

CHAPTER FIVE: ROADWAY FINANCING OPTIONS

CURRENT ROADWAY FINANCING

Roadway improvements in unincorporated Cass County are financed from both state and local funding sources that include:

- ◆ Automobile Sales Tax;
- ◆ Capital Improvement Sales Tax;
- ◆ CART;
- ◆ Real Estate Tax; and
- ◆ Vehicle Fee.

Automobile Sales Tax: When an automobile is purchased in Cass County, a portion of the sales tax on the purchase price provides funding for roadway improvements in unincorporated Cass County. The sales tax rate on automobile purchases in Cass County is 4.75 percent. The State of Missouri retains 50 percent of the sales taxes collected in the county. The county receives 10 percent of the remaining 50 percent after the State collects their share. This equates to 0.2375 percent of the sale price of the vehicle.

Capital Improvement Sales Tax: In 1996 a county-wide 1/4 cent capital improvement sales tax was approved by voters for 10 years. Funds generated by this sales tax are earmarked for specific roadway rehabilitation projects. The County Commission has adopted a five year Capital Improvement Program (CIP) which identifies the projects that are to be financed by this sales tax. These projects include improving the surface of existing roadways from gravel to chip and seal; from chip and seal to an asphalt overlay; from dirt to gravel ; and from gravel to an asphalt overlay. The roadway rehabilitation projects that are to be undertaken between 1997 and 2001 are depicted on the Cass County Road Rehabilitation Plan map.

CART: The County Access Road Tax (CART) is collected and distributed by the State of Missouri. Counties in Missouri receive 10 percent of all fuel tax collected. The proportional share of the 10 percent that Cass County receives is based on the number of roadway miles in the unincorporated portion of the county as a percentage of the total county roadway miles in Missouri. The classification of a county, such as first or second class, does not determine the amount distributed to the county.

Real Estate Tax: Roadway improvements in unincorporated Cass county are also financed by a real estate property tax. The amount of tax collected is based upon the total assessed valuation in the County. The real estate tax rate is \$0.18 per \$100 of assessed valuation.

Vehicle Fee: When vehicles are licensed in Cass County, a percentage of the license fee also pays for roadway improvements in the unincorporated portion of the County. The licensing fee is based on state statutes and is calculated in the same manner as the automobile sales tax.

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ADDITIONAL FINANCING MECHANISMS

The current financing sources provide a foundation for funding roadway improvements. However, additional financing tools are necessary to implement the recommended roadway improvements discussed above. These tools can be identified by the source of the financing. Primarily, there is public financing, which includes local, state and federal taxes and programs, such as those that are currently in place; and private financing, such as contributions from or impositions upon the individual developer who creates a development and generates traffic in the county.

The following is a summary of certain financing options that may be available to Cass County for funding major road improvements. The term "major road improvements" is defined for purposes of this study as construction, reconstruction or major maintenance (milling and overlay) of arterial streets, including parkways (divided arterials), and a limited number of existing streets that are classified as collector roads but function as arterial streets. It cannot be over emphasized that the options summarized in this section merely represent a list of possible financing tools. The in-depth research required to determine whether or not each of these tools is a legally viable option for the county has not yet been performed by the consultants. It is likely that the financing strategy ultimately selected will incorporate several of these options. Some of the options may be mutually exclusive and some of the options may be of limited utility. In addition, some mechanisms are designed to fund improvements to serve demand created by new development while others are designed to fund improvements associated with existing roadway deficiencies.

All potential options are listed for the county's information, and the consultant team will fully investigate the authority of the county to impose a particular option if the county desires to fully investigate that option. In order to avoid attaching any significance to the placement of options in the report, the options have been listed in alphabetical order.

<ul style="list-style-type: none">◆ Capital Improvements Sales Tax◆ County Special Road and Bridge Tax◆ Excise Tax◆ General Obligation Bonds◆ Government Programs◆ Neighborhood Improvement Districts◆ Right-of-Way Exactions	<ul style="list-style-type: none">◆ Road Impact fees◆ Special Road District◆ Tax Increment Financing◆ Transportation Corporations◆ Transportation Development Districts◆ Federal Highway Administration Programs
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Capital Improvements Sales Tax. Missouri statutes authorize counties to impose a sales tax of up to one-half percent on all retail sales in the county for the purpose of funding capital improvements, including operation and maintenance. The sales tax must be authorized by the County Commission and approved by a simple majority of the voters in an election. The funds

collected from this tax must be deposited in a special trust fund and may be used solely for the purpose designated in the vote which is approved by the citizens of the County.

County Special Road and Bridge Tax. Missouri statutes authorize a county commission in a county which has not adopted an alternative form of government to levy a tax in addition to other taxes which does not exceed thirty-five cents on each one hundred dollars of assessed valuation to be deposited in the county's "Special Road and Bridge Fund." The money collected in this fund may be used for road and bridge purposes only. Where any such tax is collected from any property located in a special road district, four-fifths of the tax is credited to the special road district. In Cass County, a minimum of 25% of the tax collected pursuant to the Road and Bridge Tax authority from properties located within a municipality must be spent for "repair and improvement of existing roads, streets and bridges" within that municipality. The Hancock Amendment to the Missouri Constitution requires that a majority of the citizens of the County approve this form of tax.

Excise Tax. An excise tax is a method of raising revenue by levying a tax on a particular activity. An excise tax has been defined as a tax that is measured by the amount of business done, income received, or by the extent to which a privilege may have been enjoyed or exercised by the taxpayer, irrespective of the nature or value of the taxpayer's assets or investments in business. It is different than a property tax, which is a tax on the assessed value of property. An excise tax is not subject to the benefit or nexus requirements of a fee imposed pursuant to a county's police power, such as a road user (see below). This means that there need not be a rough proportionality between the tax imposed and the demand for public services created by the activity upon which the tax is imposed, such as a new development and the resultant demand for new road, water, sewer, park or other public facilities that the development creates.

An excise tax's purpose is to raise revenue, not to pay for costs created by the activity upon which the tax is imposed. Unlike a road impact fee, the funds collected from an excise tax need not be "earmarked" for a particular purpose, such as road improvements. The funds collected from an excise tax are simply placed in the County's general fund for use for any valid public purpose. While "earmarking" of funds is unnecessary, from a practical standpoint, the County can state that the purpose of the excise tax is to provide for road improvements. This could be done in a number of different ways, including action through the adoption of an ordinance or less formally through the adoption of a resolution. An excise tax could not be imposed unless approved by a majority of those voting at an election on the question. There is no legal limit on the rate of an excise tax that could be imposed.

It has not been definitively determined, under Missouri law, that an excise tax is available to counties such as Cass County. Research has not uncovered any specific authority for the County to impose an excise tax, but has uncovered limitations in the Missouri Constitution and Statutes which may prohibit an excise tax. At the County's direction, the consultant team could research further the County's ability to impose an excise tax for road financing.

General Obligation Bonds. Subject to certain constitutional and statutory limitations, primary of which is a constitutional limit on the total amount of debt the County can incur based upon a set percentage of its assessed valuation, the County has the ability to raise funds for street

improvements by the issuance of general obligation bonds. General obligation bonds are long-term obligations of the County backed by the full faith and credit of the County.

Missouri statutes authorize the County Commission to issue bonds for the “construction, reconstruction, improvement, maintenance and repair of any and all public roads, highways, bridges and culverts” within the County, and includes the acquisition of property through eminent domain powers. The proceeds from such bonds must be kept as a separate fund to be known as “The Road Bond Construction Fund.” These funds may also be used in the construction, reconstruction, improvement, maintenance and repair of any street, avenue, road or alley in any incorporated city, town or village if that construction or improvement forms part of a continuous road, highway, bridge or culvert of the County.

Government Programs. State and federal programs exist that may provide a funding source for street improvement projects. Typically, such programs would be available only for projects meeting the criteria of that particular program and for transportation improvements forming a part of the funding entities' transportation network, i.e., federal funds for U.S. highways. Although some grants may be available, most programs will require a local “match” by the County to pay a specified portion of the project costs in order to leverage the funds from the other governmental entity. It should be noted that funding decisions have already been made for virtually all of these possible funding sources for the immediate future.

Neighborhood Improvement Districts. State statutes authorize the creation of a Neighborhood Improvement District (NID). Under the NID statutes, particular areas of land may be designated by the County Commission as a “neighborhood” that will benefit from a particular public improvement. Landowners within each neighborhood must authorize the formation of the NID either by a vote of approval or by execution of a petition to the County Commission. The boundaries of the NID are created at an election and the approval percentages are the same as those for approval of general obligation bonds (see above). State statute requires that a landowner petition to create a NID must be signed by the owners of record of at least two-thirds by area of all real property located within the proposed NID. If approved, the County Commission may authorize the issuance of general obligation bonds to finance construction of an improvement, such as road improvements. To secure the bonds, a portion of the total cost is assessed against each landowner within the NID and the special assessment becomes a tax lien against the property. The method of apportioning assessments among the property owners within the NID is established prior to the creation of the NID. The bonds may be issued without a vote of the public if the county agrees to rely on existing revenues and surpluses as a source of repayment in the event that the special assessments made against property in the NID prove to be insufficient to fund repayment. Bonds issued count against the county's debt limit. A NID allows the county to construct an applicable improvement sooner than other financing methods such as road impact fees.

Right-of-Way Exactions. Exactions are requirements imposed as part of the development approval process that require a person seeking such approval to give something to the county or to a common maintenance entity as a condition of such approval. Traditionally, counties have required developers to dedicate right-of-way for streets within the development and for streets

abutting the development as a condition of a specific development's approval requiring such a dedication is an exercise of the county's regulatory police power. Typically, these right-of-way exactions have been imposed at the time of zoning or subdivision approval, with the understanding that the dedication would take place at no cost to the entity requiring the dedication. In 1994, the United States Supreme Court decided the case of *Dolan v. City of Tigard*, in which it held that any requirements for the dedication of land imposed as a condition of development approval must be roughly proportional to that development's contribution to the need for new public facilities. Further, the Supreme Court held that the local government imposing the exaction must make an "individualized determination" regarding the proportionality between the exaction and the impacts caused on public facilities.

After *Dolan*, it can no longer be assumed that street right-of-way dedications may always be exacted at no charge. An individualized determination must be made, in each instance, to insure that the dedication requested is roughly proportionate to the demand for right-of-way created by the proposed development. At a minimum, there must be some methodology used to quantify the development's impact and the amount of the dedication required to offset that impact. However, the courts have made it clear that mathematical precision of the relationship between the impact and the dedication is not required.

Road Impact fees. A road impact fee is a monetary exaction on new development imposed as a part of the development approval process. There is some disagreement among the courts as to the application of the *Dolan* "rough proportionality" analysis to monetary exactions such as these fees.

Road impact fees would be exempt from the election requirements of the Hancock Amendment if structured as a impact fee consistent with Missouri case law; otherwise, an election would be required at which a majority of those voting on the question would be required to approve its imposition. All road impact fees collected by the county must be spent for improvements to the road network that benefit those who paid the fee. This generally requires the designation of multiple geographic areas within the jurisdiction for imposition of the fee, with the fees collected from developers within each area being spent only for public infrastructure within the area. This is not true of excise taxes, which are collected jurisdiction-wide and can be spent on public infrastructure any place within the jurisdiction. The amount of the fee collected with respect to each development cannot exceed an amount that reflects the cost of constructing improvements to the road network that are caused by the development.

The authority of counties in Missouri to impose a impact fee is uncertain. Research to date has uncovered no specific authorization for counties to impose impact fees, and the Missouri legislature has not enacted road impact fee enabling legislation. It should be noted that, unlike the constitutional provisions relating to excise taxes, the consultant team has also not uncovered any provisions of the Missouri Constitution or statutes which limit a county from enacting a impact fee system.

Special Road District. The Missouri statutes authorize the county to form a special road district comprised of any portion of the territory of the county as deemed necessary and advisable. Once properly formed, the road district has the authority of a public corporation for public purposes.

The commissioners of the road district maintain sole, exclusive and entire control and jurisdiction over all public highways, bridges and culverts, other than roads and highways controlled by the Highways and Transportation Commission, and may improve, repair and construct such highways, bridges and culverts or have that work completed by contract. The road district may issue bonds, levy a special tax for road improvements or repairs, and issue special assessments in accordance with the procedures set forth in the statutes.

Tax Increment Financing. The basic concept behind tax increment financing (TIF) is that the redevelopment of the area will increase the equalized assessed valuation of the property, thereby generating new revenues to the county that can be used to pay for specified costs of the redevelopment project. Property taxes and other revenues generated by the existing development in a legislatively defined redevelopment area are frozen on the day that the redevelopment area is approved by the County Commission and the increased property tax and a portion of other revenues generated by the new development are captured and placed in a special fund to pay for the costs of redeveloping the area. Those new property tax revenues are the source of the term "increment," and they are also referred to as "payments in lieu of taxes" (PILOTs). In addition to the PILOTs, the development may also capture up to 50% of certain locally imposed taxes (commonly referred to as economic activity taxes or "EATS") such as local sales, franchise taxes and use taxes and local earnings taxes to fund project costs. State statutes also authorize bonds to be issued that are paid off from the PILOTs and EATs generated in the redevelopment area. The bonds do not count against the county's debt limit. TIF has been the subject of much discussion and debate in the Kansas City area. The TIF statute limits the areas of the county that are eligible for TIF to "blighted," "conservation" or "economic development" areas as defined in the statute. The constitutionality of the use of TIF in "economic development" areas has been questioned.

Transportation Corporations. State statutes authorize the creation of non-profit transportation corporations, which have been used in a few instances. Transportation corporations are private entities formed for the same purposes as a transportation development district (see below). Transportation corporations are created by submission of an application signed by at least three registered voters to the Missouri Highways and Transportation Commission requesting that the commission authorize creation of a transportation corporation to act within a designated area. The application must include preliminary plans and specifications, including the proposed plan for financing a project. Projects are limited to those that will be a part of the state highways and transportation system. The transportation corporation is governed by a board of directors appointed by the commission. The transportation corporation is a private, nonprofit corporation with the power to contract, to lease or purchase real or personal property, and to sue and be sued. Transportation corporation projects are subject to approval by the Missouri Highways and Transportation Commission. Transportation corporations are authorized to charge fees for services and to collect tolls for use of transportation corporation projects. Transportation corporations are also authorized to issue bonds, including revenue bonds, by resolution of the board of directors without a vote of the public. The maximum amount of the fees and/or tolls that may be collected or bonds that may be issued is not set by statute.

Transportation Development Districts. Missouri statutes authorize the county to create transportation development districts encompassing all or a portion of the county. The purpose of a transportation development district is to "fund, promote, plan, design, construct, improve, maintain, and operate one or more [transportation] projects or to assist in such activity." A transportation development district is created by submission of a petition to the circuit court from either 50 registered voters in each county in the district or by the County Commission. The petition must identify the district's boundaries, each proposed project, and a proposal for funding the projects.

After receipt of a petition and a hearing to determine that the petition complies with the law, the circuit court enters a judgment certifying the questions regarding creation of the district, projects to be developed, and proposed funding for voter approval. If a simple majority of those included in the district boundaries vote in favor, the transportation development district is created. If the issue fails, it cannot be resubmitted to the voters again for two years. If approved, an election is held within 120 days to elect a board of directors for the district. Once created, a transportation development district is a separate political subdivision of the state with powers such as condemnation, the power to contract with parties, to lease or purchase real or personal property, and to sue and be sued. The county has no control and jurisdiction over transportation development district projects unless provided by contract. However, the board of directors of the district cannot increase or decrease the number of projects in the district without first obtaining authorization of the voters and approval by the Missouri Highways and Transportation Commission and/or the county, depending on the project.

A transportation development district may fund approved transportation projects (subject to the approval of the county or the Missouri Highways and Transportation Commission, depending upon the project) utilizing one or more financing mechanisms authorized in the election. The financing mechanisms available are special assessments, property taxes, sales taxes and tolls. The amount of sales tax may not exceed one percent. After enactment, the sales tax is subject to a citizen petition for an election to repeal the tax.

There is no statutory limit on the amount of special assessments or tolls that can be imposed. Transportation development districts are also authorized to issue bonds, including revenue bonds, by resolution of the board of directors without a vote of the public. These bonds do not count against the county's debt limit because they are issued by the district (a separate political subdivision of the state) and not by the county.

Federal Highway Administration Programs. The Intermodal Surface Transportation Efficiency Act of 1991 (as amended) provides federal-aid programs for transportation improvements. The federal-aid program available to Cass County is the Surface Transportation Program. This is a block grant program for any roads that are not functionally classified as a local or rural minor collector, referred to as Federal-aid roads. These funds are distributed to the states and the State must set aside 10 percent for safety construction activities and 10 percent for transportation enhancements, including environmental-related activities. 30 percent can be used in any area of the State. The Bridge Replacement and Rehabilitation Program is another program Cass County is eligible for.

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CHAPTER SIX: ROADWAY IMPLEMENTATION PROGRAM

INTRODUCTION

The county has determined that the primary infrastructure improvement for which financing will be provided is roadway improvements. Other than a regional sewer district under consideration, financing of other infrastructure improvements is not critical at this time. Therefore, the implementation program focuses on roadway improvements and financing strategies.

The roadway financing strategy defines the best approach for Cass County in financing roadway improvements. The strategy identifies the primary funding mechanisms to be adopted, or those that will remain, the responsible parties of those funding mechanisms, and the primary areas of the county that are targeted for roadway improvements. The intention of the strategy is to control financing of roadway improvements while controlling growth and development of specific areas of the county and allowing flexibility in adapting those financing mechanisms.

ROADWAY FINANCING STRATEGY

Table 6.1 Roadway Financing Strategy identifies the financing mechanisms that are discussed in Chapter 5. The table indicates if the strategy is currently being used and if it is proposed for future use. The funding source and actions to either improve an existing program or initiate a new program are identified.

Existing roadway funding mechanisms will remain, including the automobile sales tax, capital improvement sales tax, CART, real estate tax and vehicle fee. Further, the 1/4 cent sales tax is proposed to eventually increase to a 1/2 cent sales tax in order to make improvements to areas that are not experiencing immediate development activity. The Mount Pleasant Special Road District will remain; however, other Special Road Districts will not be established within Cass County.

Upon review of the available financing opportunities that are currently not in use, the county will be supporting financing of roadway improvements with developer contributions. Adoption of a road impact fee will be the primary source of financing roadway improvements in Cass County. The road impact fee will be based on traffic impact studies and the impact the proposed development will have on the roadway system within designated "Transportation Analysis Zones" (TAZ). The county will develop specific criteria that will trigger the assessment of a road impact fee.

The county may consider using Neighborhood Improvement Districts as a financing mechanism. This mechanism will be initiated by the developer and approval will be determined by the Cass County Commission.

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Chapter 6: Roadway Implementation Program

TABLE 6.1: ROADWAY FINANCING STRATEGY

Y = Yes, N = No, C = Consideration

Roadway Financing Option	Currently Used	Proposed for Future Use	Funding Source	Action/Improvements
Automobile Sales Tax	Y	Y	Vehicle Purchaser	Increase from 1/4 to 1/2 cent.
Capital Improvement Sales Tax	Y	Y	Retail Purchaser	No immediate action.
CART	Y	Y	Fuel Purchaser	No immediate action.
Real Estate Tax	Y	Y	Real Estate Purchaser	No immediate action.
Vehicle Fee	Y	Y	Vehicle Licensor	No immediate action.
County Special Road and Bridge Tax	N	N	N/A	N/A
Excise Tax	N	N	N/A	N/A
General Obligations Bonds	N	N	N/A	N/A
Government Programs	N	C	State/Federal	Investigate opportunities.
Neighborhood Improvement Districts	N	Y	Property Owner	Developer initiative.
Right-of-Way Exactions	N	N	N/A	N/A
Road Impact Fees	N	Y	Developer	Develop process for measuring, collecting and distributing road impact fee.
Special Road District	Y	N	N/A	N/A
Tax Increment Financing	N	N	N/A	N/A
Transportation Corporations	N	N	N/A	N/A
Transportation Development Districts	N	N	N/A	N/A
FHWA Programs	Y	Y	State/Federal	Lobby for 15 year plan inclusion.

Control of Funding Mechanisms

The county will be responsible for all funding mechanisms, with the exception of the Mount Pleasant Special Road District, which is operated by the district itself. The county is responsible for collecting and distributing the funding mechanisms identified above.

Jurisdiction of Funding Mechanisms

The funding mechanisms will apply to all areas of the county. The county will target funding mechanisms for use in the Transportation Analysis Zones (TAZ), as designated in the Comprehensive Plan. Priority for upgrading roadways will be based on traffic counts; however, financing of roadway improvements will be evenly distributed throughout the county.

Coordination Between Cities and County

The county currently coordinates funding mechanisms with the cities in Cass County. One-third of the 1/4 cent sales tax currently goes to the cities. The county intends to continue this cooperative effort. Further, the county will coordinate all roadway improvements with cities primarily impacted by improvements.

ROAD IMPACT FEE IMPLEMENTATION

The County should implement a road impact fee program. A comprehensive legal analysis of road impact fees would be required before proceeding with imposition of a road impact fee. However, the general steps for implementing a road impact fee are as follows:

1. *Develop a transportation plan.* The Cass County Development Plan in essence, is the transportation plan for Cass County. Therefore, the first step is already completed.
2. *Create road impact fee service areas.* The fee charged on new development must be reasonably related to the needs created by the development (its impact) on the County's road system and the benefits conferred upon that development through the use of the fee that is collected. Therefore, road impact fee service areas should be designated to ensure that developers pay their fair share and that fees are being distributed to the appropriate area of impact. The service area would identify the principal area from which the proposed development would attract traffic that would impact roads within the identified planning area. Using the Roadway Classification map provided in the Development Plan, county officials should designate these road impact fee service areas. They should be created with boundaries that are equidistant from roadways requiring improvements. Note that as development occurs, the Roadway Classifications map will need to be updated. Therefore, the road impact fee service area must also be adjusted to meet development activity.
3. *Adopt traffic demand variable rates.* Each particular development will generate only a small percentage of the total existing or future traffic impacting particular road segments or intersections. As a result, each particular development would be required to pay only its proportionate share of the costs associated with traffic improvements in the service area. Moreover, all existing traffic as well as pass-through traffic and future traffic must be factored in to the essential nexus/rough proportionality equation.

Traffic demand variables can be obtained from the Institute of Transportation Engineers' (ITE's) Trip Generation Manual. The Trip Generation Manual is designed to estimate the number of trips that could be generated by a specific land use. Traffic count data for various types of land uses are provided for both daily traffic volumes and peak hour traffic volumes. An average between the peak hour and daily traffic volumes should be used to determine the proportion of total traffic impacted by a single use. A listing of the land uses for which the ITE Manual has traffic counts is listed in Appendix A. This list should be used to amend the zoning ordinance and identify which land use code used in the ITE manual applies to specific land uses listed in the zoning ordinance.

4. *Establish roadway improvement cost estimates.* Once the districts have been established, cost estimates for road improvements in that district should be determined.
5. *Establish accounting procedures.* The funds collected from road impact fees must be kept in a separate account for the area or district in which those funds are to be spent. Also, these funds must be used to pay for eligible expenses only, primarily improvements necessary due to the impact of the new development. The revenues derived from a impact fee can be used for both land acquisitions and construction of public facilities to support new development. These fees cannot be used to cure "existing deficiencies" in the County's road system. These existing deficiencies must be funded from other sources, generally by the public at large.
6. *Write road impact fee ordinance.* The road impact fee ordinance should include the following sections and information:
 - *Purpose:* Identify the reasons and scope of the ordinance and for requiring road impact fees.
 - *Definitions:* Define any term used in the ordinance that requires detailed explanation.
 - *Authority to Impose Road Impact fees:* Describe the roles and responsibilities of those enforcing the road impact fee.
 - *Requirements or Road Impact fees:* List and describe specific requirements or standards for applying road impact fees.
 - *Fee to be Generated on Impact-generating Land Development Activity:* Identify district and areas where road impact fees are to be enforced.
 - *Individual Assessment of Fiscal Impact:* Identify the method for calculating road impact fee requirements for specific land or property owners.
 - *Use of Funds:* Describe the activities for which the use of road impact fee funds are applicable.
7. *Implement.* Once the road impact fee ordinance is in place, the process for implementing the program should be as follows: When a developer submits a plat or site plan, the zoning administrator will determine the land use, referring to the zoning ordinance use table to determine the appropriate code for which the road impact fee will be applied. The zoning administrator will look up that land use code in the ITE trip generation manual and calculate both the average daily traffic and the peak hour traffic, then average the results. This number will be divided by the total anticipated daily traffic for the road user district in which the development is located. This proportion will be multiplied by the total estimated

roadway improvement costs to determine the road impact fee the developer is required to pay.

NEIGHBORHOOD IMPROVEMENT DISTRICT IMPLEMENTATION

The County Commission may approve or decide to establish neighborhood improvement districts to help finance roadway improvement costs. The process for establishing a neighborhood improvement district (NID) may be initiated by either the County Commission or a property owner within the area proposed.

1. *Designate the neighborhood.* Either the County Commission will designate particular areas in need of specific improvements or a property owner will submit a petition to form a NID. If the County Commission designates a neighborhood for an improvement district, all landowners must approve of the designation. If a property owner initiates the district, at least two-thirds of owners of record of all real property located in the proposed NID must sign a petition. At this time, the county has no immediate intentions to create NID neighborhood improvements districts, therefore, they are most likely to be initiated by a property owner.
3. *Determine the method for apportioning assessments.* The method for apportioning assessments among the property owners must be determined prior to approving the NID.
4. *Hold an election.* An election must be held to determine the boundaries of the NID.
5. *Issues general obligation bonds.* Once approved, the county will authorize the issuance of general obligation bonds to finance construction of an improvement. The cost of the improvement is assessed against each landowner within the neighborhood and becomes a tax lien against the property.

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APPENDIX A: TRAVEL DEMAND MODEL FOR CASS COUNTY

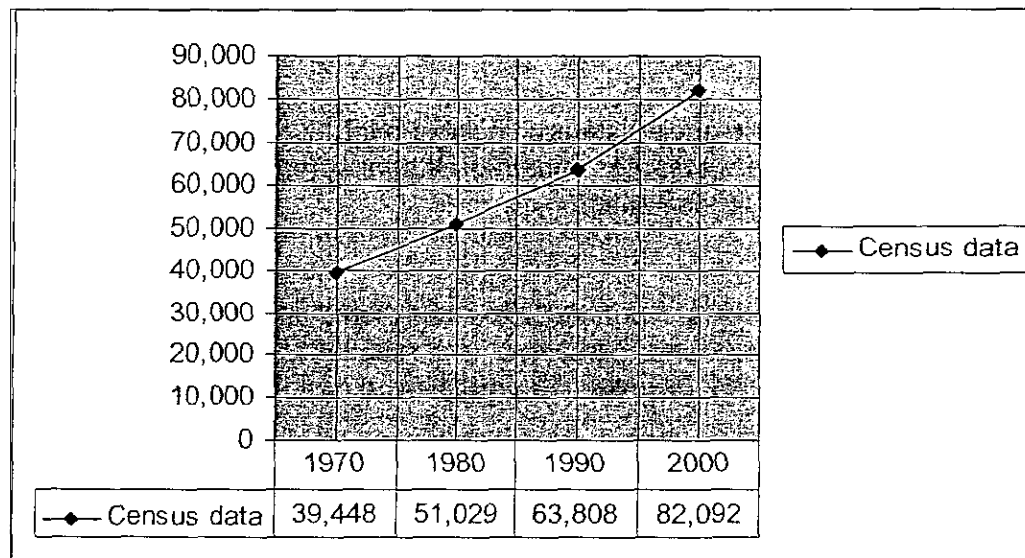
INTRODUCTION

The original travel demand model of Cass County is a PM Peak-hour model and its study area covers the entire county. This model was set up and calibrated in 1999 by using the following input data and information,

- 1) Daily traffic counts in 1997 and 1998,
- 2) 1998 population and household (1990 Census estimate),
- 3) 1997 employment data from 1997 economy census.

From 1990 Census estimate, the 1998 population is 75507 that was used in the original model. After the 2000 census is available in 2002, it's clear that this 1998 population estimate is about 3000 less the actual number. The population change of Cass County is shown in the figure below. It provides not only the accurate total population and household but also its distribution information. Therefore it is necessary to use this accurate information resource as inputs to update the travel demand model.

Figure A-1. Cass County Population



In the next section, the original travel demand model is briefly introduced. Then the model update is described in the third section together with the results.

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Appendix A: Travel Demand Model for Cass County

ORIGINAL TRAVEL DEMAND MODEL

The travel demand model development is to build and refine the model until it accurately reflects current transportation conditions. This process is called model development and calibration. After this is done, the model can be used to predict traffic flows based upon anticipated changes in land use and the roadway system. The process of Cass County model development and Calibration involves the following steps:

- Defining Traffic Analysis Zones (TAZs)
- Calculate socioeconomic data by TAZ
- Creating a computerized street network
- Developing trip generation equations and estimating the number of trips generated
- Distributing the trips between TAZs, and
- Assigning the trips onto the transportation network
- Calibrating the model by traffic counts

Definition of TAZ and Process of Socioeconomic Data

Traffic Analysis Zones (TAZs) represent the base level at which socioeconomic is input into the model. TAZ boundaries typically coincide with existing Census boundaries such as tracts, block groups or blocks. Each TAZ in the model is denoted by a centroid-node, which is connected to the transportation network. For Cass County, A total of 113 (1-113) internal TAZs were defined based on existing Census block group boundaries (see Figure 2-1). In addition to the internal TAZs, 21 (150-170) external stations were also developed to represent traffic entering and exiting the County.

Population, household and employment data is calculated by TAZ. The population is estimation based on the 1990 Census while the employment information is from the 1997 Economy Census. These data sets are basic inputs to the model.

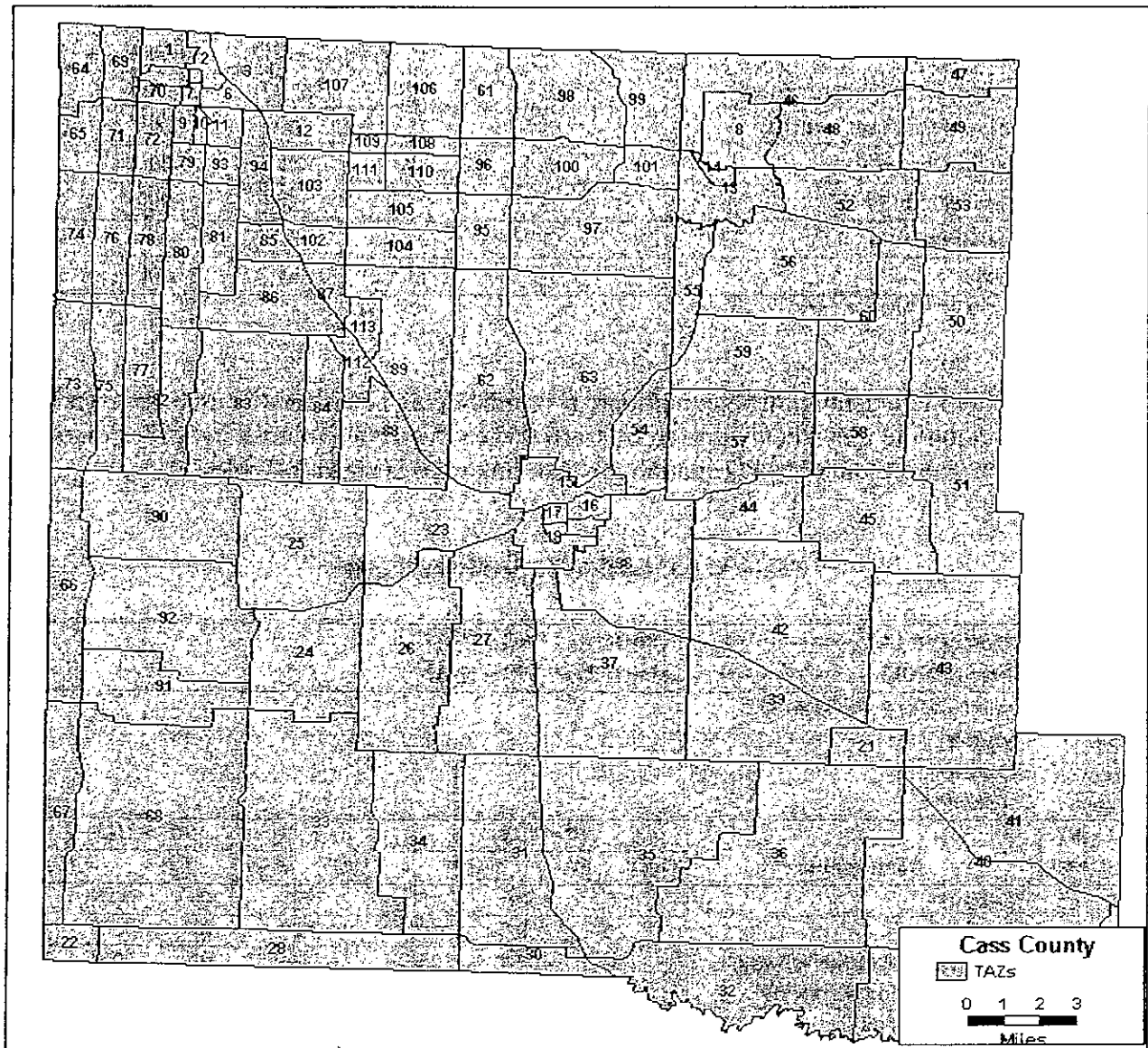
Street Network Development

At its simplest level, a network is a computerized representation of the street system. It is comprised of intersections, which are represented in the model as nodes, and street segments, which are represented in the model as links. The attributes of each link includes:

- Distance
- Speed
- Functional classification
- Area type
- Number of lanes and
- Capacity

BWR developed the Cass County network based upon the primary road system of the County. This included freeways, expressways, major arterials (state highway numbered and lettered routes) and minor arterials (paved county roads).. Information on the number of lanes and posted speed limits were collected for the County and coded into the model. The base link speeds and capacities are listed in Table A-1.

Figure A-2. TAZ Map



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Appendix A: Travel Demand Model for Cass County

Table A-1. Link Functional Classifications

Class	Description	Area	Lanes per dir	Speed	Daily Cap per lane	Pcplph (10% daily)
1	Freeway	0	4	70	20,000	2,000
2	Expressway	0	4	65	18,000	1,800
3	Primary Arterial (rural highway)	0	2	55	12,000	1,200
4	Minor Arterial (rural arterial)	0	2	45	5,000	500
5	Collector (Asphalt)	0	2	40	2,000	200
5	Collector (Chip/Seal)	1	2	35	1,000	100
6	Local (Gravel)	0	2	30	500	50
7	Ramps	0	1	35	15,000	1,500

Pcplph = passenger cars per hour per lane

To better model the existing traffic conditions, a volume-delay equation was used for each link class to simulation the travel delay caused by traffic when the traffic volume are loaded onto the street network. The Volume-Delay equation for each link class is listed in Table 2-2.

Table A-2. Link Delay Coefficients (.ldc)

If Volume/Capacity <= UL: —————>		Delay = $K_{1A} * (V/C + K_{2A})^{E_A}$							
If Volume/Capacity > UL: —————>		Delay = $K_{1B} * (V/C + K_{2B})^{E_B}$							
UL:		Upper Limit of acceptable V/C							
$K_{1A/B}$:		Constant							
$E_{A/B}$:		Exponent							
$K_{2A/B}$:		Constant							
Link Class	Description	V/C <= UL			UL	V/C > UL			
		K_{1A}	E_A	K_{2A}		K_{1B}	E_B	K_{2B}	
1	Freeway	50	400	15	85	20	1000	15	
2	Expressway	25	400	20	85	20	1000	15	
3	Primary Arterial (rural highway)	20	400	25	85	20	1000	25	
4	Minor Arterial (rural arterial)	20	400	25	85	20	1000	25	
5	Collector (Asphalt)	20	400	25	85	20	1000	25	
6	Local (Gravel)	20	400	25	85	20	1000	25	
7	Ramps	30	400	15	85	20	1000	15	

Node capacity was determined based on incoming link characteristics for each class. Summarized in the following tables are the node classes, descriptions and capacity equation values and node delay parameters.

Table A-3. Node Capacity Equations (.neq).

C = K₁ + K₂(Lanes) + K₃(lanes)^{E3} + K₄(Link Cap)^{E5}									
WHERE:									
C = Total number of vehicles that can enter the intersection at LOS D/E (vph) - 32,000 max									
K ₁ = Constant (can be used alone or in combination with others)									
K ₂ = Coefficient to be multiplied by the number of entering lanes (defined by link file)									
K ₃ = Coefficient to be multiplied by the number of entering lanes raised to an exponent E3									
E3 = Exponent for third term of equation									
K ₄ = Exponent to be multiplied times the sum of entering link capacities (defined by link file)									
K ₅ = Coefficient to be multiplied by the sum of entering link capacities raised to an exponent E5									
E5 = Exponent for fifth term of equation									
Description	Factors								
	Type	K1	K2	K3	E3	K4	K5	E5	Base Delay
Not an Intersection	1	32,000				-			
Freeway Ramp Terminals - Merges	4	(1,500)				1.00			
Freeway Ramp Terminals - Diverges	5	32,000				-			
Ramp Intersection	6	-				0.45			
Future Intersection	7	32,000				-			
Internal Zone	10	32,000				-			
External Zone	11	32,000				-			
Freeway Crossing / Expressway	1					0.45			
Freeway Crossing / Principle Arterial	13					0.45			
Freeway Crossing / Minor Arterial	14					0.50			
Freeway Crossing / Collector Street	15					0.55			
Freeway Crossing / Local Street	16					0.60			
Freeway Crossing / Centroid Connector	18					0.65			
Expressway Crossing / Expressway	22					0.45			
Expressway Crossing / Principle Arterial	23					0.45			
Expressway Crossing / Minor Arterial	24					0.50			
Expressway Crossing / Collector Street	25					0.55			
Expressway Crossing / Local Street	26					0.60			
Expressway Crossing / Centroid Connector	28					0.65			
Principle Arterial / Principle Arterial	33					0.45			
Principle Arterial / Minor Arterial	34					0.50			
Principle Arterial / Collector Street	35					0.55			
Principle Arterial / Local Street	36					0.60			
Principle Arterial / Centroid Connector	38					0.65			
Minor Arterial / Minor Arterial	44					0.45			
Minor Arterial / Collector Street	45					0.50			
Minor Arterial / Local Street	46					0.55			
Minor Arterial / Centroid Connector	48					0.65			
Collector Street / Collector Street	55					0.45			
Collector Street / Local Street	56					0.50			
Collector Street / Centroid Connector	58					0.65			
Local Street / Local Street	66					0.45			
Local Street / Centroid Connector	68					0.65			
Signalized Intersection with no Cross Street	70					0.70			

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Appendix A: Travel Demand Model for Cass County

Table A-4. Node Delay Coefficients (.ndc)

If Volume/Capacity <= UL: ----->		Delay = $K_{1A} * (V/C + K_{2A})^{E_A} + BD_A$								
If Volume/Capacity > UL: ----->		Delay = $K_{1B} * (V/C + K_{2B})^{E_B} + BD_B$								
WHERE:										
UL		Upper Limit of acceptable V/C or 0.85								
$K_{1A/B}$:		Constant								
$E_{A/B}$:		Exponent								
$K_{2A/B}$:		Constant								
$BD_{A/B}$:		Base Delay								
Description	Node Class	V/C <= UL				UL	V/C > UL			
		K_{1A}	E_A	K_{2A}	BD_A		K_{1B}	E_B	K_{2B}	BD_B
Not an intersection	1	0	1	0	0	0	0	0	0	0
Uncontrolled intersection	2	50	400	15	0	85	50	800	15	0
Yield control	3	0	0	0	0	0	0	0	0	0
Freeway ramp terminal - Merges	4	35	400	15	0	85	35	800	15	0
Freeway ramp terminal - Diverges	5	0	1	0	0	0	0	0	0	0
Ramp intersections	6	25	400	15	4	85	30	800	15	4
Future intersection	7	0	1	0	0	0	0	0	0	0
Centroid Connector Intersection	8	0	1	0	0	0	0	0	0	0
Internal zone	10	0	1	0	0	0	0	0	0	0
External zone	11	0	1	0	0	0	0	0	0	0
2-Way Stop	42	30	400	15	4	85	30	800	15	4
4-Way Stop	44	30	400	15	4	85	30	800	15	4
Signalized intersections	60	25	400	15	4	85	25	800	15	4

2.3 Modeling Procedure and Calibration

The first modeling step is to use socioeconomic data to calculation trips from/to each TAZ, i.e. trip generation. Then all trips should be distributed from an origin TAZ to a destination TAZ, i.e. trip distribution. The model calibration consists of two steps. One is the screen line calibration and the other system-wide calibration by traffic counts. The calibration procedure includes the feedback to the modifying the configuration, parameters and equations of the model so that better reflect the real traffic situation.

3. Model Update

3.1 Update of Socioeconomic Information

3.3.1 Population and Number of Households

Since the spatial units of Census data is smaller than TAZs, all demographic information from 2000 Census is aggregated to the TAZ level, including population and number of households.

The aggregation of spatial information is realized by using ESRI Arc/view.

3.3.2 Employment Data

In 2000 Census, the employment information is not available at the Census block or TAZ level but at the county level. In 1997 Economy Census, the employment information by TAZ can be obtained by the aggregating the census blocks to TAZs. This was done in the original model. The 1997 employment distribution rate of each TAZ is defined as its number of employees divided by that of the County. Assuming the employment distribution rates of all TAZs keep no change

from 1997 to 2000, the 2000 employment figure of the county can be distributed to each TAZ by applying its employment distribution rates. In addition, the employment information is categorized by Manufacturing, Retail/Service, Office and other employment.

Street Network

The street network is the same as the original one. In other words, locations, attributes, coefficients and equations of links and nodes remain no change. All tables listed in Section 2 can still be used in the model.

Update of Traffic Counts

There are 88 traffic count sites in the county. The 2000 daily traffic counts are available at 55 count sites (See sites with red points in Figure 3-1). The 2000 traffic counts at rest sites can be estimated by applying an average growth rate to 1998 daily counts. Since the model calibration requires PM Peak-hr counts, all traffic daily counts are divided by 10 (assuming the peak-he traffic rate is 10%).

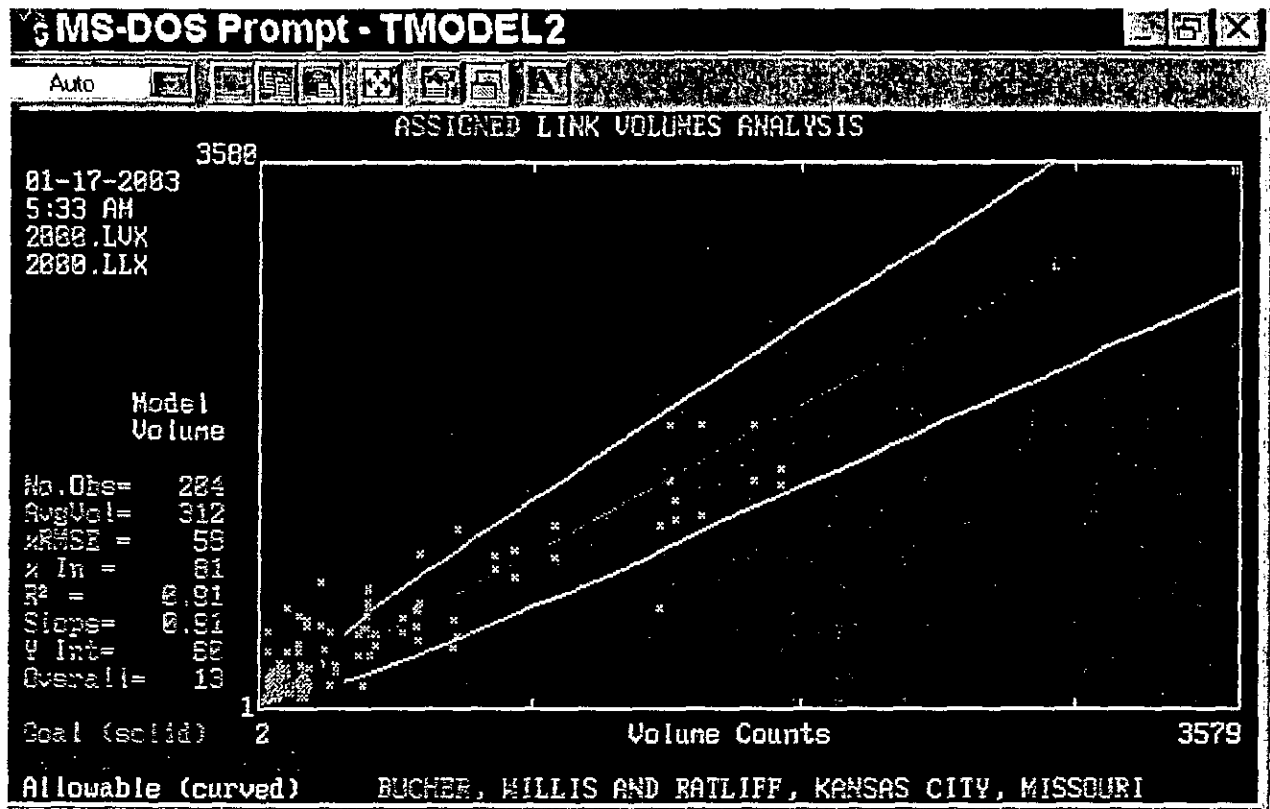
Appendix A: Travel Demand Model for Cass County

[illegible]

The model is re-calibrated by using all 2000 traffic counts. Some necessary changes are made for generation distribution rates as well as the distribution parameters.

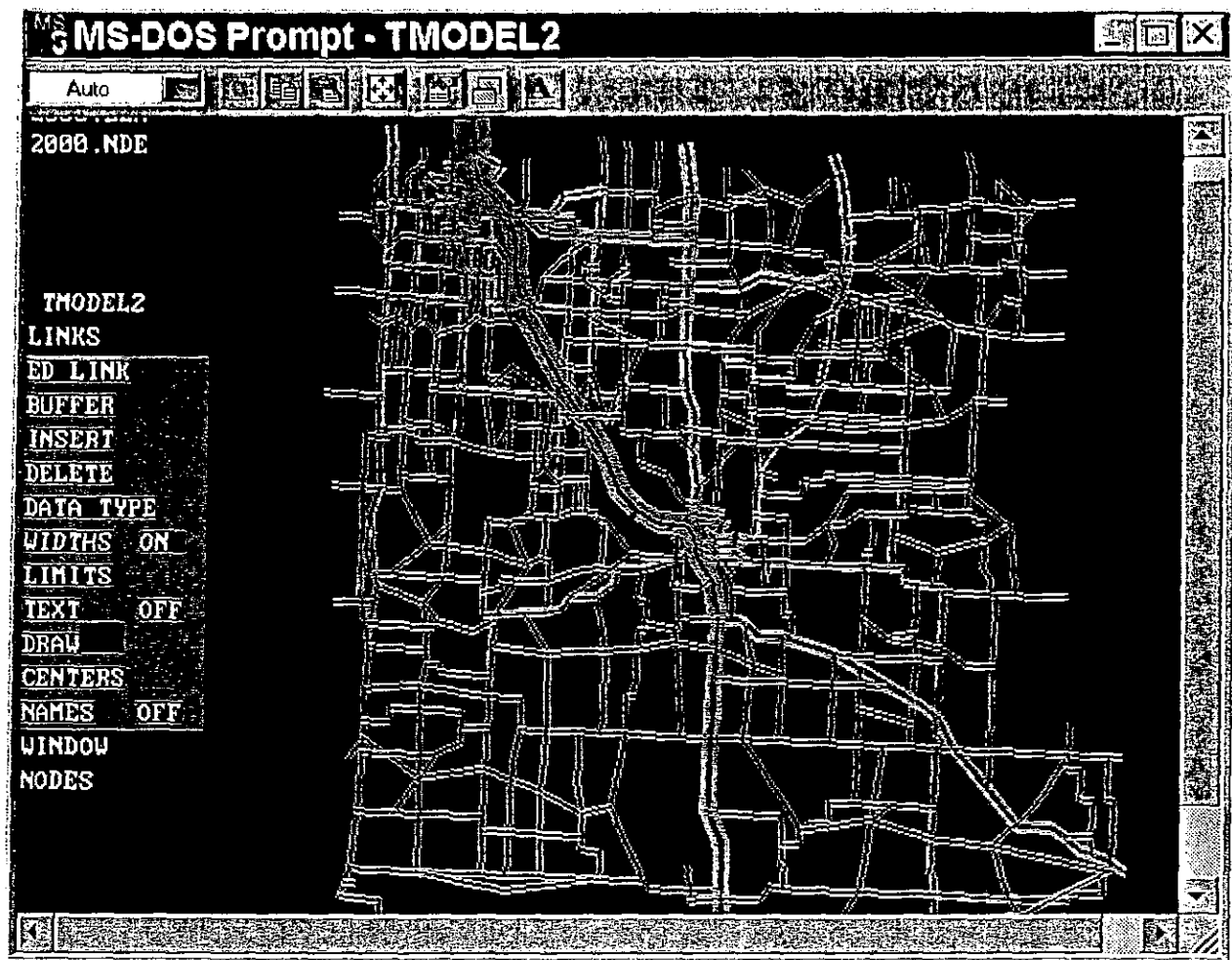
Results

Figure A-4. Traffic Counts vs Assigned Volumes



CASS COUNTY, MISSOURI—COMPREHENSIVE DEVELOPMENT PLAN UPDATE
Appendix A: Travel Demand Model for Cass County

Figure A-5. 2000 Traffic Volume Generated by the Model



APPENDIX B: CODE OF CONDUCT

INTRODUCTION

The following principles should govern the conduct of the Planning Commission's business. These principles should be considered as advisory rather than mandatory. Should any questions arise about the interpretation and application of any of these principles, the Planning Commission should be assisted.

1. Serve the Public Interest. The primary obligation of Planning Commission members and planning staff is to serve the public interest.
2. Support Citizen Participation in Planning. Because the definition of the public interest is modified continuously, Planning Commission members and planning staff must recognize the right of citizens to seek to influence planning decisions that affect their well-being. Members should encourage a forum for meaningful citizen participation and expression in the planning process and assist in clarifying community goals, objectives, and policies.
3. Recognize the Comprehensive and Long Range Nature of Planning Decisions. Planning Commission members and planning staff should recognize and give special consideration to the comprehensive and long-range nature of planning decisions. Planning Commission members and planning staff must seek to balance and integrate physical (including historical, cultural, and natural), economic, and social characteristics of the community or area affected by those decisions. Planning Commission members and the planning staff must gather all relevant facts, consider responsible alternative approaches, and evaluate the means of accomplishing them. Planning Commission members and planning staff should expressly evaluate foreseeable consequences before making a recommendation or decision.
4. Expand Choice and Opportunity for All Persons. Planning Commission members and planning staff should strive to make decisions which increase choice and opportunity for all persons; recognize a special responsibility to plan for the needs of disadvantaged people; and urge that policies, institutions, and decisions which restrict choices and opportunities be changed.
5. Facilities Coordination through the Planning Process. Planning Commission members and planning staff must encourage coordination of the planning process. The planning process should enable those concerned with an issue to learn what other participants are doing, thus permitting coordination of activities and efforts and accommodation of interests. Planning Commission members and planning staff should strive to ensure that individuals and public and private agencies likely to be affected by a prospective

CASS COUNTY, MISSOURI—COMPREHENSIVE DEVELOPMENT PLAN UPDATE

Appendix B: Code of Conduct

planning decision receive adequate information far enough in advance of the decision to allow their meaningful participation.

6. Avoid Conflict of Interest. To avoid conflict of interest and even the appearance of impropriety, Planning Commission members who may receive some private benefit from a public planning decision must not participate in that decision. The private benefit may be direct or indirect, create a material personal gain, or provide an advantage to an immediate relation. A member with a conflict of interest must make that interest public, abstain from voting on the matter, not participate in any deliberations on the matter, and step down from the Planning Commission and not participate as a member of the public when such deliberations are to take place. The member must not discuss the matter privately with any other member voting on the matter.
7. Render Thorough and Diligent Planning Service. Planning Commission members and planning staff must render thorough and diligent planning service. Should a Planning Commission member or members of staff believe they can no longer render such service in a thorough and diligent manner, they should resign from the position. If a member has not sufficiently reviewed relevant facts and advice affecting a public planning decision, the member must not participate in that decision.
8. Not Seek or Offer Favors. Planning Commission members and members of staff must seek no favor. Planning Commission members and planning staff must not directly or indirectly solicit any gift or accept or receive any gift (whether in money, services, loans, travel, entertainment, hospitality, promises, or in some other form) under circumstances in which it could be reasonably inferred that the gift was intended or could reasonably be expected to be intended to influence them in the performance of their duties; or that it was intended or could reasonably be construed to be intended as a reward for any recommendation or decision on their part. Individuals must not offer any gifts or favors intended to influence the recommendation or decision of Planning Commission members or planning staff.
9. Not disclose or Improperly Use Confidential Information for Financial Gain. Planning commission members and planning staff must not disclose or use confidential information obtained in the course of their planning duties for financial or other gain. A Planning Commission member or staff must not disclose to others confidential information acquired in the course of their duties or use it to further a personal interest. Exceptions to this requirement of non-disclosure may be made only when (a) required by process of law, (b) required to prevent a clear violation of law, or required to prevent substantial injury to the public. Disclosure pursuant to (a) and (b) must not be made until after the Planning Commission member or member of staff has made reasonable efforts to verify the facts and issues involved, obtain reconsideration of the matter, and obtain separate opinions on the issue from other planners or officials.

10. Ensure Access to Public Planning Reports and Studies on an Equal Basis. Planning Commission members and planning staff must ensure that reports and records of the public planning body are open equally to all members of the public. All non-confidential information available to a member or planning staff must be made available in the same form to the public in a timely manner at reasonable or no cost.
11. Ensure Full Disclosure at Public Hearings. Planning Commission members and staff members must ensure that the presentation of information on behalf of any party to a planning question occurs only at the scheduled public hearing on the question, not in private, unofficially, or with other interested parties absent. The official must make partisan information regarding the question (received in the mail, by telephone, or other communication) part of the public record. The Planning Commission Chairman at the commencement of each public hearing ask if any member of has received any exparte communication. If any member has received exparte communication concerning the application at hand, that member must describe the nature of the information received.
12. Maintain Public Confidence. A Planning Commission member or member of staff must conduct himself/herself publicly so as to maintain public confidence in the public planning body and the official's performance of the public trust.

In administering the zoning and subdivision regulations, it is crucial that the decisions be made fairly and that they have the appearance of fairness. The credibility of the Planning Commission and other boards, such as the Board of Zoning Adjustment, will erode quickly if there is an appearance of unfairness or impropriety in members of these public bodies. For this reason, it is important that a code of conduct be established and followed as closely as possible.

CONFLICTS OF INTEREST:

In making zoning and subdivision decisions, members of the Planning Commission, Board of Zoning Adjustment, and the Governing Body should be acting in the best interest of the countywide community. Whenever a member of any of these bodies is acting on an issue in which he or she also has a personal interest, an important element of fairness is lost. In general, a conflict of interest is any situation in which a member is in a position to act upon or influence a development request, which includes the potential for direct or indirect gain, financial or otherwise. In order to clarify this general rule, the following guidelines are recommended.

No member shall act on or influence any development request when:

1. The member has a potential for direct or indirect profit or financial gain from the development;

CASS COUNTY, MISSOURI—COMPREHENSIVE DEVELOPMENT PLAN UPDATE

Appendix B: Code of Conduct

2. The member owns or is employed by any company, which is an applicant, subdivider, developer or option holder;
3. The applicant, subdivider, developer or option holder is an established and regular client of the member or the member's place of employment;
4. One or more of a member's immediate family (parent, sibling, spouse or child) has a direct financial interest in the development or is an owner or officer of any company which is an applicant, subdivider, developer or option holder; or
5. The member has a potential for indirect financial gain or loss because of related property or business holdings.

Other situations not covered by these guidelines should be left to the judgment of the member involved. Again, the appearance of fairness and impartiality is as important as actual fairness and impartiality.

When a conflict of interest does occur, however, the following steps should be taken:

1. The member should declare, and the record should show, that a conflict of interest exists with respect to a particular issue, and that the member will not participate in any discussion or action;
2. The member should step down from his or her regular seat and should not speak with any other members during the discussion of the issue at hand; and
3. The member should not represent or speak on behalf of the applicant, but may speak on this or her own behalf as a private citizen during the hearing.

ACKNOWLEDGMENT OF OUTSIDE INFORMATION:

During any public hearing, it is presumed that all sides will have the opportunity to hear the opposing side's information and arguments, and to offer rebuttal. This right is lost when discussions are held or information is provided outside the public hearing. The possibility exists that a decision could be based on information that was never discussed publicly. To avoid this situation, Planning Commission and Board of Zoning Adjustment members should not receive any information relating to a case or discuss a case with anyone who has an interest in the outcome. Where such a discussion or information is unavoidable, the member should declare during the hearing, and the record should show, the general nature and content of the discussion or information and the participants in the discussion or the source of the information.

These guidelines also apply to any personal knowledge, which is relevant to the issue. If a member has any personal knowledge which will affect his or her decision, such information should be made public during the hearing and should be subject to rebuttal.

INFORMED PARTICIPATION:

All parties with an interest in a particular development issue have a right to a decision based on all of the available information. Any member who is not informed or aware of the available information should abstain from voting on that issue. This includes the following situations:

1. When a member has not reviewed the application or the information submitted with the application;
2. When a member has missed all or part of a public hearing and has not been able to review a transcript of the hearing; or
3. When a member has missed all or part of the discussion between members prior to the vote.

As a corollary to this policy, it is the duty of each member to attend normally scheduled meetings as regularly as possible. Without regular attendance, informed decision-making and full participation in the regulatory process is unlikely.



Urban Reserve Secondary Boundary
For dimensional purposes the actual boundary
line will follow section lines, half section lines
and quarter section lines as designated on this map.

GENERAL HIGHWAY MAP
CASS COUNTY
MISSOURI

MISSOURI HIGHWAY AND TRANSPORT
DIVISION OF PLANNING
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



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INTRODUCTION

Growth in the unincorporated area of *Cass County* during the 1990's has been guided by the Cass County 1991 Comprehensive Plan. The primary intent of the county's comprehensive plan has been to encourage urban development to locate near incorporated areas and other urban land uses. By doing so, it maximizes the benefits from land already within urban areas through infill development on underutilized sites and in areas within proximity of municipal services. The comprehensive plan also, encourages that the comprehensive plan be reviewed on a regular basis so that the county can anticipate changing needs.

In 1996 the process of reviewing the county's Comprehensive Plan was begun. Meetings were held with the Planning Commission, County Commission and representatives of various cities in the county to review the existing goals, policies and objectives of the Comprehensive Plan and to identify issues that are relevant to the future of the county. The following is a listing of the issues that were identified:

- X potential impact of confined feeding operations
- X siting of communication towers
- X minimum lot width/frontage of lots
- X adequacy of existing detention pond standards
- X improvement of road specifications
- X hard surface paving of off-street parking areas including display lots for car sales
- X limiting operation of quarries on certain holidays
- X need to more clearly define and regulate recycling facilities
- X home occupation standards and the expansion of home based businesses

Based upon these meetings the existing goals, objectives and policies were revised and new ones drafted. In addition, development patterns that have occurred in the county since 1991 were analyzed and population and economic data for *Cass County* was updated to include more recent census data. Finally, recommended amendments to the *Cass County* zoning and subdivision regulations were drafted in order to implement the Comprehensive Plan Update.

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 225%, from 19,534 in 1940 to 63,808 in 1990. 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 25% between 1980 and 1990. However, the absolute change in population has remained relatively consistent during this time; increasing by 9,746, 11,581 and 12,779, respectively for each of the above-described time periods.

During the 1980's, the number of households in Cass County increased at a slightly faster rate than the rate of population growth (Table 1-2). The number of households increased from 17,900 in 1980 to 22,892 in 1990, a 27.9% increase.

Both natural increases and net-migration account for the County's change in population as indicated in Table 1-1. Between 1980 and 1990, there were 4,328 more births than deaths in the County and 8,451 more people moved into Cass County than moved away.

TABLE 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
1990	63,808	5,117,073
1995*	73,547*	5,210,309
% Change 1970-80	29.4	5.1
% Change 1980-90	25.0	4.1
Net Migration 1980-90	8,451	(65,602)

Source: Office of Social & Economic Data Analysis, University of Missouri-Columbia, 1994

Note: * U.S. Census Estimate

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

	1980	1990	% Change
Households	17,900	22,892	27.9

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

Regional and Metropolitan Context

Within the context of the Kansas City Metropolitan Area,¹ Cass County ranks 6th in population. Cass County's 1990 population of 63,808 represents 4.2% of the population within this eight-county area (see Table 1-4).

Concentration

It is clear from looking at the 1990 distribution of individuals and households throughout the entire County, as shown in Table 1-5, 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, 29,662 (46.5%) of the residents of the County lived in its northwest corner in 1990 with the remaining 34,146 (53.5%) 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 1-3, 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 there has been a decline in the percentage of individuals between the ages of 6 to 19 from 27.6% in 1980 to 23.8% in 1990. 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 10.8% in 1990. In contrast to the gradual aging of the county population, there was a slight increase in the percentage of individuals under the age of 5 from 7.8% to 8.1% in 1990.

¹ The 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 3
Population-Age Profile
Cass County, Missouri
1980-1986

Age Group	1980	1980 % of County Total Population	1990	1990 % of County Total Population
Under 5	3,998	7.8	5,155	8.1
5 to 19	14,108	27.6	15,209	23.8
20 to 34	11,740	23.0	14,606	22.9
35 to 54	12,237	24.0	16,862	26.4
55 to 64	4,160	8.2	5,162	8.1
65 and older	4,786	9.4	6,814	10.8
Total	51,029	100.0	63,808	100.00

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

Population Projections

Two 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 1994; and another was generated by the Mid-America Regional Council's (MARC) Research Data Center in 1996. The MOA projections 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. 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.

The MOA figures (Table 1-4) 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 1980-1992 will continue through 2020; Scenario R (recent migration) assumes that 1987-1992 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 50.3% by the year 2020. Using a recent migration rate, the population will increase 60.9% over the same period of time and, with no migration, the population will increase 18.1%.

The MARC Research Data Center used two different methods to project population growth. The first method was the baseline forecast which projects future population reflecting historical trends and current data. The second method used by MARC was the policy forecast. The policy forecast projects where current policies and investments will take the Kansas City metropolitan area if the policies are fully implemented. The policy forecasts are different from basic trends affecting the metropolitan area. Both of MARC=s projection methods include input from planners and economic development specialist from throughout the metropolitan area concerning the future economic and demographic outlook for the Kansas City area. The policy forecast was approved by the MARC Board of Directors which is comprised of elected officials from throughout the metropolitan area.

MARC=s baseline forecasts (Table 4) project Cass County=s population will increase 39.6% between 1990 and 2020. The policy forecast projects the county=s population to increase 38.8% over the same time period.

TABLE 4
Population Projections
Cass County, Missouri
1980-2020

	1990	1995	2000	2005	2010	2015	2020	% Change 1990- 2020
<i>Missouri Office of Administration</i>								
Long-Term Migration	63,808	70,434	76,463	82,088	87,332	91,997	95,875	50.3
Recent Migration	63,808	71,779	79,104	85,941	92,299	97,960	102,654	60.9
Zero Migration	65,902	67,914	70,025	72,124	73,941	75,341	75,341	18.1
<i>Mid-America Regional Council</i>								
<i>Cass County</i>								
Base Line Forecast	63,808	—	71,960	—	79,734	—	89,052	39.6
Policy Forecast	63,808	—	71,890	—	79,535	—	88,595	38.8
<i>Metropolitan Area*</i>								
Base Line Forecast	1,511,740	—	1,627,084	—	1,731,297	—	1,833,855	21.3
Policy Forecast	1,511,740	—	1,627,084	—	1,731,297	—	1,833,855	21.3
<i>Cass County as a % of the Metropolitan Area</i>								
Base Line Forecast	4.2	—	4.4	—	4.6	—	4.9	—
Policy Forecast	4.2	—	4.4	—	4.6	—	4.9	—

Sources: Mid-American Regional Council/Research Data Center, Base Line Population Forecasts, March 1996
Missouri Office of Administration, May 1994

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 1-4, 1-5) 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 Census Tracts within the northwest portion of the County. The areas, as previously stated, are witnessing the County's most substantial growth. The isolated are as follows:

- ! Census Tract 600.00 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;
- ! Census Tract 601.00 is the area in Cass County that is included within the Richards-Gebaur Air Force Base property limits;
- ! Census Tract 602.00 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 Harreson Road and the unnamed County Road Two miles north of the Mount Pleasant/Union Township boundary;
- ! Census Tract 603.00 is the area included within the Raymore Township boundaries; and
- ! Census Tract 604.00 is the area included within the Big Creek Township boundaries.

MARC=s baseline and policy forecast figures both show an increase in population of 60.6% from 1990 to 2020 with Cass County representing 7.8% of the total projected growth within the Kansas City Metropolitan Area. The figures also show that Cass County percentage of the Metropolitan Area population will increase slightly each decade from 1990 through 2020. The MARC figures which isolate the northwest portion of the County show that the areas within the northwest corner combined will increase 60.6% between 1990 and 2020. They will continue to increase in significance in terms of population concentration reaching 53.5% of the County's total population in 2020. Each of these Census Tracts are projected to increase in population through 2020. Census Tract 604, which includes Lake Winnebago, is projected to grow 129.4% by the year 2020. The population in Census Tract 603.00, which includes all of the City of Raymore, is projected to increase 77.3% over the same period of time. Census Tract 602.00, which includes the southern part of Belton, is forecasted to increase 63.2%. The population in Census Tract 601.00, which includes Richards-Gebauer Airport, is projected to increase 1.0%.

The number of households is projected to increase at a rate significantly higher than the figure for the Metropolitan Area (Table 1-6). 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 30% in the number of households by the year 2020 is slower than the County=s projected rate of growth. Based upon the projected population figures and the projected

household growth, the average household size will increase to over 3.0 persons per household by 2020.

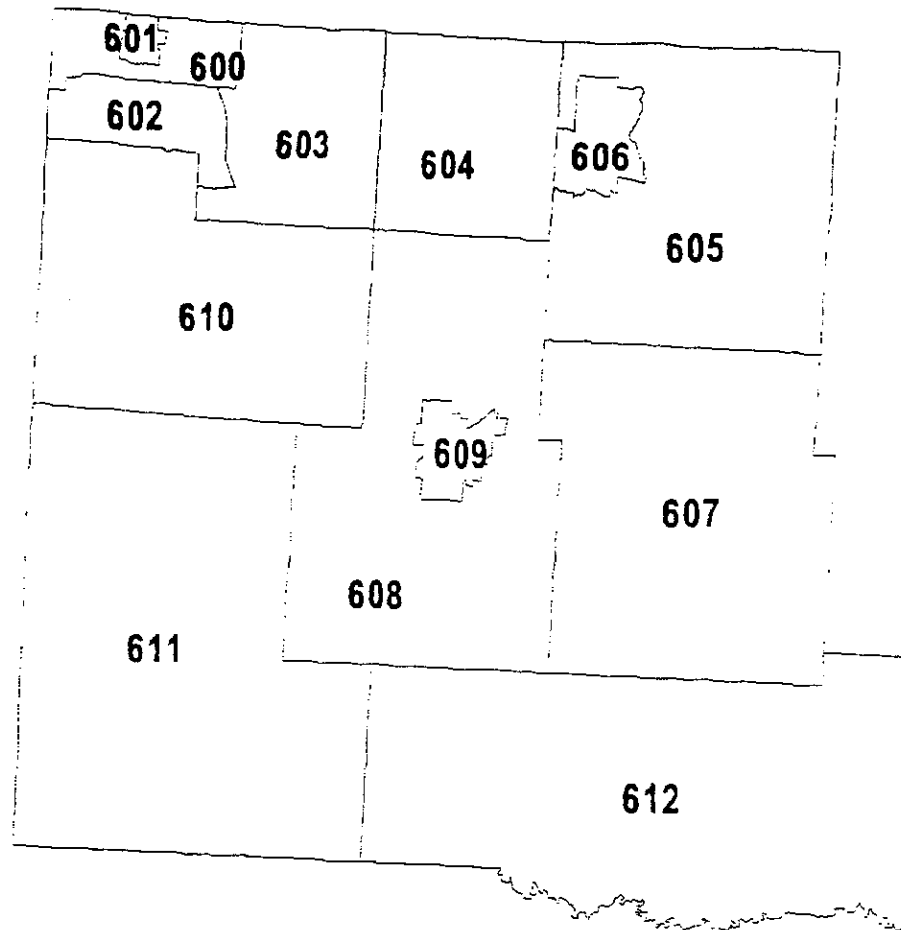


Figure 1
Census Tracts
Cass County, Missouri

Source: U.S. Census Bureau, 1990

The MOA figures assume that a recent migration rate will continue and suggest that the population of Cass County will increase 60.9% by the year 2020 (Table 1-7). 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 54 will continue to decrease in number through the year 2020, 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 5
Population Projections
Northwest Cass County, Missouri
1980-2010

Census Tract	1990	% of County Total Population 1990	2000	2010	2020	% of County Total Population 2020	% Change 1990-2020
600.00	9,754	15.3	11,623	13,586	15,920	17.9	63.2
601.00	2,307	3.6	2,501	2,414	2,331	2.6	1.0
602.00	7,384	11.6	8,232	9,067	10,087	11.3	36.6
603.00	7,971	12.5	10,074	11,940	14,136	15.9	77.3
604.00	2,246	3.5	2,776	3,621	5,152	5.8	129.4
Total	29,862	46.5	35,206	40,628	47,626	53.5	60.6
Balance of the County	34,146	53.5	36,754	39,106	41,426	46.5	21.3
Total	63,808	100.0	71,960	79,734	89,052	100.0	39.6

Source: Mid-America Regional Council/Research Data Center, March 1996

TABLE 6
Projection of the Number of Households
Cass County and Kansas City Metropolitan Area*
1980-2010

	1990	2000	2010	% Change 1990-2020
Cass County**	22,988	26,181	29,886	30.0
Metropolitan= Area**	582,198	631,212	688,437	18.2
Cass County as a % of the Metropolitan Area	3.9	4.1	4.3	—

Source: Mid-America Regional Council/Research Data Center, March 1996

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

** Projections reflect baseline forecasts and policy forecasts.

TABLE 7
Population Projections by Age
Cass County, Missouri
1980-2010

Age Group	1990	% of County Total Population 1990	2000	2010	2020	% of County Total Population 2020
Under 5	5,155	8.1	5,553	6,501	6,930	6.8
5 to 19	15,209	23.8	18,544	19,871	21,821	21.3
20 to 34	14,606	22.9	14,985	18,465	18,484	19.0
34 to 54	16,862	26.4	23,172	24,818	25,063	24.4
55 to 64	5,162	8.1	9,564	9,281	11,767	11.4
65 and Older	6,814	10.7	9,840	13,363	17,589	17.1
Total	63,808	100.0	81,658	92,299	101,654	100.0

Source: Missouri Office of Administration, May 1994

Population Summary

MARC 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 38.8% and 60.9% between 1990 and 2020. MOA long-term migration figures vary somewhat from the others and show a greater percentage increase during this same period of time (60.9%), if migration trends between 1980 and 1992 continue through the year 2020.

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.

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 1-8. The overall employment in Cass County grew 37.8% between 1980 and 1990. Employment in the Kansas City MSA, in comparison, grew at 23.1%. The majority of employed persons in Cass County are working within the managerial and professional specialty employment sector and in the technical, sales and administrative support employment sector of the economy.

According to U.S. Census data these two employment sectors were the only sectors in Cass County to grow between 1980 and 1990. Employment in the Kansas City MSA in 1990 was primarily comprised of managerial and specialty occupations and technical, sales and administrative support occupations. This is similar to the employment distribution in Cass County.

The OSEDA figures on commuting patterns (Table 9) 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 between Cass County and the Kansas City metropolitan area.

The percent of Cass County residents commuting to work outside of the county has steadily increased each decade since 1960. This is true of all other counties on the Missouri side of the Kansas City MSA except for Platte County which showed a decline between 1970 and 1980. Between 1960 and 1990, except for Jackson County Cass County has had the largest percentage increase of residents commuting to work outside of the county than any other Missouri county in the MSA.

TABLE 8
Occupation of Employed persons 16 years and older

TABLE 9
Commuting Patterns:
Percent Working Outside County of Residence
1960-1990

County	1960	1970	1980	1990	% Change 1960-1990
Cass	27.3%	48.8%	54.3%	65.1%	138.5%
Clay	42.1%	47.8%	47.9%	53.5%	27.1%
Jackson	8.1%	11.4%	15.1%	20.0%	146.9%
Platte	50.4%	56.6%	53.9%	61.1%	21.2%
Ray	34.0%	47.4%	52.4%	62.0%	82.4%
Average	32.4%	42.4%	44.7%	52.3%	83.2%

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

Employment Projections

The Mid-America Regional Council (MARC) has collected employment figures and generated a set of employment projections for Cass County through the year 2020 (Table 10).

These figures represent the number of jobs that existed within the County in 1990 and the number of employment opportunities that are expected to exist in the future. This investigation used the same five Census Tract Areas that were used in generating population projections for the northwest corner of the County. In 1990, 43.1% of the jobs in the County were located within the northwest area of the county. The majority of the jobs in the northwest corner of the county were located in and around the City of Belton. MARC has projected the following employment trends:

- ! By the year 2020, the number of jobs will increase within these five Census Tract Areas. The total number of jobs, as a percentage of the total number of jobs in the County, within the five Census Tract Areas combined is projected to increase 53.4% by 2020. The total number of jobs within these Census Tract Areas is projected to increase 77.6%.
- ! The total number of jobs in other areas of Cass County are expected to increase 17.3 percent. However, due to the projected faster rate of employment growth in the five Census Tract Areas the number of jobs in the rest of the County, excluding this northwest corner, is expected to decrease from 56.9% to 46.68% of the total jobs in the County.

TABLE 10
Employment Projections
Cass County, Missouri
1990-2020

Census Tract	1990	% of Total County Employment in 2020	2000	2010	2020	% of Total County Employment in 2020	% Change 1990 - 2020
600.00	1,557	17.3%	1,781	2,167	2,322	18.0%	49.1%
601.00	58	0.6%	222	924	998	7.8%	1,620.7%
602.00	1,500	16.7%	1,646	2,074	2,289	17.8%	52.6%
603.00	751	8.4%	795	1,049	1,210	9.4%	61.9%
604.00	6	0.1%	9	28	53	0.4%	783.3%
Areas Combined	3,872	43.1%	3,453	6,233	6,878	53.4%	77.6%
Balance of County	5,115	56.9%	6,558	6,024	5,998	46.6%	17.3%
County Total	8,987	100.0%	10,011	12,257	12,876	100.0	43.3%

Source: Mid-America Regional Council/Research Data Center, Base Line Employment Forecast, March 1996

Income

Another component of the County's economic structure is income. Cass County's apparent substantial growth in income as indicated in Table 11 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:

- ! In Cass County, the 1990 median household effective buying income (income after taxes) was \$31,373. The comparable Kansas City MSA level was \$29,891. (Table 11)
- ! Cass County had the second largest increase in personal income between 1982 and 1992 of all Missouri Counties in the Kansas City MSA. Total personal income in the County increased from \$806,563 in 1980 to nearly 1.1 million in

1992 - a 40.7% gain. Over the same period, Missouri total personal income increased 26.5%. (Table 11)

Cass County's per capita income between 1982 and 1992 increased 9.8%. This rate of increase was less than all other Missouri Counties, except for Ray County, in the Kansas City MSA.

TABLE 11
Personal and Per Capita Income
1982-1992

County	1982 Adjusted Personal Income	1992 Personal Income	Personal Income - % Change 1982-1992	1982 Adjusted Per Capita Income	1992 Per Capita Income	Per Capita % Change 1982-1992
Cass	806,563	1,134,549	40.7%	15,312	16,818	9.8%
Clay	2,476,684	3,132,401	26.5%	17,898	19,691	10.0%
Jackson	10,895,447	12,961,730	19.0%	17,429	20,443	17.3%
Platte	889,657	1,314,289	47.7%	18,581	21,321	14.8%
Ray	306,468	328,802	7.3%	14,324	15,105	5.5%
Missouri	77,862,773	98,469,628	26.5%	15,796	18,970	20.1%

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

Note: 1982 income adjusted to 1992 by a factor of 1.453 (CPI Inflation)

TABLE 12
Distribution of Households
by Income
Selected Missouri Counties
1990

County	Number of Households 1990	Median Household Income	% of Households in Each Category					
			Under-\$10,000	\$10,000-\$14,999	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-49,999	\$50,000-and over
Cass	22,388	\$31,373	10.9	9.0	18.3	18.2	22.6	20.8
Clay	58,998	\$34,370	8.4	7.3	17.4	17.9	22.6	26.3
Jackson	252,202	\$27,853	16.5	9.3	18.7	17.0	18.3	19.1
Platte	22,116	\$38,173	6.8	6.2	15.0	16.8	22.1	33.0
Ray	8,075	\$27,124	16.3	9.8	19.4	19.7	19.3	15.6
Kansas City MSA	376,257	\$29,891	14.3	8.9	18.4	17.3	19.5	21.5

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

Note: * EBI = Effective Buying Income.

With the 1982 figures adjusted to 1992 dollars, the per capita income in Cass County increased 9.8%. While this represents an 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 other Missouri counties in the Kansas City MSA.

According to MARC the number of households in all income brackets in Cass County are projected to increase between 1990 and 2020. The Aupper middle income bracket had the largest percentage of households in 1990. MARC projects that the number of households in the Alower middle income bracket will increase at a faster rate through 2020. This will result in the largest number of households in the County being the Alower middle income bracket in 2020. MARC projects the number of upper income households in Cass County will increase by 62.7% between 1990 and 2020. The number of lower income households is projected to increase 61.0% over the same time period (Table 1-12).

TABLE 13
Income Range Projections
Cass County and Kansas City Metropolitan Area*
1990-2020

	1990	2000	2010	2020	% Change 1990-2020
Cass County Income Range - (Households)					
Lower	5,509	6,285	7,440	8,869	60.1%
Lower Middle	6,195	6,332	7,432	8,969	40.3%
Upper Middle	6,576	7,517	7,977	8,639	31.4%
Upper	4,708	6,005	6,914	7,663	62.7%
Metropolitan Area Income Range - (Households)					
Lower	145,547	154,659	170,823	188,554	29.5%
Lower Middle	145,551	152,659	168,372	189,349	30.1%
Upper Middle	145,551	149,042	153,879	162,083	11.4%
Upper	145,549	174,655	195,363	207,656	42.7%

Source: Mid-America Regional Council/Research Data Center, Adopted Households by Income, March 1996

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 60.8% between 1980 and 1989. The number of small businesses (less than 20 employees) increased from 666 to 1,068; the number of mid-size businesses (20 to 100 employees) increased from 61 to 97; and the number of large businesses (over 100 employees) increased from 2 to 7. (Table 14)
- ! Retail sales in Cass County increased 27.2% between 1980 and 1989 to \$324,665. The average rate of increase for Missouri counties in the Kansas City MSA was 27.8%. (Table 15)

TABLE 14
Number of Businesses
Cass County and Missouri
1980-1989

County	Small Size Business			Medium Size Business			Large Size Business		
	1980	1989	% Change 1980- 1989	1980	1989	% Change 1980- 1989	1980	1989	% Change 1980- 1989
Cass	666	1,068	60.4%	61	97	59.0%	2	7	250.0%
Clay	2,254	3,255	44.4%	341	473	38.7%	76	94	23.7%
Jackson	12,312	14,504	17.8%	2,107	2,422	15.0%	441	513	16.3%
Platte	513	1,068	108.2%	63	137	117.5%	9	27	200.0%
Ray	264	338	28.0%	20	20	0.0%	1	3	200.0%
Missouri	85,988	111,584	29.8%	11,128	14,114	26.8%	2,374	3,028	27.5%

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1996

TABLE 15
Retail Sales
Selected Missouri Counties
1987-1992

County	Retail Sales		Change 1987-1992	1992 Number of Establishments
	1987	1992		
Cass	\$255,152	\$324,665	27.2%	273
Clay	\$1,142,385	\$1,583,344	38.6%	996
Jackson	\$4,625,848	\$5,047,739	9.1%	3,895
Platte	\$254,124	\$345,811	36.1%	279
Average	\$1,569,377	\$1,825,390	27.8%	1,361

Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1996

Note: Ray County is not reported because the retail trade industry in the County has less than 1,000 employees.

FUTURE LAND USE

URBAN ISSUES

Due to the nature and intensity of development in its northern tier, *Cass County* is facing a 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 incorporated areas in *Cass County* is critical. The following report is a summary of the key issues that face *Cass County*.

Perceived Barriers to Annexation

Subdivisions which are developing 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.

Roads

Both road maintenance and design standards are a concern within *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.

Streets within subdivisions that have lots that are less than three acres in size should be constructed according to the following standards:

- X Curb and gutter is required and rollback curbs are permitted for residential streets but six inch stand up curbs are required for collector streets.
- X Minimum street width is 28 feet back of curb to back of curb for residential streets and 36 feet for collector streets.

- Surface Standards:

Type A - 6" portland cement concrete over 6" compacted subgrade 95% of standard maximum density; or

Type B - 2" Type 3 asphaltic concrete with 6" Type 1 asphaltic concrete base course and 6" compacted subgrade 95% of standard maximum density; or

Type C - 3" Type 3 asphaltic concrete with 5" stabilized aggregate base and 6" compacted subgrade 95% of standard maximum density.

Impact and User Fees

The concept of charging impact and user fees to more evenly and justly distribute the cost of constructing facilities is a method many local governments use to offset the cost of development on the general public. If an impact or user fee is to be implemented by Cass County three key issues must be addressed.

1. The county must establish a legal mechanism for imposing the fee as a condition of development approval.
2. A rational nexus must exist which demonstrates that there is a relationship between the fee or dedication that is being required of the proposed development and the applicable public improvement.
3. If imposition of the fee is legitimate, the county must be able to demonstrate that the amount of the fee is in rough proportionality to the need and the use the development is creating for the applicable improvement. As Chief Justice William Renquist stated in the United States Supreme Court's ruling in *Dolan vs. The City of Tigard*, "no precise mathematical calculation is required, but the City must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development". Based on this, three factors are critical:
 - X Whether the development creates a need for new capital facilities;
 - X Whether the developer pays a proportional share; and
 - X Whether the fee collected from the developer benefits the developer.

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:

- X Concentrating urban land uses
- X Restricting development in specific areas
- X 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. Directing growth to specific areas will allow the County to conserve resources including natural, cultural, agricultural as well as assure private investment. By directing growth to specific areas a managed urban growth pattern in the County will be 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. Ongoing changes should be reflected in the inventories of manmade 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

Development within *Cass County* since 1991 has been primarily concentrated in the northwest portion of the county. The *Cass County* 1991 Comprehensive Plan and zoning regulations encourage the concentration of urban development near existing urban development. The effect of the rules has concentrated growth since 1991 inside incorporated areas of the county. The *Development Areas* shown on the *Cass County Development Patterns* map indicate where there has been an approved subdivision plat or rezoning in the unincorporated areas of the county since 1991. The majority of the subdivision development and rezoning for urban uses in the county has occurred in the northwest portion of the county particularly near the cities of Raymore and Peculiar. There has also been to a lesser extent subdivision development and rezonings near the cities of Belton and Harrisonville.

The growth in this area of the county can be attributed to its proximity to the Kansas City metropolitan area and the ability of Highway 71 to provide easy access to jobs in Jackson County, Missouri and Johnson County, Kansas.

It appears that growth will continue to occur within and near the cities of Raymore and Peculiar. The City of Raymore has extended and upgraded its sanitary sewer system. In addition, the City of Raymore is planning for improvement and development of major thoroughfare roads to accommodate increased amounts of traffic caused by the growth. The City of Peculiar's waste water treatment plant is located one mile southeast of the city, east of U.S. 71 Highway. The sanitary sewer system is designed to serve the drainage basin west of old 71 Highway, and east of Missouri J Highway. The sewage plant is capable of serving existing and near-term development in and around the City of Peculiar, however, the city is planning to upgrade its plant in the next three years to increase capacity. The improvements will allow the plant to serve a population of 5,000 persons.

The *Cass County Future Land Use Plan* encourages the continued concentration of urban land uses so as to maximize the benefits from land already within the urban area through infill development on underutilized 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

Specific geographic boundaries around incorporated areas are defined as an urban area reserve. The urban area reserve indicates where urban-oriented land uses in the County will be encouraged to locate. The land within the urban area reserves 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 "leapfrog" development is avoided.

Primary Area

Developments at density greater than one Acell-off \approx in 40 acres within one-half mile of and adjacent to an incorporated city in Cass County shall petition for annexation to the City. Subdivisions not annexed by the adjacent city shall be developed according to regulations for Urban Reserve Secondary Area developments.

Secondary Area

Developments within a geographic boundary around an incorporated area defined as an Urban Area Reserve, but is not within an Urban Reserve - Primary Area shall be within an Urban Reserve - Secondary Area. 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, a developer or subdivider 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.

Subdivisions located within the designated Urban Reserve - Secondary Areas shall develop water, sewer and storm drainage improvements according to the following requirements:

- a. Water: If the proposed subdivision is served by a water district, it shall install waterlines and fire hydrants in accordance with the standards of the water district. If the proposed subdivision is to be served by a city, it shall install waterlines and fire hydrants in accordance with city standards.
- b. Sewers: If the proposed subdivision is within four hundred (400) feet of a public sewer and that sewer has the capacity to accommodate the subdivision, the subdivision shall connect to that sewer system and the sewer lines within the subdivision as well as the connecting line will be built to the standards of the public sewer system.

If the proposed subdivision is farther than four hundred (400) feet from a public sewer line and the lots are less than three (3) acres, the subdivision shall either connect to the public sewer system if that line has adequate capacity, or build a treatment facility adequate to handle the proposed subdivision.

If the proposed subdivision is platted in lots of three acres or more, individual sewage disposal systems, will be permitted provided they are approved by the County Health Department.

- c. Storm Drainage/Storm Sewer: All subdivisions designed with curb and gutter streets shall include a storm sewer system designed by a licensed professional engineer in accordance with APWA standards. All subdivisions designed with slab and ditch streets shall include appropriate ditches and drainageways designed by a licensed professional engineer in accordance with APWA standards.
- d. Lots: In those areas where municipal-type water and sanitary sewer systems will be available in the future, but are not yet available, the Planning Commission may require that lots be laid out and arranged so that they can

readily be converted to urban type building sites without replatting when said systems become available. When this situation occurs, land should be subdivided so that by combining lots, a building site is created with an area of not less than required for individual sewage treatment systems which currently is three acres and provisions should be made for appropriate utility easements and street rights-of-way when utilities become available. The creation of a building site through use of multiple lots shall be contingent upon the establishment of restrictive covenants satisfactory to the County Commission that no more than one dwelling unit shall be built on an aggregate group of lots having an area of at least three acres until such time as municipal-type water and sanitary sewer systems are available.

- e. *Design and Inspection:* All required facilities will be designed and inspected by a licensed professional engineer. The installation of water and sewer lines shall be coordinated with the city or district providing the service and whatever additional inspection that entity may require shall be made.

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.

Streets within subdivisions located in areas outside of the Urban Reserve Secondary Area should develop private streets to the following standards.

- X Streets in subdivisions comprised of lots smaller than 22,000 square feet (0.505 acres) shall be improved with curb and gutter, and a Type A, Type B or Type C paved surface as specified for streets within Urban Area Reserves.
- X Streets in subdivisions comprised of lots between 22,000 square feet but less than five (5) acres in size shall be improved with a Type A, Type B or Type C paved surface as specified for streets within Urban Area Reserves. Curbs and gutters shall not be required, however.
- X Streets in subdivisions comprised of lots five (5) acres and larger in size shall have a compacted base and be surfaced with chip and seal in conformance with the County Engineer's standards and specifications.
- X Arterial roads which directly connect with an existing asphalt or concrete surfaced street shall be constructed of 2" Type 3 asphaltic concrete surface, 10" Type 1 asphaltic concrete case course and 6" compacted subgrade 95% of standard maximum density. Collector roads shall be improved with a Type A, Type B or Type C paved surface as specified for streets within Urban Area Reserves.

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 (2) 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 will benefit from the traffic attracted by the other businesses. The increase in business is an example of a positive land use externality.

In general, a residential land use is 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 road 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 2
4-Lane Rural Arterial

Figure 3
4-Lane Rural Arterial with Frontage Road

Insert Figure 4 - 2-Lane county road cross section drawing here

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:

- X Goals are broad statements which describe what the County aspires to provide for its residents and its communities and what it hopes to achieve.
- X Objectives are more specific statements which outline methods of accomplishing these goals.
- X Policies are specific actions or standards designed to implement an objective.

The following set of goals, objectives and policies are intended to provide guidance to the County through the planning process. 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 be contiguous to existing development to avoid the inefficient "leap-frog" pattern of growth.

POLICY G1.2 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 G1.3 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, a developer or

subdivider 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 the standards of the incorporated City.

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 development.
- 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 are met.

POLICY G1.4 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 G1.5 Subdivisions shall have direct access to a paved collector or arterial road.

POLICY G1.6 Streets within subdivisions located outside of an urban area reserve shall meet the following requirements.

- a. Streets in subdivisions comprised of lots smaller than 22,000 square feet shall be improved with curb and gutter, a width of 28 feet back of curb to back of curb, and be surfaced with cement concrete or asphaltic concrete.

- b. Streets in subdivisions comprised of lots between 22,000 square feet but less than five (5) acres in size shall be improved with a cement concrete or asphaltic concrete paved surface and be 28 feet in width back of curb to back of curb. Curbs and gutters shall not be required.
- c. Streets in subdivisions comprised of lots five (5) acres and larger in size shall have a compacted base and be surfaced with chip and seal in conformance with the standards and specifications of the County Engineer.

POLICY G1.7 Local streets within rural subdivisions shall be privately maintained unless the County Commission specifically requests dedication.

POLICY G1.8 Collector and arterial streets shall be dedicated to the public.

POLICY G1.9 All utilities for new development shall be mapped and approved prior to installation.

OBJECTIVE G2 Establish Urban Area Reserves adjacent to cities within the county that can provide public services necessary to accommodate urban and suburban development.

POLICY G2.1 New urban development should be encouraged to locate within urban area reserves as identified on the Future Land Use map where municipal services and public facilities are already present. These new developments should be encouraged to connect to such services.

POLICY G2.2 Specific Urban Area Reserves should be established and mapped around city=s that have been experiencing growth near their fringe and are able to provide municipal services to urban type developments.

OBJECTIVE G3 Minimize conflicts between rural and urban land uses.

POLICY G3.1 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 G3.2 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 G3.3 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 G3.4 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 G3.5 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 G4 Restrict development to areas with few environmental hazards and minimize the loss of natural resources due to urbanization.

POLICY G4.1 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 G4.2 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 G4.3 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 G4.4 Increased storm water runoff attributed to new development should not adversely affect downstream properties or structures.

POLICY G4.5 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.

OBJECTIVE A2 Monitor the locating and size of concentrated feeding facilities in Cass County.

POLICY A2.1 Hold public hearings to receive input on Missouri Department of Natural Resources concentrated feeding operation permit applications that are proposed to be located in the County.

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.

OBJECTIVE C3 Establish performance standards that address the expansion of existing accessory uses and home occupations.

POLICY C3.1 Accessory uses and home occupations should not detract from the existing or planned residential character of the area in which they are located.

POLICY C3.2 Apply the special use permit process to allow more home based businesses while preserving the character of residential areas.

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 II.3 Industrial development should be located so as to minimize the negative impact on the environment and on other less intensive uses.
- POLICY II.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 II.5 Future industrial uses should not be allowed in areas where substantial, long-term environmental damage is likely to occur.
- POLICY II.6 Industrial uses such as salvage yards should be located and screened so as to minimize their visual impact on the County landscape.
- POLICY II.7 Areas for potential industrial land should be reserved and discouraged from being developed as residential.
- POLICY II.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.
- POLICY II.9 Require quarry and land fill operations to submit land reclamation plans and guarantees.

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.
- POLICY P1.3 Coordinate location of telecommunication towers so that each location has a negligible impact on adjoining land uses and can serve multiple providers.

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.

GOAL: PREPARE FOR BECOMING A FIRST CLASS COUNTY IN 1999.

OBJECTIVE M2 Review alternative methods for planning and enforcement of zoning and subdivision regulations as allowed by state law for first class counties.

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 Cul-de-sacs within subdivisions should be prohibited unless warranted due to unusual topographic conditions.

POLICY T1.6 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, 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

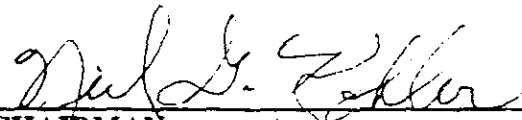
WHEREAS, the Public Hearing was closed and the meeting continued to the next
regularly scheduled Planning Commission meeting; and

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
Cass County 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.

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	109	140	150	37.6	.40
Total Incorporated Area	33,334	38,903	42,533	27.6	88.7
Total Unincorporated Area	17,695	18,397	18,867	6.6	11.3
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.

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:

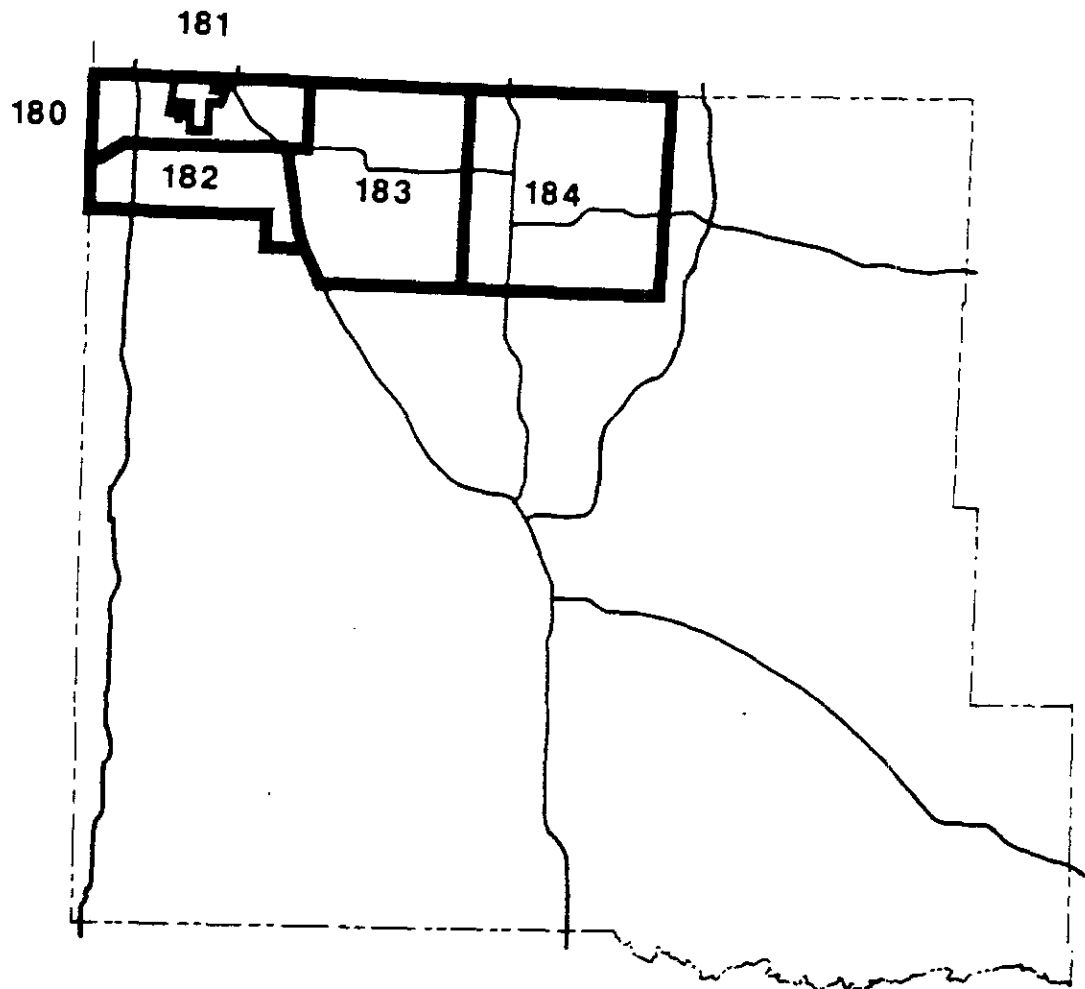
- Area 180 is that area bounded on the north and west by the *Cass County* Line, on the south by Missouri Highway 58, and on the east by the Belton/Raymore city limits;
- Area 181 is the area in *Cass County* that is included within the Richards-Gebaur Air Force Base property limits;
- Area 182 is that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

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

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
Cass County	17,424	21,331	25,262	28,441	63.2
Metropolitan Area*	510,523	594,221	675,412	735,940	44.2
Cass County as a % of the Metropolitan Area	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	4,786	9.4	6,979	9,528	12,493	17.2
Total	51,029	100.0	60,155	67,566	72,433	100.0

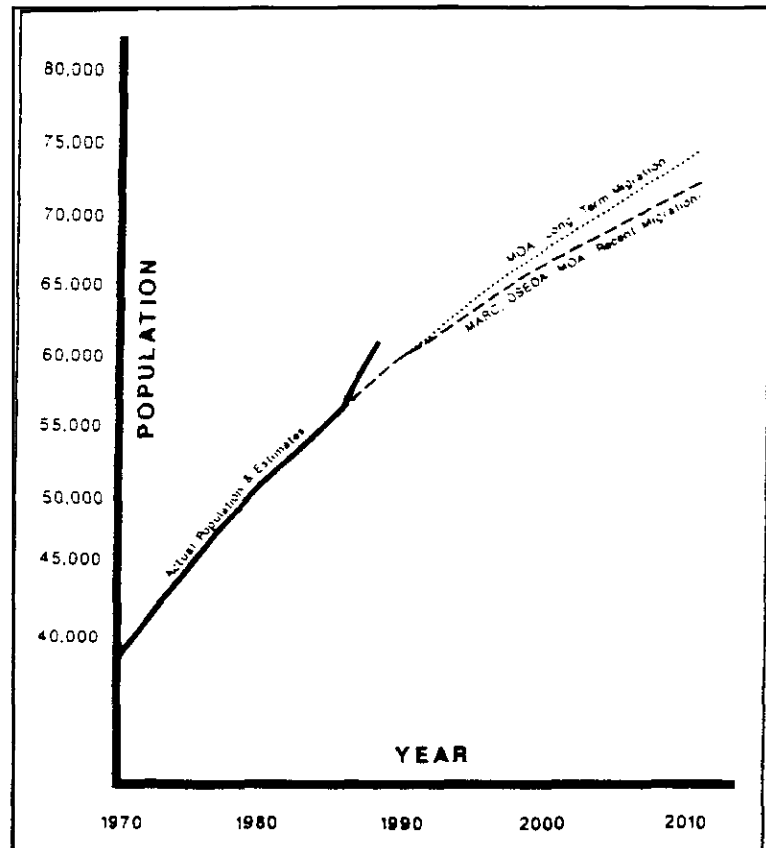
Source: Office of Social and Economic Data Analysis, University of Missouri-Columbia, 1989

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
<i>Missouri</i>					
\$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)

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	
Cass County	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
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-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.

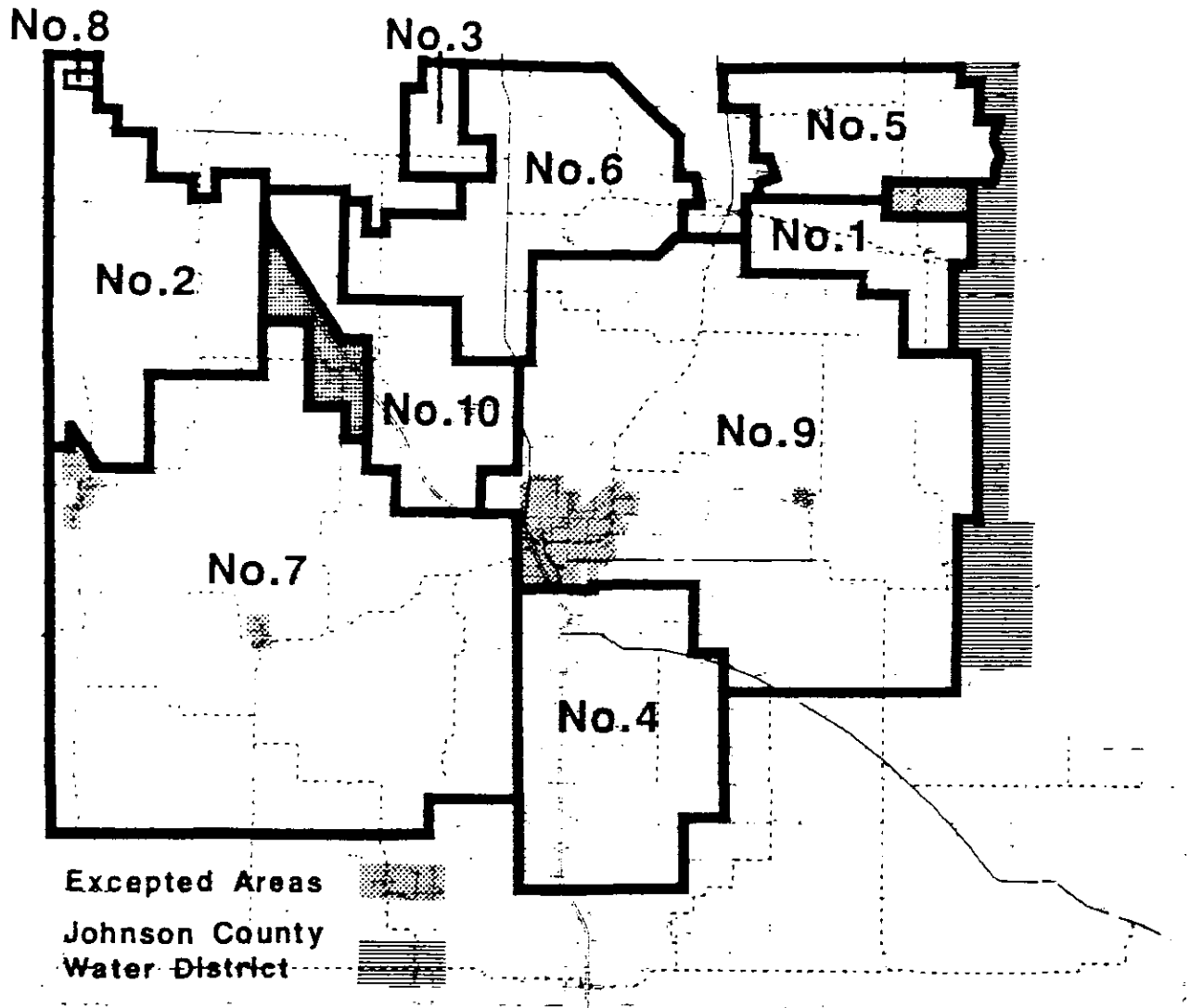
Rural Water District #9 has over 200 miles of 2" - 6" lines serving approximately 1,200 customers. In 1989, it delivered approximately 108,000,000 gallons of water which is close to its operating capacity of 12,500,000 gallons per month. The district buys its water from the City of Harrisonville and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

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

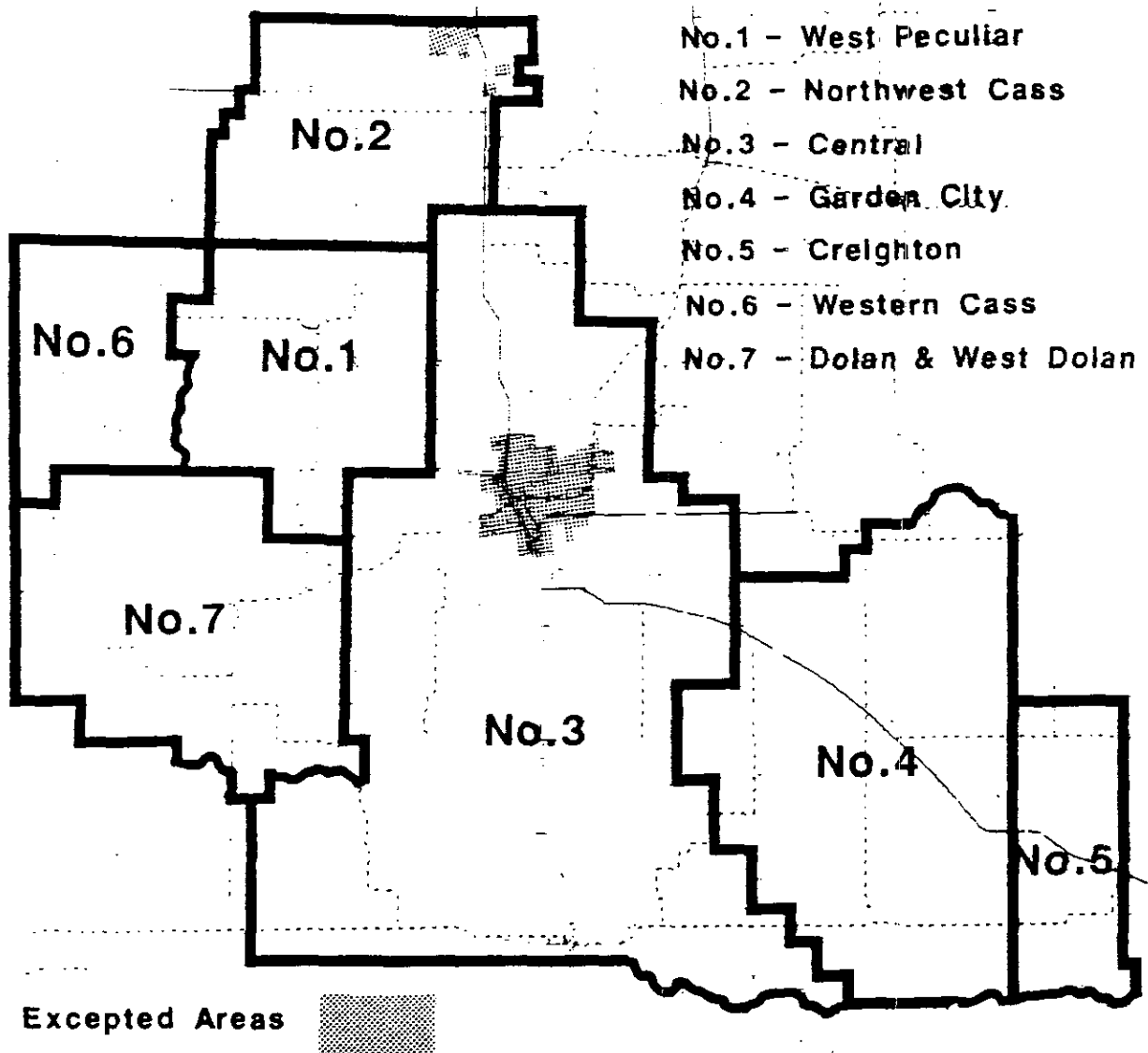
Cass County is served by two hospitals. Cass Medical Center is located in Harrisonville and has a capacity of 50 beds. In 1989, 3,000 square feet of outpatient clinic was renovated and an additional area for ancillary services was constructed. Belton-Research Hospital has a capacity of 75 beds and currently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

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