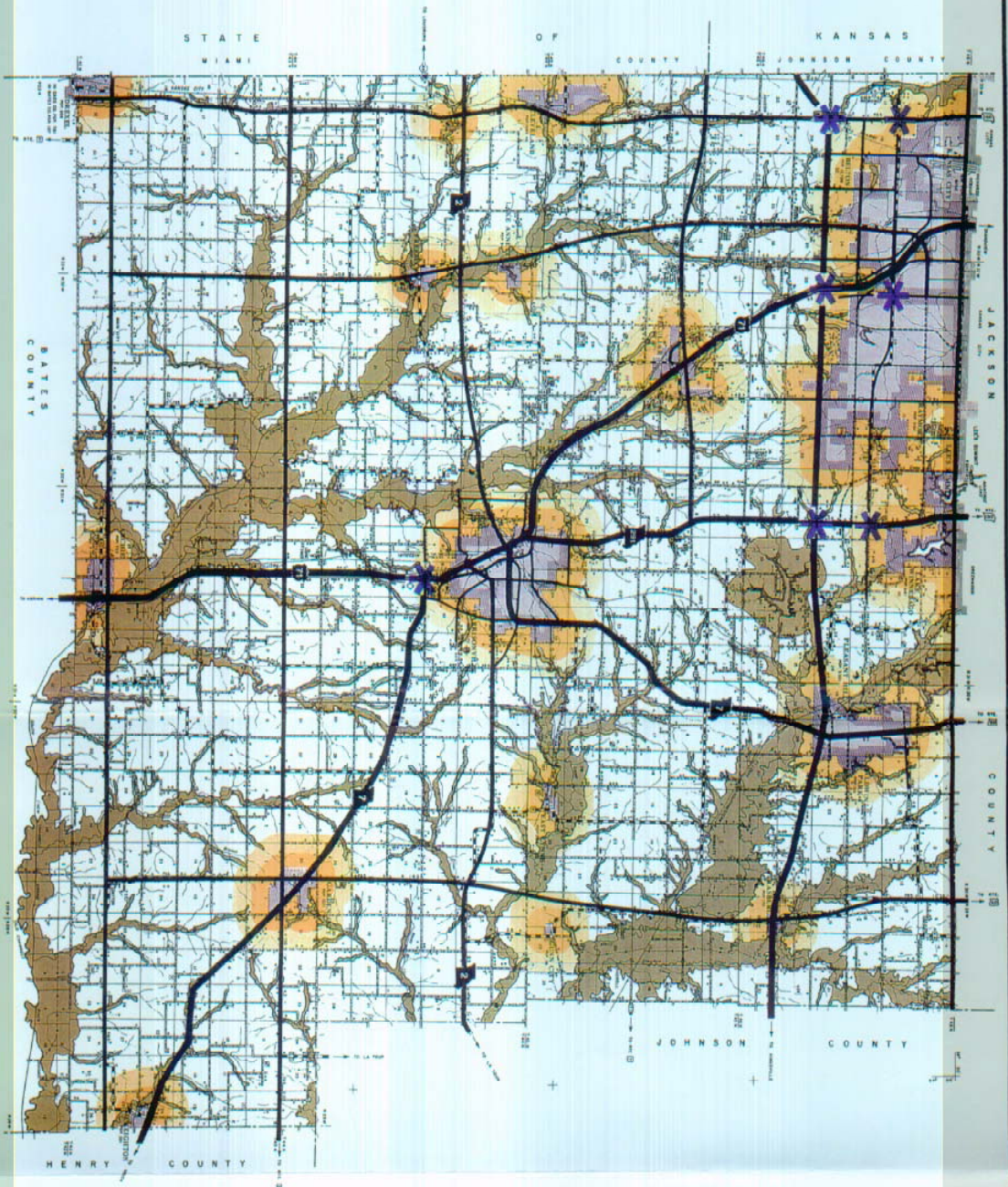
POLICY T1.2 Right-of-way and improved roadway surfaces should be sufficiently wide and of sufficient strength to accommodate anticipated future traffic loads.

POLICY T1.3 Direct access onto major thoroughfares should be carefully controlled by limiting the number of curb cuts and by the use of frontage roads for adjacent commercial and residential land uses.

POLICY T1.4 Curb cuts should be spaced in such a way that traffic is not impeded.










POLICY T1.5 Major new developments should not be approved until their impact on the surrounding road system is evaluated and it is confirmed that design capacities will be exceeded.

Cass County Comprehensive Plan
Cass County, Missouri



FUTURE LAND USE

LEGEND

-  Urban Area Reserve
-  Primary Residential Development Area
-  Secondary Residential Development Area
-  Future Commercial Node
-  Open Space / Resource Protection Area
-  Major Arterials
-  Minor Arterials
-  Urban Area Major Arterials
-  Urban Area Minor Arterials



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