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THE CHANGING LANDSCAPE OF A RURAL REGION:
THE EFFECT OF THE HARRY S. TRUMAN DAM AND RESERVOIR IN
THE OSAGE RIVER BASIN OF MISSOURI

By

Melvin Arthur Johnson

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy

Major: Geography

Under the Supervision of Professor David J. Wishart

Lincoln, Nebraska

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THE CHANGING LANDSCAPE OF A RURAL REGION:
THE EFFECT OF THE HARRY S. TRUMAN DAM AND RESERVOIR
IN THE OSAGE RIVER BASIN OF MISSOURI

Melvin Arthur Johnson, Ph.D.

University of Nebraska, 2009

Advisor: David J. Wishart

The Harry S. Truman Dam and Reservoir project is of immense size. Many thousands of tons of raw materials were required to complete the construction of the dam and relocations. Millions of dollars were spent to acquire land, compensate those who were displaced, and to pay those who were employed in the planning, purchasing, coordinating, defending, and managing the myriad of contractors, contracts, and legal defenses. The affected area of the project is not only complex physically but also socially and economically. It is, therefore, not surprising that the counties studied (Benton, Henry, and St. Clair) would react in different ways to the same stimulus—the Truman project—from the very beginning, through construction, and finally after completion. This dissertation discusses the reaction of the three counties prior to construction, during construction, and for twenty years post construction. The population changes, changes to the local businesses including farm and non-farm entities, changes to the local tax structures, and finally the visual changes to the landscape are analyzed.

The complexity of the situation at Truman as discussed in this dissertation, presents three distinct scenarios. Benton County, home of the dam and majority of project facilities received the greatest amount of economic resources. With a population which doubled, Benton County has capitalized upon its location to the greatest advantage. Henry County also received significant economic resources. However, Henry County had a more diversified economy in the beginning. With a steadily growing population, Henry County has primarily maintained a growing diversified economy with manufacturing, retail trade, and the services sectors providing the greatest amount of wealth to the county. St. Clair County received the fewest economic resources and has continued to have the highest poverty rates. Understanding these scenarios would be helpful to not only the future planner, but also the public policy decision maker and the general public when considering large scale economic development.

This dissertation is dedicated to two incredible people:

First, my wife, Leatha and most patient and supportive spouse.

Second, Mr. Ed. Elmore, with whom I worked at the Corps of Engineers
while completing the HST environmental statement.

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I have also been very fortunate to have a patient and understanding committee. David J. Wishart, my advisor, has always supported my decision to do a doctorate, and has mentored me in more ways than I am sure he realizes. Drs. J. Clark Archer, Rodrigo Cantarero, and Stephen Lavin have provided invaluable assistance and instruction throughout my program. Their assistance and forbearance in completing this dissertation was extremely valuable, as well as necessary.

I must also recognize the assistance and support which I received from my students throughout my career. In particular, I would like to recognize the help and support which I received from two specific students. Mr. Martin Hutfless

found the MERIC article which gave me the germ of an idea for the direction this dissertation would take. Mr. Matthew Mohebalian, whose patience with Adobe Illustrator and me, allowed me to complete the maps which were necessary.

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One final note, I have decided that a sense of humor is required to complete a dissertation. Smiles are always desirable, especially when going through that last edit. For this I wish to thank the following people for making me smile and laugh during the last few months: Ms. Eva Bachman, Miss Sierra Blacketer, Ms. Kathy Hellwege, Ms. Joyce Hurst, Ms. Sarah Johnson, Mst. Sgt. Bradley Martinez, Mrs. Esther Martinez, Master Jorge Martinez, Dr. Chris Swift, Ms. Barbara Trail; and above all Mrs. Dr. Johnson.

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CHAPTER 1: INTRODUCTION

“It was a life-defining moment” —John A. Jakle (2008)

Life defining moments probably occur more often than we realize.

However, the realization of these moments is infrequent and often forgotten.

Not so concerning this dissertation. Two life defining moments separated by 30 years and ten times that number of miles have directed the efforts required for this project. In the fall of 1975 a private boat leaving Warsaw carried two people up the Osage River to its confluence with the Pomme de Terre River (“Pom”) and then proceeded up the “Pom” to a point in Avery Bottoms opposite the Rogers Shelter Archaeological Site. The scene, suitable for a Currier and Ives greeting card, was filled with tremendous sadness as this area would soon be at the bottom of a lake.

In Omaha, Nebraska, in the summer of 2006, a student found a report about personal income conditions in Missouri. “Thought you would be interested in this,” were the words spoken. Interest soon turned into questions as the ten-page report was read. What happened? Why didn’t the lake fulfill its promise of economic opportunities? Where did the land of “milk and honey” go? Such was the inspiration for this dissertation.

During January 2006, the Nebraska Unicameral considered authorizing a feasibility study for a 50,000 acre lake on the Platte River near the town of Ashland. The project as conceptualized would provide hydroelectric power, recreation benefits, and, according to an article in the *Omaha World Herald*, become an attraction for high tech industry similar to Lake Travis, near Austin, Texas (Kroeger 2006). This project, estimated to cost approximately two billion dollars, would require acquisition of nearly 100,000 acres of land including numerous farms. It would also require the displacement of many people and businesses, including the community of Ashland (population approximately 2600), and the relocation of the well field for the City of Lincoln's water supply, numerous farms, railroads, roads, and highways. In addition, the anticipated project would affect the habitat of several rare plant and animal species. Not surprisingly, there was opposition to this project.

The use of large, "mega-development" projects as magnets for improving, or at the very least stabilizing economic conditions and reversing or stopping the outflow of population is not uncommon. Large urban projects, such as sports stadiums, convention centers, and even lake projects are often justified to constituencies using the language of jobs. The Platte River project was touted as a "draw for recreation" dollars and an attraction to "industries with good jobs," (Hicks 2006). Others have indicated that this project would attract "thousands of

jobs” (Kroeger 2006). The question is, would it? To assist in answering that question, it would be helpful to see how successful similar projects have been in fulfilling the dreams of locals for jobs, additional population, and money. Although constructing dams with large lakes extending behind them is a development activity mostly confined to the mid-20th century, the “mystique” of the large body of water is still very much in the minds of local politicians. A project of similar size and purpose as that proposed on the Platte River is the Harry S. Truman Dam and Reservoir (Truman project) located on the Osage River in Missouri, built between 1965 and 1979.

Prior to looking at the Truman project, let us look at some considerations for this type of development. To maintain and enhance local economic development, governments historically have engaged in series of public works projects and programs. This, according to Adam Smith, is appropriate and necessary:

“The...duty of the sovereign or commonwealth is that of erecting and maintaining those public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature, that the profit could never repay the expense to any individual or small number of individuals, [including] works and institutions...for facilitating the commerce of the society...” (Smith 1993 (reprint), 473-474)

The projects and programs in the United States which fall into those “facilitating the commerce of society” include those for water supply, flood control, power generation, transportation infrastructure, and natural resource management.

Through the 1950s these “mega-development” water resource projects were superimposed upon the local landscape without much regard or consideration for the local populations. The assumption was that the development was for the benefit of the country as a whole. However, local participation became paramount during the later part of the 1960s and the first part of the 1970s, beginning with a series of federal laws which required public involvement in the planning, construction, and operation of federally funded and licensed projects and programs. Three of the most important federal laws as they relate specifically to water resource development are the National Environmental Policy Act of 1969 (NEPA), the 1970 Rivers and Harbors Act, and the 1972 Amendments to the Water Pollution Control Act (Willeke 1976).

The National Environmental Policy Act (NEPA), Public Law 91-190, is probably the most famous of the environmental legislation passed in the late 1960s and early 1970s. It established a national policy promoting the enhancement of the environment and set in place procedures for the agencies of the Executive Branch to follow when proposing an action. Included in those procedures is a requirement for public comment on the proposed action. The

Council on Environmental Quality became the central agency for information and for monitoring all procedures of the federal agencies to ensure compliance. The act also established the requirements for developing environmental assessments and environmental impact statements (Willeke 1976).

The 1970 River and Harbors Act, sometimes referred to as the 1970 Omnibus Bill, Public Law 91-611, authorized “the construction, repair and preservation of certain public works on rivers and harbors for navigation, flood control and for other purposes” (U.S. Congress 1971). The act directs the Secretary of the Army, through the Chief of Engineers, to engage in a wide variety of activities within the United States and its possessions. In section 122, the U. S. Army Corps of Engineers (Corps of Engineers) is required to promulgate their guidelines which are “designed to assure that possible adverse economic, social and environmental effects relating to any proposed project have been fully considered” (U.S. Congress 1971). Part of that process includes consultation with other agencies and public participation in the planning process. Documentation of the decision making process includes consideration of all public input.

The final significant act is the 1972 Amendments to the Water Pollution Control Act, Public Law 92-500. Although an act centered around water pollution, it also provided “whistle-blower” protection for any employee (federal

or non-federal) testifying in court or reporting on non-compliance with the requirements of the Federal Water Pollution Control Act. The objective of the act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. In order to accomplish this, the act authorized the Environmental Protection Agency certain powers and procedural requirements for assuring Congress of compliance. Again, those procedures included public participation.

Even though there may seem to have been a general disregard for public opinion, the activities of water resources planning and development agencies were not conducted in a political vacuum. Although often unknown to the general public, there was substantial input and support from different specific interest groups. Indeed, the activities in water resources development on the part of such agencies as the Corps of Engineers and the Bureau of Reclamation would have been impossible without strong support from influential public and private organizations. The Corps of Engineers, for example, received much of its support from the National Rivers and Harbors Congress, composed of member organizations representing "local interests which included state and local officials, local industrial organizations and contractors" (Maass 1951, 25). Whether these public organizations actually represent that amorphous entity known as the public is, of course, a major issue.

Redford (1969), Maass (1951), and Freeman, Clark and Soete (1982) all have noted the manner in which agency relationships with local interests are linked with the interests of the congressional public works committees. These linkages are so standard that they have become institutionalized over the years. Decisions on water resource development are often based on interactions among three groups—congressional committees, agencies, and interest groups. Over the years, agencies have become relatively independent from the executive department hierarchy, thus becoming more responsive to legislative committees. In addition, agencies have solidified and sometimes institutionalized their relationships with particular interest groups that are supportive of the agencies' agendas. It is because of the development of this agency-committee-interest group troika, which historically has made the decisions concerning water resources development projects and programs, that certain local groups or populations have been systematically excluded from the decision-making process (Pierce, et al. 1976). As Zeigler and Dye indicate:

In all societies, and under all forms of government, the few govern the many....Because the symbols and concepts of American politics are drawn from democratic political thought, we seldom confront the elemental fact that a few citizens are always called upon to govern the remainder (Zeigler and Dye, 1969). (in Wengert 1976, 35)

Compounding, or perhaps driving the lack of general public participation is the issue of complexity. Water resource issues usually are rather complex,

with technical questions at the heart of evaluations or policy alternatives.

Opportunities for public participation are only irregularly available and often depend on the initiative of those who make the policy. Because participation in water resources politics requires rather special effort and motivation on the part of the individual, people who do participate are distinct from those who do not (Pierce et al. 1976). Understanding the long-term effects of large scale projects on the local community is often ignored by the sponsoring agency, except in terms of the overall benefits accrued to those purposes upon which the project or program is justified. In this dissertation, it is necessary to understand the extent to which the Truman project has affected the local cultural and physical landscapes. Consequently, a history of the project and its relationship to the larger Missouri River Basin Comprehensive Plan (Pick-Sloan) is discussed in detail in the second chapter.

The report mentioned in the first paragraph of this chapter was prepared by the Missouri Economic Research and Information Center (MERIC) in 2002. Their report entitled "Income Inequality in Missouri 2000," identified poverty centers in the state of Missouri. One of the identified poverty centers is "the west central area...around the lake recreation counties of Benton, Hickory, and St. Clair" (Missouri Department of Economic Development, Missouri Economic Research and Information Center 2002). MERIC defined a poverty center as an

area having an Inequality/Gini Coefficient score that is 1.0 or more standard deviations above the mean and also having 50% or more of all households with incomes of \$25,000 or less. Such conditions indicate a concentration of lower income households in the area. Figure 1-1 locates the three-county study area for the Truman project. Within that area are portions of two counties identified as poverty centers: the southeast corner of Benton County and a majority of the southern half of St. Clair County. The MERIC report indicates the poverty levels in these counties are caused, at least in part, by a dependency upon the amusement and recreation industry associated with the Truman project, Pomme de Terre Lake, and the western fork of the Lake of the Ozarks. The report further states that in general there is a lack of other economic opportunities within the region. The MERIC report, however, does not indicate the relationship of population age to the lack of income or economic opportunities. In other words, the report does not discuss the role retirement may play in the calculation of the Gini coefficients and the high level of low income households in identifying poverty centers.

In January 1973, the Corps of Engineers published their environmental statement for the Truman project in response to the National Environmental Policy Act of 1969. In 1972, the Environmental Defense Fund and others filed a

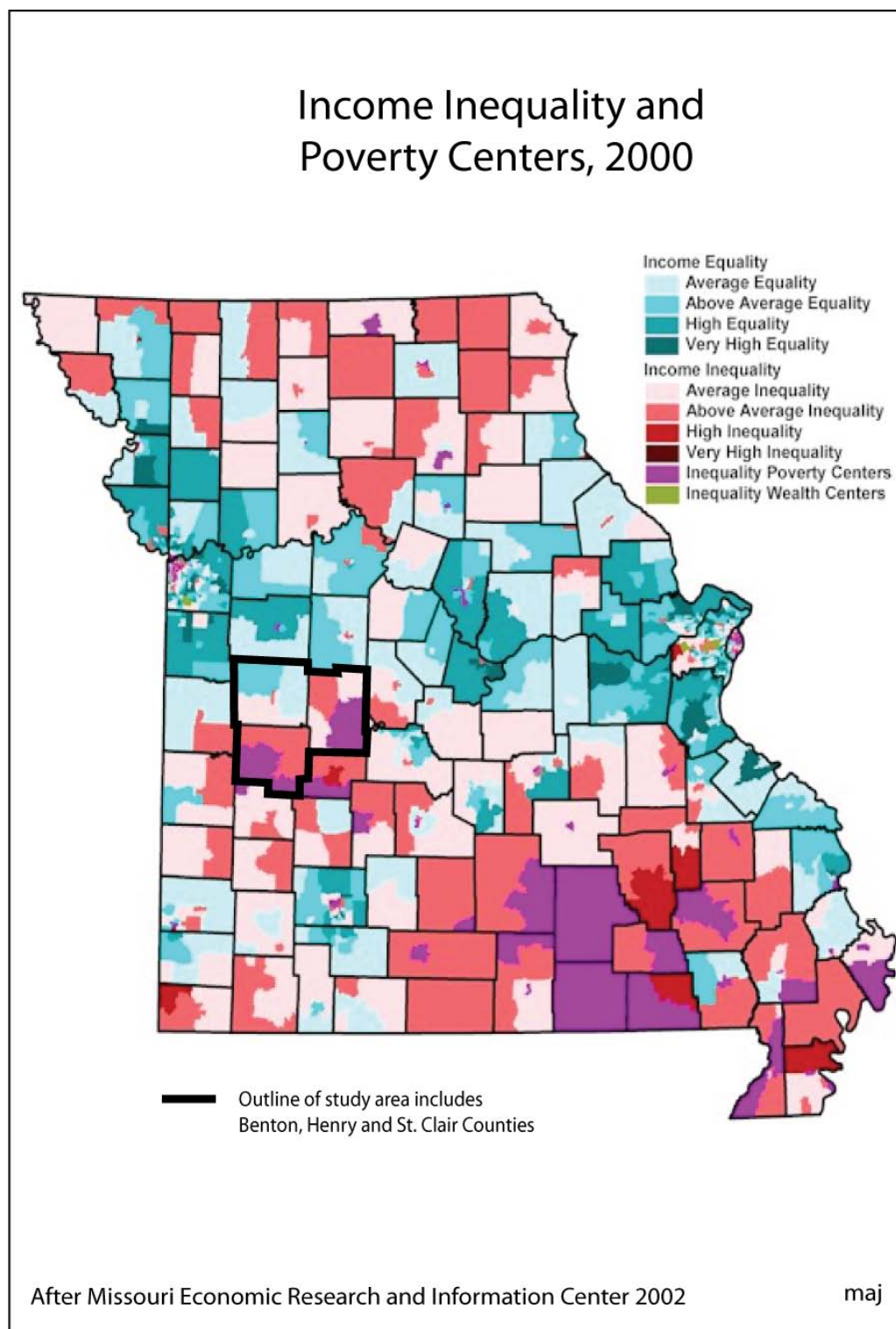


Figure 1-1. Income inequality and poverty centers (Missouri Department of Economic Development, Missouri Economic Research and Information Center, November 2002)

lawsuit in district court alleging mainly violations of the 1969 act, but other acts and regulations were also identified. In the environmental statement section discussing the effects of the project upon the local area one statement is especially pertinent: "The project would boost the economy of the project study area by creating a market for recreationally associated goods and services" (U.S. Department of the Army, Corps of Engineers 1973). Other anticipated effects included changes to the local tax structure, the population structure (including the social structure of the communities in nearby areas) and the local economy, all a result of construction.

During the comment period (late 1972) many parties challenged the draft environmental statement and the claims of the Corps of Engineers that the project would increase population and enhance the economic conditions of the counties directly affected by the project. For instance, in a joint letter, the Environmental Defense Fund, Incorporated, and the Missouri Chapter of the Wildlife Society made the following comments:

While it is correctly pointed out that the data available on 'growth trends in manufacturing, retail trade, wholesale trade, and services suggest that the project area is an economically viable region,' it is inappropriate to argue...that growth trends in retail trade and services in the Lake of the Ozarks region suggest[s] that 'reservoir development provides a favorable impetus to trade and services and that the completion of Truman Reservoir would add substantially to the economic well being of the region.' Furthermore, the argument is refuted by the relevant data regarding per capital income in similar reservoir areas (Department of the Army, Corps of Engineers 1973, VIII-31).

Contrary to the suggestion...there is no evidence from any research available that this project will slow the outward migration of population. While it may reduce the net out-migration this may be only because the project attracts people such as persons wishing to retire or small industries. There is no evidence that it will slow down the outward migration of young people from the community but even if young people were to stay because of the project, they could be making a tragic mistake because inevitably many of the people employed in the tourist industries that will emerge as a consequence of the project, will end up in the poverty category. Had they migrated to better opportunities elsewhere they may have greatly improved their life chances (Department of the Army, Corps of Engineers 1973, VIII-59).

It would appear from the comments of the MERIC report that the arguments presented by the Corps of Engineers were not completely accurate. More specifically, it would appear that the arguments regarding population and economic development were flawed. What happened? Why did this \$400,000,000 project not enhance population growth and economic development as predicted? Why is this area identified as a poverty center in the state of Missouri? The answers to these and other questions may be forthcoming through an examination of what happened during and after construction of the Truman project, specifically in Benton, Henry and St. Clair counties. Understanding the changing demographic and economic character of this area geographically may help us to understand what might be expected of other similar major developments, and whether they will stimulate or discourage economic and demographic growth. My objective in this dissertation, therefore,

is to identify and describe what changes to the economic landscape occurred between 1960 and 2000 in the counties most directly affected by the Truman project.

Literature

The development of water resources, whether for control of nature's hazards or for supplementation of human desires, has created landscapes which have departed from those that previously existed. Understanding how the new landscapes were created first requires the description of the past. The description of the changes made through time and over space may allow the researcher to develop theories associated with those changes. One aspect of this research involves the ways in which people conduct business, both at the micro and macro levels, and how people distribute the remaining scarce resources; in other words, the economics.

Economic development, especially with reference to the water resources of the study area, includes an understanding of the historic background of the area. County histories have been prepared for all three counties. Because Henry and St. Clair Counties were initially one, their histories were published together as one volume in 1883. These volumes were later reprinted by the editors of the *Clinton Daily Democrat*. During the period described, both Henry and St. Clair

counties had larger populations than were present at the beginning of the study period (*History of Henry and St. Clair Counties, Missouri* 1883). A later update by Lamkin (1919) continued the Henry County history to 1915 only. The Benton County history was published in 1969 by White and Miles. The chronicling of the events within Benton County ended with 1965. Some of the events associated with the authorization and early legislative processes for the construction of the Truman project are included in this history. All of these volumes discuss the flooding of the Osage River and the need to harness some of the “power” of the river for future economic development. The separate *History of Benton County, Missouri* chronicled the efforts of local politicians lobbying for the Truman project (then known as Kaysinger) and for enlarging the lake to accommodate more tourists and the generation of hydroelectric power.

In the case of water resources development the landscape is not only physically altered, which is generally regarded as permanent, but is also altered culturally (including economics and demographics). The changes in the physical environment, as Barrows indicates, change the “economic utility...repeatedly and greatly for many reasons, such as the discovery of mineral wealth, the application of new methods of land utilization, improved transportation, and altered relations to other regions” (Barrows 1923, 11). Assessment of the effects of development projects, especially those requiring funding or licensing from the

Federal government, has a modest literature. Specifically, discussions about the analysis and description of the effects of water resource development may be found in U.S. law and regulations directing the work of the affected governmental agencies. Of note are the standards established by the U. S. Water Resources Council (1973) for planning and assessing the effects of water and related resources development. These standards address not only those issues associated with the impacted natural environment, but also the beneficial and detrimental effects on social well-being, including social and economic opportunities for the affected populations. Other “how-to” publications include regulations developed by individual governmental agencies, such as the Corps of Engineers and the Bureau of Reclamation. These regulations indicate specific actions to be taken by the agencies in compliance with the laws and standards established by reviewing and oversight bodies.

As a requirement of NEPA and the lawsuit filed in 1972, the Kansas City District of the Corps of Engineers prepared an environmental statement which was finalized in 1973 following the prescribed comment period. Initially based upon a report prepared under contract by the Midwest Research Institute, the environmental statement ultimately included additional environmental and economic data generated both within the organization and by other contracted state agencies, such as the Missouri Department of Conservation. Supplements

and additional appendices were published between 1973 and 1979. These additions were related to specific features of the Truman project and additional legal documentation. After completion of the Truman project, requests for ongoing operational funding were accompanied by supporting documentation derived principally from statistically updated data collected during the pre-construction and construction time periods.

In 1998, Propst et al., at the Corps of Engineers Waterways Experiment Station, reported on the usability of different computer software by the Corps of Engineers to more accurately calculate recreation visitation and the economic value of that visitation at Corps of Engineers projects. Truman was among the study projects. The report indicated that based upon their analysis, Corps of Engineers projects had measurable economic impacts upon counties within a 30-mile radius of the projects. The authors estimated the number of jobs directly, indirectly, and induced by the demand for recreation at Corps of Engineers projects. Propst et al. indicated the relative value of each dollar spent by tourists upon the local economy. The rate of retention of each dollar spent ranged from 54 to 84%. Data specific to the Truman project indicated that the number of jobs created by recreation development numbered over 1,000. However, the report lacks any definitive information concerning the substitution of recreation related jobs by those from other sectors in the same area.

Another significant source of information for the operation of the Truman project can be found in the *Annual Report of Reservoir Regulation Activities* published biennially by the U.S. Army Corps of Engineers, Kansas City District (2008). The report's purpose is to summarize the past year's regulatory activities at storage projects within the Kansas City District. This report gives the fluctuation levels for each lake, historic fluctuation data, and inflow and outflow data, specifications of the project and, of note in the 2007-2008 report, estimates concerning annual visitation rates and patterns relative to previous years. For instance in 2007-2008, Truman experienced over 16,000,000 visitor hours within a twelve month period. This rate of visitation was down by nine percent, which the Corps of Engineers indicated was "mostly due to high water conditions" (U.S. Army Corps of Engineers, Kansas City District, Engineering and Construction Division 2008, 25).

In geography, the assessment of changes to the landscape caused by major development projects is presented in a variety of manners. For instance, Tobin, et. al (1989) discussed geographic contributions to the study of water resources through the hydrologic sciences, water management, water quality, law, and hazards. They identified three specific areas of research and reporting: (1) theory development, (2) applied problem-solving and policy recommendations, and (3) international water issues (Wescoat 2003). Relating to this specific study,

applying an historic perspective could allow decision makers to develop policies that are relevant and appropriate for each situation. Without understanding the historic perspective, the resulting policy is often lacking in direction and applicability to the specific situation being analyzed. Tobler's (1970) first law of geography, if it may be called that, emphasizes proximity and nearness to understanding geographic interaction. Applied here, the communities in Benton, Henry, and St. Clair counties are most directly affected by the Truman project, and therefore, attention to these effects is necessary in the development of appropriate policies. Berry, et al. (1996), Root, et al. (1998), and Kromm and White (1992) have indicated that local political bodies make better policy decisions when they have an understanding of the spatial aspects of water resource geography. White and Kromm (1995) and Templer (1997) have applied these concepts to the situations in the central and southern plains of Kansas and Texas. These studies, however, relate specifically to irrigation, water conservation management, and groundwater management.

The changing nature of the rural landscape as communities attempt to retain their populations and economic viability in the presence of public lands is addressed in several geographic works. Harrington and Roberts (1988), Curry-Roper (1989), Duram (1995) and Harrington (1996) address changes in rural land use as a result of growing public utilization of areas for recreation, resource

extraction, and research. Millward (1996) indicates that public access to resources varies because of differences in transportation, topography, and land cover. Recreational access to the Truman lake, for example, is restricted to specific access points and public use areas. Because of federal ownership and state and federal management of the lands surrounding the lake, there is no private land immediately surrounding the permanent pool. This lack of unrestricted access to the project and potential ownership of "a piece of lake front property," has affected the number of visitors and the number and type of entrepreneurs in the region.

Tourism is one salvation that many rural communities want to use to enhance their economic viability. However, developing tourism requires careful planning and implementation if the communities are to avoid serious effects upon local cultural and natural resources. Butler et al. (1998) present an overview on utilizing tourism to enhance economic development, while Harris and Nelson (1993), and Hanink and White (1999) focus on specific economic developments. Community misrepresentations or enticements and the hidden effects of tourism are presented by Belsky (1999) and Place (1997). If the community enhances the attraction's description or enticements for the tourists, but is unable to successfully provide the enticements, the tourists are likely to provide enough negative feedback that the attraction becomes no longer

economically viable. The question of sustainability of tourism in rural areas, which is often ignored by locals and also policy makers, is described by Hall and Lew (1998). Rural areas face different challenges than urban areas. The tourist experience needs to be specific to the area. The enticement to the tourist needs to revolve around the type of tourist desired and how the tourist plans to spend their time and money. Promising the tourist a water adventure is one thing; getting that adventure on a placid lake is something else entirely. Propst et al.'s study (1998) indicates that boaters, whether they stay in the campgrounds, come for the day, or stay overnight off the project, are likely to be the heaviest spenders. Utilizing that knowledge could allow the local planners to focus their attention on those opportunities that are likely to provide the greatest economic benefit while providing for a sustainable economic resource—in this case the boater. The counties in the Truman area had some experience with tourism prior to completion of the Truman project. However, that experience (associated with the Lake of the Ozarks) was more serendipitous than planned, and consequently development for tourism was random, uncoordinated, and only marginally effective.

Mayer (1982) and Morrill et al. (1999) have indicated recently that more and more land-use planning and regional development issues are becoming intertwined with environmental assessment analysis and reporting. Part of this

assessment analysis includes the effects upon economic viability and sustainability and population characteristics of the geographic contexts. Again, utilizing the information available would enhance future actions. Understanding the effects of a planned development project, whether economic, environmental or social in terms of sustainability, allows for the development of policies which are sensitive to the specifics of the local area. In the case of the Truman counties, this early development was inconsistent, and consequently not as effective or sustainable as possible.

To attempt to remove inconsistency (and consequently the ineffectiveness of insensitive policies), one must turn to the landscape and understand its possibilities. Jackson (1995, 43) defines landscape as “more than an area of attractive rural or natural scenery. It is a space or a collection of spaces made by a group of people who modify the natural environment to survive, to create order, and to produce a just and lasting society.” Although a lofty goal, for Jackson and others, understanding the landscape is necessary to any undertaking which will alter that landscape. In the case of Truman, although the lawsuit may have been considered painful and unnecessary at the time, it served a purpose, the description and understanding of the landscape in which the Truman project was being built. To minimize the adverse effects of the project, the planner, the local entrepreneur, the politician all needed to have an understanding of the

affected landscape. To enhance economic activity within the project area requires understanding of what resources, human and natural, are available and what resources may be utilized to, as Jackson would say, “produce a just and lasting society.”

Understanding the dimension of the landscape is helpful in determining the potential for effect and sustainable development. John Fraser Hart (1998) identifies the principal components of the rural landscape and the three orientations needed to study it. Hart argues that geography recognizes the “landscape of spatial practice,” or the real world in which people move and live, the “conceptual landscape,” or the imagined world tied to past experiences, and the “depicted landscape,” which represents the previous two landscapes in symbols or in pictures. Therefore, any study of the landscape needs to include depictions which are both meaningful to the local people as well as the outside party, be it researcher, policy maker or planner.

For Hart, the primary source of data about the landscape is “the landscape itself.” The landscape needs to be identified “in terms that make sense to, and can be used by, others” (1995, 25). Thus that group of people for whom the planner is working needs to understand what the possibilities for the landscape are. They need to be aware of the “pitfalls” associated with different courses of

action, and above all they must not be “lied to.” This education is, for Hart, the task of the geographer and the planner.

The self-identification by the counties within the study area as “Truman County” (Henry County Library 2009), and as active components of the Kaysinger Basin Regional Planning Commission leads to the development of “a strategy to establish different degrees of access to people, things, and relationships” or territoriality (Sack 1986,101). For Benton, Henry, and St. Clair counties, visitor access to places by the people from within the counties restricts the type of activity and its effect upon local cultural and natural resources. This restriction can either be universally or randomly applied, but regardless it is understood by those from within the counties. Such restrictions could include access to specific places such as cemeteries, events such as local gatherings and community fetes, or times such as holidays and seasons. Within the context of the study area, restrictions have historically been applied by locals to government personnel, the random researcher or to those not part of the family or “clan.” Recognizing this cultural aspect can assist the planner or decision

Purpose

The purpose of this research is to describe geographically what the changes to the cultural landscape have been from 1960 to 2000 in the three

counties most affected by the Truman project. Specifically, the research will focus on the counties of Benton, Henry, and St. Clair. Although the project area included the seven counties of the Kaysinger Basin Regional Planning Area, only the listed three were directly affected by the construction of the Truman project. The landscape includes the population (labor and market), businesses (including changed locations over time), county sources of revenue (taxes) and the visual elements of the landscape. Included in the analysis of the businesses and economic activities is consideration of the basic (both in terms of external marketing and sale of goods and services and tourism) and non-basic economic industries, and the different sectors of the economy (primary, secondary, and tertiary). Finally considered are the types of clientele and customers which the different businesses attempted to engage. Many of these discussions also consider the changing tax structure of the three counties, such as the collection of property, merchandising and manufacturing, and sales taxes.

The principal research questions for this study are:

What are the changes to the landscape that have occurred before, during and since the construction of the Truman project? More specifically:

What new economic developments have occurred since 1960?

What population changes have occurred since 1960?

What local economic activities have remained throughout the study period (1960-2000), such as agribusiness, recreation and tourism, and manufacturing (dairying and cheese manufacture)?

What were the benefits to the three counties accessed, as a result of construction and operation of the Truman project? More specifically:

Did the outflow of population stop?

Did the diversity of economic activity expand or contract or remain the same?

Did the area experience an increase in employment opportunities?

Did the local governments collect additional revenue and in what forms?

What visible changes have occurred in the landscape as a result of the Truman project? More specifically:

What patterns of development appear in all counties studied?

What patterns of development are not universal to all counties?

What changes to the landscape are the direct result of the Truman project?

Research methods

Population.

An analysis of population change for the study area will include a comparison of data from the censuses of 1960, 1970, 1980, 1990 and 2000. This comparison will include changes in population structure (age and sex), changes in the median age as compared to the state of Missouri, changes in population totals for the communities, townships, and counties, and changes as a result of net migration and natural increases. Population pyramids for each county will be constructed from each census.

Business and income.

Several census sources are utilized for this dissertation. From the Decennial Census reports on *Social and Economic Characteristics*, data concerning median household income, poverty levels, and per capita income were collected. From the *County Business Patterns*, data concerning the number of employees, annual payroll, and number of firms involved were collected for the periods 1959 through 2000. The earlier census reports dealt with multiple years. There were no reports for 1960 and 1961, so 1959 was used as the starting date. Data from the *Census of Agriculture* were collected regarding number of acres in farms, average size of farm and the number of farmers.

Electronic census data sources included the U. S. Bureau of Economic Analysis website, Missouri Census Data Center web site, U. S. Census Bureau American Fact Finder website, and finally the Office of Social and Economic Data Analysis through the University of Missouri Extension office. All of these sources provided data concerning economic factors, age related economic data, and detailed tables associated with economic profiles for each of the counties in the study area.

The data from censuses were utilized to describe changes in the economic structure for the affected area. However, the census is a “snapshot” in time, and what was needed for this study was a more dynamic approach to augment the census derived data. Therefore, an inventory of local businesses was taken and data collected included frequency of mention in the dominant county newspaper, location (local address if available, but county and community locations at a minimum), dates of mention or advertizing in the newspaper, determination of the appropriate industry type (basic or non-basic) economic sector (primary, secondary, and tertiary), and clientele served or sought. Primary sector activities for this area include farming (cash cropping and animal production) and mining. The secondary sector is primarily concerned with any business which added value to the components or raw materials included in their inventory. Examples of this would be furniture manufacture, cheese

production, food processing, and production of recreational products such as boats and RVs. The tertiary or service sector is further divided into the following categories: professional services, personal services, transportation, construction, entertainment, retailing, healthcare, government, and education. Types of clientele sought included farmers, locals, non-locals/tourists, and other businesses. The data were collected on a daily basis for the *Clinton Daily Democrat*, and weekly from both the *Benton County Enterprise* and the *St. Clair County Courier*.

Analyzing the data collected from the newspapers helped to provide clues about micro-economic changes within a community and reaction to short duration recessions or changes in the national economy such as those exhibited in the 1960s, 1970s, and the 1980s. These types of data, if only collected from the censuses, may have been lost, not observed, or overlooked. The reaction of entrepreneurs to the Truman project became apparent rather quickly once the data had been grouped into periods associated with pre-construction, construction, and post-construction. Questions addressed include: Has there been an increase in the number of business types? Has there been an increase in any one particular economic activity (primary, etc)? Graphical presentation of the data collected and processed as a Microsoft Access database began to answer the above questions and the narrative completed the analysis.

Changes to the counties' tax structures utilized data collected from the county financial statements. These statements are submitted by the county clerk to the state auditor. Once the auditor's office has completed their review and affirmed the reliability of the statements, they are published in the local newspapers. Many of the newspapers did not include the insert prepared by the county clerk when the documents were microfilmed. Paper copies normally archived with the State Historical Society Library have in most cases been destroyed.

In the absence of the published documents a review of the records of the county clerk was accomplished. Information collected included the assessed valuation of the county, the total general fund receipts, total property taxes collected, and total sales tax receipts collected. Other taxes were noted if they were significant contributors to the county's general fund. Notes concerning disbursements and utilization rates for specific fund categories were also recorded.

Visual economic landscape changes.

Photography is a widely used method of recording data for future interpretation and for historic record keeping. According to Sontag, "Photographs alter and enlarge our notions of what is worth looking at and what

we have the right to observe” (in Jakle 1987, 124). Jakle continues this thinking by displaying photographs which prove that the “trip was made” (Jakle 1987, 125). Further photography may allow the researcher to document the “consumption” of the place through the depictions of the place on paper.

Photography was the medium of choice for this aspect of data collection. All incorporated communities were photographed. The photographs record primarily the business districts and any distinctive economic activities within these communities. All unincorporated communities were also photographed. Many maps were utilized in locating these communities, as not all maps agreed on both the identity and the location of the unincorporated ones. All public use areas were photographed, along with the visitor center on Kaysinger Bluff and historic village recreation. Samples of the different types of overnight accommodations and day use facilities were recorded along with any businesses located either adjacent to or in close proximity to these public parks. Photograph collections from the Benton County Historical Society, Henry County Historical Society, Windsor Historical Society, and the St. Clair County Historical Society were examined, and selected photographs were digitized for possible inclusion within this dissertation.

Dissertation format

This dissertation presents the findings in the following manner. The first section of chapter two includes the legislative history of water resources development and a discussion of the Pick-Sloan Plan relating it to water resource development in the Osage River Basin, and then specifically the Truman Project. The second section presents a brief description of the physical environment in which the Truman project is found.

The results of the data collection and analysis are presented by county in the next three chapters, with Benton first followed by Henry and St. Clair. Each chapter provides a brief introduction to the county, then discussions concerning changes to populations (with population pyramids), economic structure (with graphs of the business categories for each of the three identified periods), tax structure (including bar graphs for each significant tax category and assessment with comparisons between current and 2000 dollars), and the visual landscapes (including photos from the communities, development along highways, and public use areas). A concluding chapter summarizes the situations in each county and presents comparative data in a series of matrices and figures.

CHAPTER 2: HISTORICAL BACKGROUND AND PHYSICAL SETTING

“Every landscape contains elements of persistence and elements of change, a mixture of the old and the new” —John Fraser Hart (1998, 5)

Background to the Truman Project

Prior to a discussion of the changes to each county, it is necessary to have an understanding of the basis for decisions made in the formulation of the Truman project. The middle part of the twentieth century was a busy time for the Corps of Engineers. Prior to the 1930s, the Corps had very little experience in large scale civil works projects except in Washington, D.C. The Corps was responsible for the construction of many monuments, large government structures and the water supply system for that city. But work associated with the rivers and harbors was minimal and sporadic at best. The construction of the dam at Kaysinger Bluff has a significant history and setting which have affected subsequent activities in the study area during the period 1960-2000.

The United States Congress passed the Flood Control Act of 1944 (Public Law 78-534), which was signed by President Roosevelt on December 22nd. Besides authorizing scores of projects, the act also made substantial changes in policy. What many historians regard as the most significant portion of the act is the established basis for water resource development in the Missouri River Basin known as the Pick-Sloan Plan. The Kaysinger Bluff Dam and Reservoir project,

later renamed the Harry S. Truman Dam and Reservoir, was an identified element in the Pick-Sloan Plan. The 1944 act was not, however, the first to direct federal agencies to act in this region (Hart 1957).

The federal government's role in providing for flood control began as early as 1859. Navigational interests joined forces with flood control interests in pressuring Congress to deal with recent flood events which also affected navigation on major rivers (Mississippi, Ohio, Delaware, Potomac, Hudson, Missouri). Although their objectives were not the same, the special interest groups had a common cause, that is, levees constructed to confine rivers within definite channels, thus easing navigation and reducing flood damages (Ridgeway 1955).

In House Document 308, the Corps of Engineers provided cost estimates for conducting multipurpose surveys of the nation's navigable rivers, including the Missouri. Congress formally authorized these surveys in the 1928 Flood Control Act. The Corps of Engineers submitted their 308 Report for the Missouri River in 1934. This report identified numerous potential projects for navigation, flood control, irrigation and hydroelectric power generation. Equitable distribution of the rivers' water became the fundamental question. Increasing the navigable depth of the Missouri River would require additional water from the reservoirs in the upper basin that could be used for irrigation and water

supply. Equally controversial was the extent to which the federal government was authorized to regulate navigable water.

Legal Setting

In *Gibbons v. Ogden*, 22 U.S. 1 (1824) Chief Justice John Marshall's court placed navigable waterways use in the classification of interstate commerce. In this particular case, the court determined Congress' power over interstate commerce was plenary. When this doctrine was applied to the nation's waterways, it was interpreted to be applicable to all streams flowing through two or more states which were navigable or, necessary for interstate commerce. Interstate commerce is an enumerated power associated with the Commerce Clause in the United States Constitution (Article 1, Section 8, Clause 3). The clause states that the United States Congress has the power to regulate commerce with foreign nations, among the states, and with the Native American tribes.

Two additional Supreme Court decisions specifically broadened federal plenary power over navigable waterways. In *United States v. Appalachian Electric Power*, 311 U.S. 377, (1940) also known as the "New River Case," the court concluded that the Commerce Clause of the Constitution could legitimately cover activities relating to commerce through navigation such as flood control, hydropower and watershed development. The court stated:

...it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation....In truth the authority of the United States is the regulation of commerce on its waters. Navigability, in the sense just stated, is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control.... Water power development from dams in navigable streams is from the public's standpoint a by-product of the general use of the rivers for commerce....The point is that navigable waters are subject to national planning and control in the broad regulation of commerce granted the Federal Government. (In Ridgeway 1955, 65)

In 1941, the Supreme Court addressed the question of the federal government's power over non-navigable streams in *Oklahoma v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941), also known as the "Red River Case." The court declared:

There is no constitutional reason why Congress cannot under the commerce power treat the watersheds as a key to flood control on navigable streams and their tributaries. Nor is there a constitutional necessity for viewing each reservoir project in isolation from a comprehensive plan covering the entire basin of a particular river. [Citing the New River Case]...And we now add that the power of flood control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions, so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries. (In Ridgeway 1955, 65)

These rulings appeared to negate long-standing state laws under which water had been appropriated and used for beneficial consumptive purposes. The actual or potential exercise of federal jurisdiction threatened traditional practice, throwing into question water rights throughout the Missouri basin. The

situation was particularly difficult because federal navigation powers were even more firmly rooted in the nation's history than were state water laws.

Missouri River Comprehensive Plan (Pick-Sloan)

In the spring of 1943, flood waters along the Missouri River between Rulo, Nebraska, and Pierre, South Dakota, rose to unprecedented levels. Following these events, Congress held hearings to determine the appropriate course of action. Colonel Lewis A. Pick, division engineer for the Missouri Division of the Corps of Engineers, and William G. Sloan, assistant director with the Bureau of Reclamation in the Billings, Montana, office prepared competing and ultimately complimentary reports about the situation in the Missouri River Basin (Ridgeway 1955). Pick's plan assumed "too much water," that the problem stemmed from uncontrolled main stem flooding. Sloan's plan assumed "too little water," that the problem stemmed from a lack of diversion and use of water primarily associated with the upper portion of the Missouri River Basin.

Corps of Engineers—Pick's Plan

Colonel Pick's plan visualized engineering projects of far-reaching magnitude. The report was small (twelve and one-half pages). Secretary of War Henry L. Stinson submitted it over the objections of the Bureau of the Budget.

The latter stated that the program as outlined by the Corps of Engineers was “not in accord with the program of the President.” It went on to state that it would withhold further comment until after the Bureau of Reclamation had submitted its report (H. Doc. 475, vii-ix in Ridgeway 1955, 70).

Pick asserted that the proper solution to the flood problems of the main stem required a comprehensive plan of works to supplement those already approved. The plan included: 1) construction of twelve multiple purpose reservoirs, five on the Missouri River above Sioux City, Iowa, between Yankton, South Dakota, and Garrison, North Dakota; two in the Yellowstone River basin, and five on the tributaries of the Republican River; 2) works in North Dakota for diversion of “a feasible amount of water” from the proposed Garrison Reservoir on the upper Missouri River to the Devil’s Lake area and to the headwaters of the James River; and 3) levees along both banks of the Missouri River between Sioux City and the mouth. All reservoirs and levees were planned to provide protection against floods equal to the largest on record. Colonel Pick’s report drew heavily upon the 308 Report which the Corps of Engineers had submitted nearly a decade earlier.

The Pick report claimed that the improvements would not only prevent large flood damages along the Missouri River, its tributaries, and the Mississippi River, but that the storage of floodwaters would also provide for irrigation,

navigation, power production, and, additionally, water for domestic supply, sanitary purposes, wildlife, and recreational uses. The completed plan would stabilize the valley's economic life, encourage industry and civic growth, and relieve distress caused by the river's uncontrolled behavior. All works, dams and reservoirs were to be managed and operated by the Corps of Engineers.

Agency reviews were mixed. The Department of Agriculture thought that the plan seemed to provide "a workable beginning" and "a framework around which the ultimate basin-wide plan can progressively be developed" (H. Doc. 475, 12-13 in Ridgeway 1955, 80-81). The Federal Power Commission was less enthusiastic and gave only tentative endorsement to the plan. In his letter to Major General Eugene Reybold, chief of engineers, Leland Olds, chairman of the Federal Power Commission, indicated that they were giving tentative endorsement to the plan. Olds stated that there was a need to work out details on a step-by-step basis and noted that authorizing legislation should permit wide latitude for selection and modification of the projects. Ridgeway indicates that the commission believed that the Pick proposal would help resolve contemporary conflicts over basin water resources use, which it regarded as stemming from an insufficiency of usable water (Ridgeway 1955).

The Bureau of Reclamation, with its own report pending, made detailed criticisms, asserting that, whatever plan was adopted, it would stand upon its

previous statements that a Missouri basin plan should be comprehensive and that not only flood control but also improved navigation should be provided with “full development of irrigation, hydroelectric power production, and all other beneficial uses of water.” The Bureau included “certain principles” which it regarded as fundamental to whatever was developed. These included attention to all beneficial uses of the water resources, application of benefits to all features of the plan, widest possible range of multiple uses and benefits, and control and management of the various features, specifically Corps of Engineers management for flood control and navigation and Bureau of Reclamation management of irrigation, water storage, and hydroelectric power generation. In sum, the Bureau indicated that it felt that the plan as presented would leave upper river areas flood damaged and flood menaced and with no provision for relief. (H. Doc. 475, 5-9 in Ridgeway 1955, 80-81)

Bureau of Reclamation—Sloan’s Plan

The man in charge of the Bureau’s survey was W. Glenn Sloan, assistant director of the Bureau’s office in Billings, Montana. Sloan’s plan was intended to be comprehensive and to address all the various beneficial uses of water in the basin. Its philosophy was utilitarian: “The greatest good to the greatest number.” (Reuss 2005, 238) Considerably larger than Pick’s, Sloan’s report

presented a thorough statement of the basin's physical features, a classification of basin land uses and ground water resources, an analysis of surface water quality, a description of soils and climate, population and industries, markets and transportation, minerals, fish and wildlife, and recreational possibilities. The Bureau assumed that farming would remain the primary regional economic base and recommended doubling the amount of irrigated land, adding 4.76 million acres to the 4 million already being irrigated, and supplying supplementary water to another 547,000 acres. Incorporated into the plan were the Corps of Engineers' flood control and navigation proposals for the river below Sioux City. Modifications had been made in the Army's upper river development plans, however, because certain reservoirs and related works there could be utilized not only for lower river flood control and navigation but also for other purposes which the Bureau regarded as desirable. Candid in its admission that some river-bottom land and improvements would be permanently flooded by the proposed reservoirs, the report added that the reservoirs, for the most part, would cover lands presently having little or no agricultural value.

Sloan also proposed building seventeen power plants to generate about four billion kilowatt-hours annually. He rejected the Corps' recommendation to build a dam at Garrison on the main stem and instead proposed that more dams be built on the headwaters. The plan called for 90 dams in all. He did concede

that his plan would reduce navigation water at Sioux City “by somewhat less than half the original stream-flow” but thought the allocation of water between navigation and irrigation was a political decision better left to Congress (Reuss 2005, 239). The delay in the plan’s presentation for a number of months after the Pick proposals had appeared allowed the Bureau to review and compare its terms with those of the Army report.

Prior to its submittal to Senator Joseph C. O’Mahoney of Wyoming and introduction to Congress, the Sloan plan had been reviewed only by those agencies within the Department of the Interior having direct interest in the basin, such as the Office of Indian Affairs and the Fish and Wildlife Service. Other reviewing agencies were the Corps of Engineers and the Bureau of the Budget. Their responses are summarized below.

1. The Fish and Wildlife Service was of the opinion that it could not subscribe to a policy which would allow “any particular plot or block of agricultural land, regardless of how submarginal it might be,...[to] have prior use of water over an important muskrat marsh or other wildlife project.” Not every industrial use, it believed, would necessarily have more value, from the national standpoint, than wildlife benefits (S. Doc 191, 9).

2. The Department of the Interior's Office of Indian Affairs wanted jurisdiction over construction, operation, and maintenance of dams and irrigation features that would predominately service Indian lands (S. Doc. 191, 3).
3. The Corps of Engineers took issue with the Bureau over the merits of flood control works in reservoirs "far upstream on the headwater tributaries" for lowering flood stages along the main river below Sioux City. It also took issue with the advisability of developing the Missouri-Souris diversion project. The Army indicated that to develop "a large-scale irrigation project outside the Missouri River Basin" was inadvisable because such a project would require a considerable water supply before the "...existing and foreseeable needs for conservation and use of water within the Missouri River Basin" could be satisfied. Its final comment regarded administrative jurisdiction. The Chief of Engineers, Eugene Reybold, in his letter of April 25, 1944, stated that it was "essential that the main stem reservoirs in North and South Dakota be built, operated, and maintained by the Corps of Engineers." Reybold further indicated that construction, operation and maintenance of the tributary reservoirs should be placed with the agency having "dominant interest under existing law" (S. Doc. 191, 6).

4. Finally, the Bureau of the Budget observed that it would not object to the Bureau making their report available to congressional committees “considering relevant legislation” but that it could not assess the Sloan plan in relation to the President’s program and that it consequently withheld its advice (S. Doc. 191, 1).

The Marriage—Pick-Sloan Plan

The House Flood Control Committee was considering Pick’s plan and only gave superficial attention to the concerns of the upstream states regarding the demands for water for navigation. The Committee finally recommended that no new demands be made on the river’s water and that some planned main stem storage be transferred to tributary sites. Then the bill was reported favorable to the full House. The House proceeded to approve both the 9-foot channel bill on March 22nd and the Pick plan on May 9th. Upper basin interests, thereupon, turned their attention to the Senate, where the western states traditionally enjoyed more power, especially on water matters.

Senator O’Mahoney led the fight in the Senate on behalf of the upper basin states. He was an avid proponent of national planning and multipurpose water development. Four days before the House passed the bill including Pick’s plan, O’Mahoney introduced into the Senate the long awaited Bureau of

Reclamation plan for the development of the Missouri basin. The Bureau had been working on the plan since 1939, but expedited it after Pick produced his proposal (Ridgeway 1955).

The two plans, Pick's and Sloan's, were subjects of much discussion and critical analysis in the Missouri River basin in the summer and fall of 1944. Only the war itself stimulated more interest (Reuss 2005, 238). Within Congress, the House Flood Control Committee considered the Pick plan, while the Rivers and Harbors Committee debated the nine-foot channel project. The Senate Commerce Committee considered both the Pick and Sloan plans. Since the Sloan plan was formally presented only a few days before the House Flood Control Committee endorsed Pick's plan, the Sloan plan received only a cursory overview on the House side, although some highlights had already been presented in committee hearings. When O'Mahoney presented the Sloan plan to the Senate Commerce Committee, the Bureau of the Budget had not decided whether the plan was or was not in accord with the program of the President. Therefore, the Bureau withheld advice in this regard. Secretary of the Interior Harold L. Ickes, in submitting the Sloan plan to the President, stated his belief that the two plans could be successfully coordinated.

As the controversy increased, certain events seemed to provide the necessary incentive for bringing the two agencies together. These included the

more and more frequent demands and suggestions of congressional members that a compromise of some sort be reached. It was, however, the introduction of Montana Senator James E. Murray's Missouri Valley Authority (M.V.A.) bill on August 18, 1944 and President Roosevelt's message to Congress on September 31, 1944 which brought the Bureau and the Army together. Roosevelt's message was issued for the purpose of forwarding to Congress a resolution of the Missouri River States Committee asking for a single, coordinated plan for the development of the Missouri River basin. Though the valley governors did not ask for an "M.V.A.," Roosevelt did. He urged Congress, before it began its recess, to give "careful and early" consideration, upon its return, to the creation of river basin development agencies patterned after the Tennessee Valley Authority (T.V.A.) for the Missouri, the Arkansas, and the Columbia basins,

By the end of 1944, the M.V.A. proposal appeared to have been discarded by everyone except President Roosevelt, who kept a continued interest in seeing such an agency established, and Senator Murray, who maintained a determination to reintroduce it in the next session of Congress. The language of the "principle" which Congress laid down on December 22, 1944, was formulated during a meeting at the Stevens Hotel in Chicago on September 7 and 8. The gathering that decided what Congress was going to do, called itself innocuously the Water Conservation Conference, and it left to the annals of

extracurricular bill-drafting a stenographic transcript. With two specific exceptions the conference resolutions, redrawing the O'Mahoney-Milliken amendments, are congressional policy for the Missouri basin development. What is more, they are the law of the land for any like developments elsewhere, having been incorporated in the Flood Control Act of 1944 (P. L. 78-534), the Rivers and Harbors Act of 1945 (P.L. 79-14), and faithfully in all successor acts (Reuss 2005).

It was agreed in the Stevens Hotel that the Corps and the Bureau alike, before they presented new plans to Congress, must submit them for comment to the states. It was agreed, on the Missouri water question, that navigation should give way to irrigation and other "consumptive uses" present or future. But the water to which that priority applied was "water arising in States lying wholly or partly west of the ninety-eighth meridian." The project of the Stevens Hotel conference was the first general law of the United States relating the uses of water one to another. Into federal law it adopted the scarce-water principle preferring the most beneficial uses, and it extended that principle to water flowing from what Congress could only crudely define by a line of longitude as the arid and semi-arid West (Reuss 2005).

Finally, the conference reached its most difficult decision. In cases where the delegations from the affected states opposed them, should rivers and harbors

or flood-control plans be stricken from the authorizations bills? It was on this most immediate issue that a compromise was made with rivers and harbors interest. Plans would be authorized with specific exceptions to Corps of Engineers proposals as necessary. The decision of the conference was for authorization of the Pick and Sloan plans, to be coordinated by the two departments before a deadline set by Congress. Among other requirements of coordination, the departments would, according to the conference resolution, have to agree upon an allocation of costs to the purposes served. This conference decision was not written into law, because after it had been made known to the agencies and before it could be considered in Congress, the agencies had met and agreed upon a list of physical works, entirely avoiding the question of the allocation of costs. Yet so rigidly did the Stevens Hotel formula fix the language of Congress that the resultant Flood Control Act assumes a nonexistent cost allocation comprehensive of both the Pick and Sloan plans, "subject to the basin-wide findings and recommendations regarding the benefits, the allocations of costs and repayments by water users, made in said House and Senate documents" (In Ridgeway 1955, 48).

Meeting in Omaha on October 16 and 17, a committee composed of two representatives each from the Corps of Engineers and the Bureau of Reclamation examined their respective plans, discussed them, and issued a "joint engineering

report.” The committee determined that “by making appropriate modifications” it would be possible “to eliminate existing differences between the two plans” (Ridgeway 1955).

Before determining the final compromise plan, however, the committee reached agreement on certain principles:

1. The Corps of Engineers should have the responsibility for determining main stem reservoir capacities and capacities of tributary reservoirs for flood control and navigation
2. The Bureau of Reclamation should have the responsibility for determining reservoir capacities on the main stem and on the tributaries of the Missouri River for irrigation, the probable extent of future irrigation, and the amount of stream depletion due to irrigation development.
3. Both agencies recognized the importance of the fullest development of potential hydroelectric power in the basin and that this development should be consistent with the development of other beneficial uses of water.

Changes necessary to bring about reconciliation were relatively few. One writer observed, “Every project in both plans was incorporated into the joint venture except the Army’s proposed Oak Creek Dam in South Dakota, and would have been included too if its site were not to be submerged by another dam in the joint plan” (Hart 1957, 135). Ultimately House Resolution 4485 and House Resolution 3961 (later Senate Document 35) are in sum the Missouri basin’s Pick-Sloan plan of development presently in effect and in progress.

The Pick-Sloan plan included the following elements (fig. 2-1) (Hart 1957, 120-135):

1. Levees along the main stem of the Missouri River between Sioux City, Iowa, and its confluence with the Mississippi River near St. Louis.
2. A series of five main stem reservoirs to provide flood control and hydroelectric power generation.
3. Realignment of channel segments of the Missouri River below Sioux City to its confluence with the Mississippi River near St. Louis.
4. A series of reservoirs in the tributary basins below Sioux City including the Platte, Kansas, Blue, Osage, and Gasconade rivers.
5. Irrigation projects in the semi-arid portion of the Missouri River Basin, utilizing waters impounded in the main stem reservoirs and other smaller reservoirs in the upper reaches.

Although the compromise initially envisioned a plan similar in scope to the Tennessee Valley Authority, Congress in the authorizing legislation—the 1944 Flood Control Act and the Rivers and Harbors Act of 1945—did not continue that pattern and instead voted for a comprehensive plan for the Missouri River Basin subsumed under the existing agencies. The relevant portion of the plan with reference to this dissertation is the Osage River Basin discussed below.

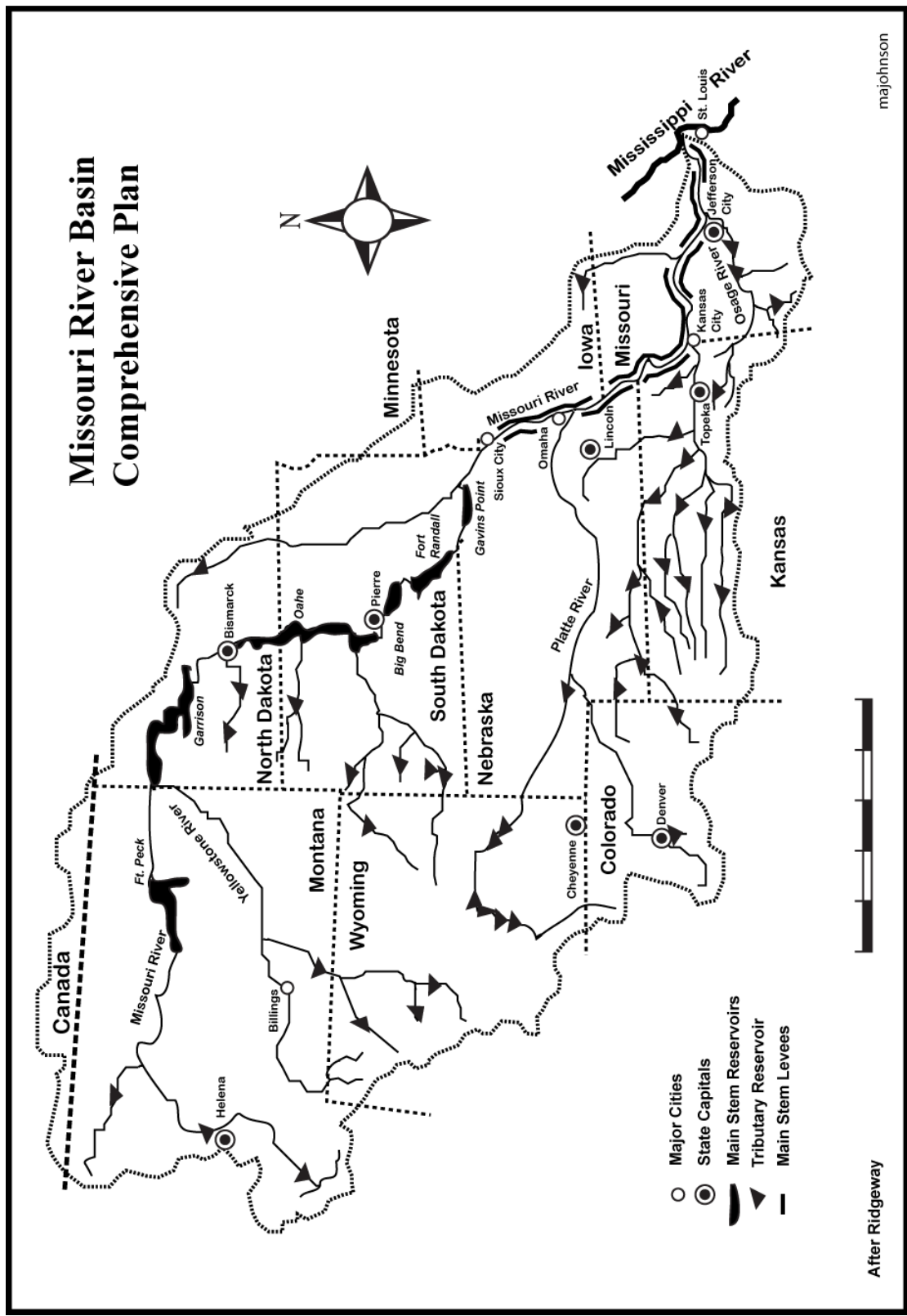


Figure 2-1. Missouri River Basin Comprehensive Plan (Pick-Sloan).

Osage River Basin

The Osage River basin is elliptical in shape, being about 250 miles long, and having a maximum width of 100 miles north to south. The upper third of the basin is characterized by rolling land containing well developed dendritic-patterned stream systems, with main stream valleys averaging about one mile in width. In the middle third of the basin, the valley becomes wide and shallow with the streams meandering in wide swings. The lower third of the basin, that area east of Osceola, Missouri, traverses a part of the Ozark Plateau and contains streams in deep narrow valleys.

The Truman project lies about midway between the middle and lower thirds. The uncontrolled drainage area between the Truman project and upstream existing and authorized Federal lakes is 8,914 square miles. The drainage area and capacity of existing reservoirs in the Osage River basin are shown in Table 2-1. See Figure 2-2 for locations of all projects within the Osage River Basin. There are approximately 28,000 acres in the flood plain along the Osage River below Bagnell Dam, and approximately 160,000 acres in the Missouri River flood plain from the mouth of the Osage River to its confluence with the Mississippi River just upstream of St. Louis, Missouri.

The Osage River basin upstream of the dam site is situated in the Osage Plains and Ozarks sections of the Central Lowlands physiographic province. The

boundary between the rugged, broken terrain of the Ozarks of the eastern part of the basin and the gently rolling, more subdued topography of the Osage Plains to the west is not everywhere readily discernible. Stream valleys with Ozark type character extend several miles headward into uplands with definite Osage Plains character.

Table 2-1. Existing Reservoirs within the Osage River Basin						
		Drainage Area (Square Miles)	Capacity in Acre Feet			
Reservoirs	Stream		Flood Control	Multi-Purpose	Sediment	Total
Pomona	110-Mile Creek	322	174,000	70,000	(28,000)	216,000
Melvern	Marais des Cygnes River	349	209,000	154,000	(26,000)	337,000
Hillsdale	Big Bull Creek	144	84,000	76,000	(11,000)	149,000
Stockton	Sac River	1,160	782,000	892,000	(25,000)	1,649,000
Pomme de Terre	Pomme de Terre River	611	407,000	243,000	(13,000)	637,000
Harry S. Truman	Osage River	8,914	3,993,300	1,203,000	(244,000)	4,952,300
	Totals	11,500	5,649,300	2,638,000	(347,000)	7,940,300
Note: Previously authorized projects at Garnett, Fort Scott, Hackleman Corner (all in Kansas) have not been constructed.						
Source: U.S. Department of the Army, Corps of Engineers 1973, 2008						

The Ozarks section is a submaturely to maturely dissected region with narrow valleys incised up to 200 feet below the adjacent ridges. The area is generally underlain by cherty dolomite and limestone of Mississippian and Ordovician age that is fairly resistant to erosion, thus forming steep to vertical valley walls. Below Osceola, the Osage River and other streams have incised

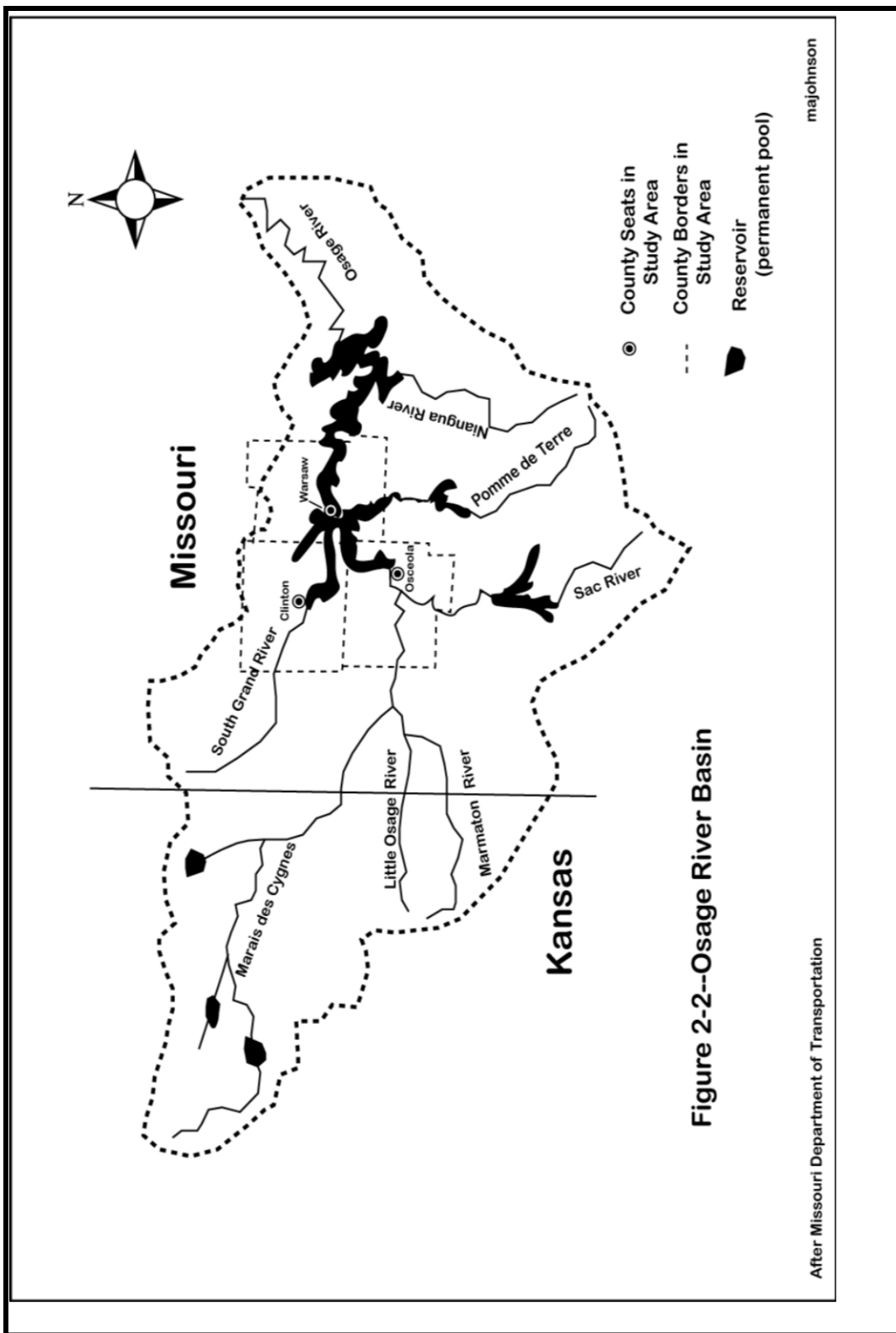


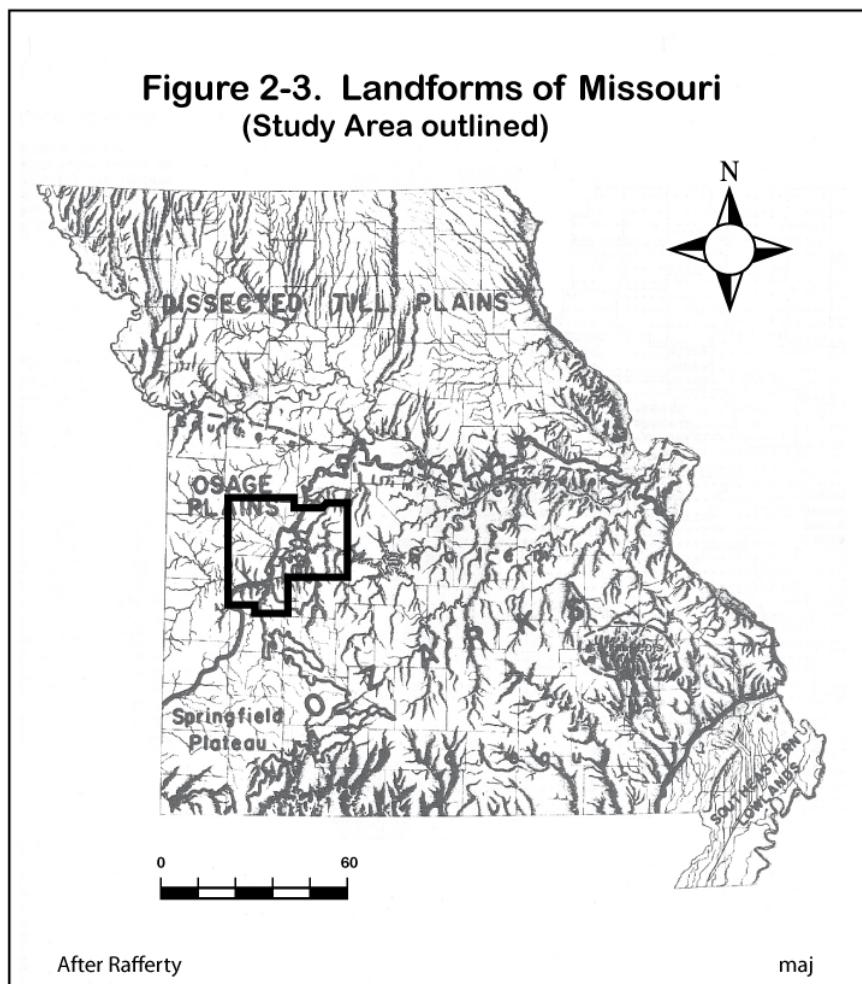
Figure 2-2--Osage River Basin

After Missouri Department of Transportation

majohnson

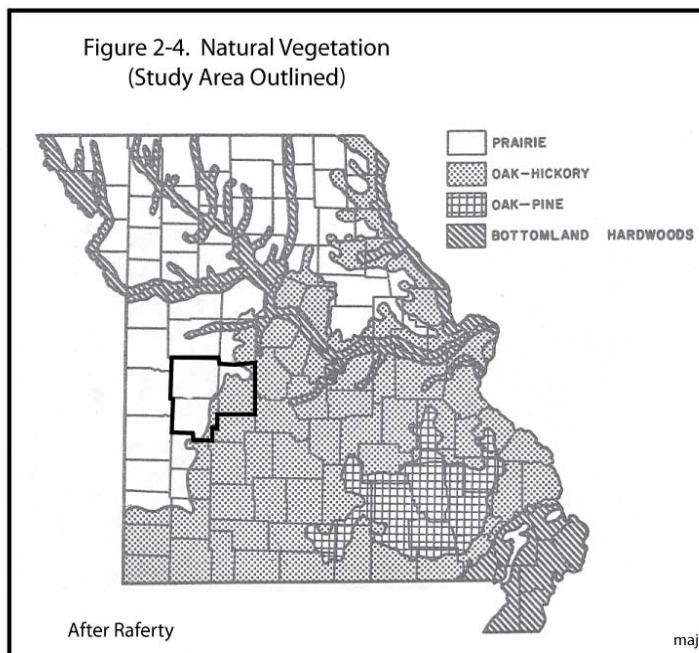
meanders with pronounced asymmetry of cross section, steep undercut slopes on the outside of the meander curves, and more gentle slip off slopes on the inside.

The Osage Plains section is a maturely dissected gently rolling region with relatively wide stream valleys. The topography has developed on Pennsylvanian age shales with interbeds of limestone, sandstone, and coal. Erosion has produced an expansive, mildly rolling land surface with low, eastward facing escarpments along the outcrop belts of the more erosion resistant, westward dipping limestones (fig. 2-3).



The Osage River Basin has an essentially continental climate. There are frequent changes in the weather, both from day to day and from season to season. This area is in the path of the cold air moving south out of Canada, moist air coming north from the Gulf of Mexico and the dry air from the west. Annual precipitation averages approximately 40 inches. The winter months are comparatively dry, with most of the precipitation coming in the spring, summer and fall months. The winter precipitation is usually in the form of snow. Spring, summer, and fall precipitation comes largely in the form of showers or thunderstorms. Tornadoes are not uncommon, occurring primarily in the months of March through June. Temperatures over 100 degrees Fahrenheit are infrequent, but have occurred. The highest temperature recorded in Missouri is 118 degrees Fahrenheit in Warsaw (in the study area) in 1954. Average temperatures range from 33.7 degrees in January to 80.5 degrees Fahrenheit in July. Besides the highest temperature in the region, Warsaw is also the location for the lowest temperature of -40 degrees Fahrenheit in February 1905. The average date for the first killing freeze is the third week in October, with the last freeze in mid-April (U. S. Department of the Army, Corps of Engineers 1973).

The Osage River Basin lies in two distinct vegetation regions, the unglaciated Prairie region, known as the Osage Plains, and the Ozark region (fig. 2-4). The Ozark region is by far the largest



area in Missouri covering most of the state south of the Missouri River. The Prairie region occupies a wedge-shaped portion of the western part of the state south of the Missouri River. The boundary for the regions extends through northwestern Benton County, southeastern Henry County, and roughly divides St. Clair County in half with the Ozark region situated in the eastern half of the county (Steyermark 1963).

These principal plant regions correspond generally to the location of the physiographic sections; however, the boundaries are not exactly the same. The natural vegetative composition is extremely varied and complex. Much of the land area is no longer in natural vegetation because of agricultural activity; however, some extensive areas remain. Overall, the floral cover of the Ozark region is a deciduous oak-hickory climax forest. This community, along with its

associated herbaceous plants, belongs to the Carolinian flora group; floristically it is intermediate between austral and boreal phases (Steyermark 1963). Along the west border of the Ozarks, a post oak-blackjack oak association dominates because of increased xerophytism (Sauer 1920), but the Osage Plains are dominated primarily by tall-grasses such as blue stem and the grammas.

The Osage River Basin is located in two zoogeographic regions—the Western Prairie and the West Ozark Border. These regions are transitional zones between the tall-grass prairie and the Ozark plateau (Nagel 1970). The eastern portion of the area is typically more forested while the western portion becomes typically prairie in aspect. Bottomlands along the Osage River and its major tributaries support a diversified flora and an array of micro-habitats. Along the streams, ecological communities have become adapted to the base of bordering cliffs, the flood plain, the riverine stream border, the gravel bars, the sloughs, the springs, and the stream waters. Uplands contain typically prairie, brush, forest, and agricultural lands.

The transitional character of the basin between forest and grassland provides habitat for a great variety of species. Overlapping plant communities support faunal populations which are characteristics of this habitat edge between the major vegetative types. Attesting to the importance of the Osage River basin

to the maintenance of wildlife populations are the numerous management areas developed by the Missouri Department of Conservation within the region.

The fish fauna in the Osage River basin streams is diverse, represented by more than 100 species (Pflieger, 1971). This diversity is due to the variety of aquatic environments within the basin and, in part, from events that occurred during developmental history of fish fauna. The streams support a host of fish species endemic to the Ozark, Lowland, Prairie, Big River, Ozark-Lowland, and Ozark-Prairie fish faunal groups. Probably the most unique element of the fish fauna of the upper Osage River is the paddlefish (fig. 2-5). Belonging to an ancient family of fresh water fishes, the paddlefish is represented by only two living species, *Polyodon spathula*, the paddlefish of the Mississippi River valley, and *Psephurus gladius*, of the Yangtze River valley in China. Prior to the construction of the Truman project, the paddlefish was a prime sport fish in the Osage River during the spring months. Fishing for paddlefish in the Osage River is done by blind snagging with a short, heavy snagging rod, heavy weighted line, and a three pointed snagging hook from boats and from river banks. Paddlefish snagging occurs in the Osage River typically from 15 March to 15 May as the paddlefish move upstream to spawn. Prior to the construction of the Truman project, approximately 23,000 people enjoyed this sport annually. Annual harvest varied from 4,000 to 8,200 fish, and represented 70-107 tons. The weights

of the fish caught varied from 1.6 to 88 pounds, while the age of the fish harvested ranged from 2 to 30 years (Purkett 1963)

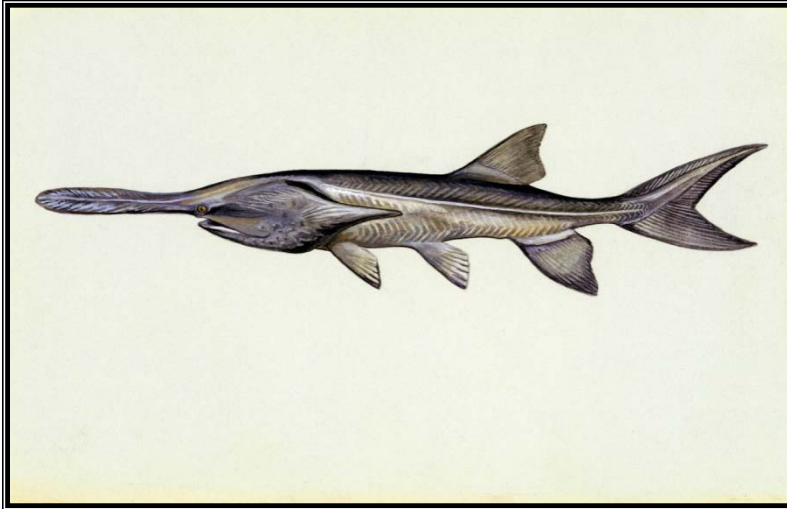


Figure 2-5. The Paddlefish of the Mississippi River, *Polyodon spathula* (Source: U.S. Fish and Wildlife Service's National Digital Library)

Another notable fish is the blue catfish, *Ictalurus furcatus*. A large rivers fish, the blue cat is found in the Osage River. The uniqueness of the upper Osage blue catfish is its size. Early reports of blue catfish of almost incredible size are not uncommon. Such reports list fish which weighed up to 250 pounds. The "Missouri Big Fish Records" compiled by the Missouri Department of Conservation and the records of the Museum of Natural History at the University of Kansas disclose that large blue catfish are still being caught. Records from the area of the Truman project have fish ranging from 50-120 pounds.

Harry S. Truman Dam and Reservoir Project (Truman project)

Authorized by the River and Harbor Flood Control Act of 1954 (Public Law 83-780) and the River and Harbor Flood Control Act of 1962 (Public Law 87-874), the Truman project is the largest of the proposed reservoirs on the Osage River in Missouri. Built between 1964 and 1979, the principal project purposes are flood control, hydroelectric power, and recreation, including fish and wildlife management. The dam site is located on the Osage River approximately one and one-half miles northwest of Warsaw, Missouri (fig. 2-6).

The major features of the project include an earthfill embankment (5,000 feet long), a concrete spillway and powerhouse (964 feet long), a dike (7,500 feet long), state highway and county road relocations, railroad relocations, reservoir clearing (1,900 building sites and 16,140 acres of timber), 22 initial public recreational access areas, dedication of approximately 31,000 acres of project land and water for fish and wildlife management, and facilities for operation of the project. The multipurpose (permanent) pool for the project covers approximately 55,600 acres at 706 feet mean sea level (ft. m.s.l.) and the flood control pool covers an additional 153,700 acres for a total of 209,300 acres at 739.6 ft. m.s.l..

(Department of the Army, Corps of Engineers 1973).

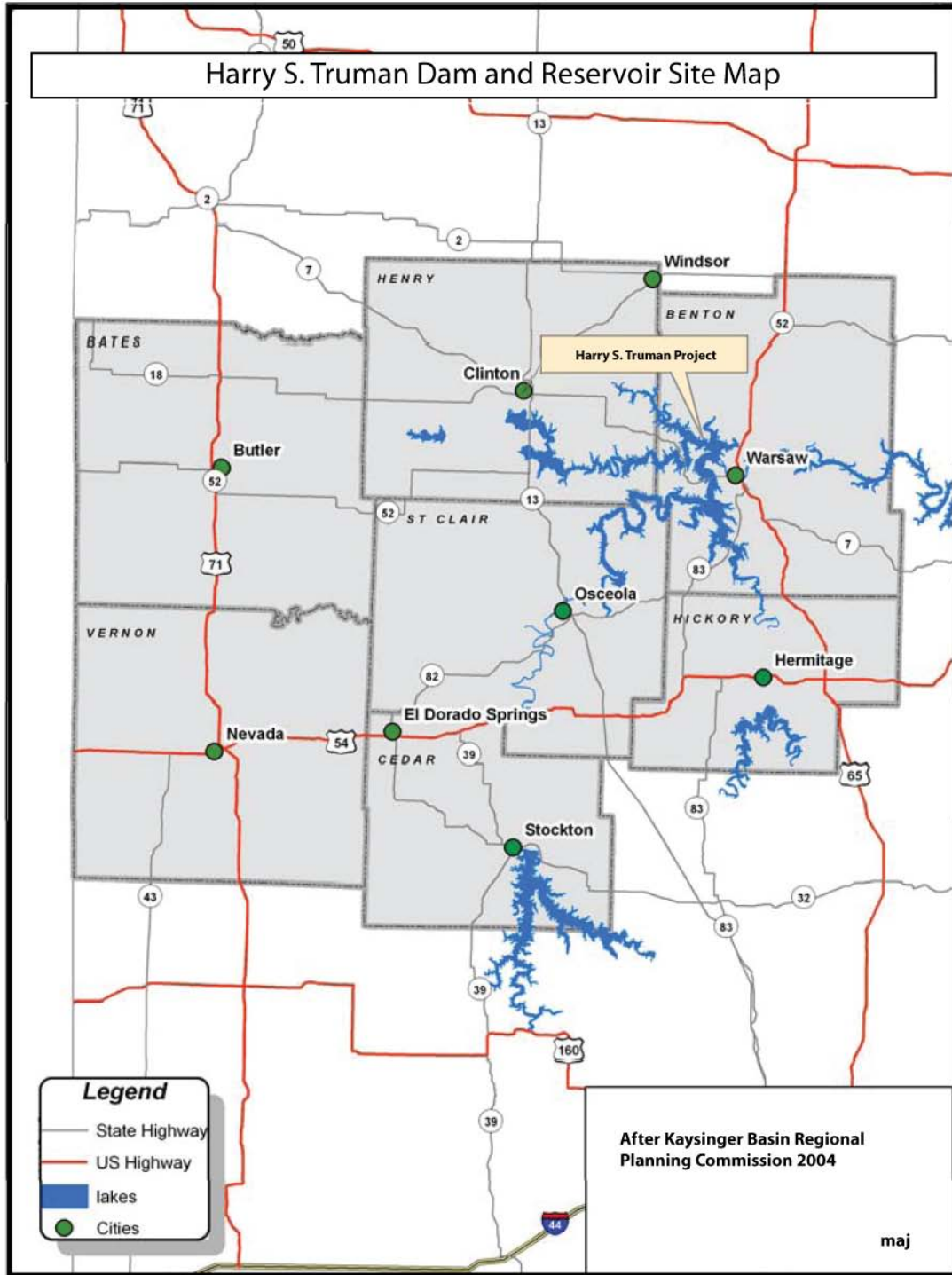


Figure 2-6. Harry S. Truman Dam and Reservoir Project and the Kaysinger Basin Regional Planning area.

The dam, consisting of an earthfill embankment, has an average height above the valley floor of 96 feet. The average depth of the permanent pool at the dam is 74 feet (fig. 2-7). The permanent pool has a shoreline of approximately 958 miles long and a mean depth of approximately 22 feet. The highest level of impoundment at the Truman project is 738.9 ft. m.s.l., which occurred in October 1986 (U.S. Department of the Army, Corps of Engineers 2008).



Figure 2-7. View of the Truman dam from the upper deck of the visitor Center. Powerhouse is located at the far end of the dam, outlet channel is located in the upper right. Photo by author.

The concrete spillway and powerhouse structure is located on the right bank side of the entire dam. The structure includes two non-overflow bulkheads which tie the structure to the embankment, a 190-foot long spillway, and a 409-foot long powerhouse. The total structure length is 964 feet, with a maximum height of 172 feet.

The spillway has four tainter gates capable of discharging a total of 275,000 cubic feet per second (c.f.s.) at a maximum surcharge elevation of 751.1 ft. m.s.l. The spillway is normally not used with water released through the dam, but provides for flood control operations, as well as insuring the safety of the dam in the event of extraordinary flood flows. Normal releases pass through the powerhouse.



Figure 2-8. Truman powerhouse and spillway which is located on the left side of the dam looking upstream. Photo by author.

The powerhouse contains six reversible pump turbines each with a rated capacity of 26,677 kilowatts producing a total rated capacity of approximately 160,000 kilowatts. Anticipated average annual generation was estimated initially at 282 million kilowatt hours of energy. However, structural problems with the turbines, oxygen gas content in the releases, and greater than expected fish mortality rates associated with the pump back operation have precluded the

generation of significant amounts of energy. Until 2008, only one turbine was to generate electricity at any specific time. Recent changes to the structural integrity of the turbines and the operations and maintenance routine have addressed the concerns, so that future power generation should be enhanced. The maximum discharge capability of the power plant is 63,000 c.f.s. with both the Lake of the Ozarks and the Truman Reservoir at full power pool elevations. The main power generation period is during the months of June through September. Power generation also occurs during periods when flood storage is being released.

Land acquisition within the seven county region included approximately 150,000 acres of agricultural lands and 4,500 acres of resort and town properties in fee (outright purchase) and an additional approximately 112,000 acres of flowage easements for the intermittent storage of flood waters. Relocations included over 600 farmsteads, over 400 nonfarm homes, 660 resort and suburban homes, over 90 commercial buildings, and over 50 other structures resulting in the removal of more than 2,300 families, or approximately 10,000 people. In addition, relocations included more than 25 miles of railroad track, 130 miles of state and county roads, 500 miles of power, telephone and pipe lines, 5,200 graves, and public facilities in the communities of Clinton, Deepwater, Osceola, Warsaw, and Roscoe (Department of the Army, Corps of Engineers 1973).

Initially the cost for the Truman project including both federal and non-federal funding was approximately \$400,000,000 (approximately \$1,600,000,000 in 2007 dollars). The federal government portion was approximately 80% of the total.

The initial recreational development program for the Truman project consisted of 22 public access areas, utilizing approximately 10,170 acres of land. Eighteen of the areas were to be operated by the Corps of Engineers and to contain complete development designed to accommodate water-oriented recreation (Table 2-2). Facilities built under the recreational development program included access roads, interior roads, parking areas, boat launching ramps, potable water supplies, sanitary facilities, and camping and picnicking areas. Additional features now include an ATV park and an equestrian campground. Subsequent to changes in the master plan, a total of 21 public use areas related to the project were ultimately developed. Currently, the Corps of Engineers manages fifteen areas directly. As indicated in Table 2-2, one area is operated by the Missouri Department of Conservation as a low density use site for fish and wildlife oriented purposes. One area is operated by the Missouri Department of Natural Resources, State Park Board as a State Park. The communities of Deepwater, Osceola, Roscoe and Warsaw also operate either

independently, or in connection with the Corps additional public use areas.

Finally, one area is licensed to a concessionaire through the Corps of Engineers.

In addition to the developed public use area operated by the Missouri Department of Conservation, other lands in the upper reaches of the reservoir are licensed to the department for fish and wildlife management. The project plan included approximately 31,000 acres of land and water in 13 separate areas which are to be made available to the department.

Located in the public use area on Kaysinger Bluff is the Harry S. Truman Regional Visitor Center and historic village (fig. 2-9 – 2-11). Exhibits within the visitor center provide information about the history of the Osage River Valley from pre-European contact to modern day. The rotunda area contains reproductions of archeological fossils and artifacts found in an area now covered by Truman Lake. Views from the upper deck include both Truman Lake and the tail waters of the Lake of the Ozarks.

Table 2-2--Public Use Areas at the Truman Project				
Original Name	Modern Name	Operating Agency	County	Marina?
Kaysinger Point (Lt. Abut.)	Kaysinger Bluff	Corps of Engineers	Benton	
Kaysinger Point (Rt. Abut.)	Shawnee Bend	Corps of Engineers	Benton	
Pomme de Terre Point	Osage Bluff	Corps of Engineers	Benton	Yes
Fairfield Point	Fairfield	Corps of Engineers	Benton	
Redbud Point	Long Shoal	Corps of Engineers	Benton	Yes
Windsor Crossing	Windsor Crossing	Corps of Engineers	Henry	
Big Bend	Berry Bend *	Corps of Engineers	Benton & St. Clair	
Paradise Point	Harry S. Truman State Park	Missouri Department of Natural Resources	Benton	Yes
Bucksaw Point	Bucksaw	Corps of Engineers	Henry	Yes
Clinton	Sparrowfoot	Corps of Engineers	Henry	
Oak Grove	Talley Bend	Corps of Engineers	St. Clair	
Osceola Point	Crowe's Crossing	Corps of Engineers	St. Clair	
Outlet	Bledsoe Ferry	Corps of Engineers	Benton	
Little Tebo Point	Thibaut Point	Corps of Engineers	Benton	
Cross Timbers	Cross Timbers	Missouri Department of Conservation	Hickory	
	Sterrett Creek	Concessionaire	Benton	Yes
	Osceola Park	City of Osceola	St. Clair	
	Roscoe Park	Village of Roscoe	St. Clair	
	Sac River Access	Corps of Engineers	St. Clair	
	Cooper Creek	Corps of Engineers and Village of Deepwater	Henry	
	Warsaw	City of Warsaw	Benton	
*Berry Bend is actually two areas, Berry Bend Park and Berry Bend Equestrian Park				
Source: U.S. Department of the Army, Corps of Engineers 2008.				



Figure 2-9. Harry S. Truman Regional Visitor Center, Kaysinger Bluff. Photo by author.

Completed in 1977, the visitor center not only provides a spectacular view of the dam and reservoir but has become a site for numerous regional fairs and outdoor events. On the grounds of the visitor center the Benton County Historical Society has established an historic village with a collection of buildings from the area which date from the 1800s and early 1900s, including the Hooper House and farmstead, and the Concordia School building.



Figure 2-10. Hooper House at the Truman Visitor Center. Relocated from area farmstead purchased by the Corps of Engineers. Photo by author.



Figure 2-11. Ed Elmore Log Cabin at the Truman Visitor Center (constructed by volunteers associated with the Benton County Historical Society and Heritage Days volunteers.) Mr. Elmore was the first Truman project manager and later the first director of the visitor center. Photo by author.



Figure 2-12. Concordia School at the Truman Visitor Center. Photo by author.

Study Area.

The Truman Project impact area, as illustrated in Figure 2-6, is the same as the area associated with the Kaysinger Basin Regional Planning Commission (KBRPC). Established under Chapter 251 of the Revised Statutes of the State of Missouri, the KBRPC has its headquarters in Clinton, Missouri, and is charged with providing the following services to the communities in the planning areas: 1) community development, 2) planning and technical assistance, 3) transportation planning, and 4) small business enhancement and incubation. The planning area has 4,786 square miles of territory and a total population of 108,600 per the 2000 Census (Missouri Association of Council of Governments 2009).

The counties within the planning area are Bates, Benton, Cedar, Henry, Hickory, St. Clair, and Vernon (fig. 2-6). Not all of the counties are affected by the Truman project equally. At the top of the flood control pool, all counties contained a portion of the project. However, at the permanent multipurpose pool level, Bates and Vernon counties are unaffected and, therefore, are not considered as part of the study area. The permanent pool is contained within the stream channels of the Sac and Pomme de Terre rivers in Cedar and Hickory counties. Consequently, these last two counties are also not included in the

study area. All permanent features of the Truman project plus the majority of public use areas, access areas, and lands acquired in fee are located in the study area of Benton, Henry, and St. Clair counties. Each of these counties is individually discussed in separate chapters, beginning with Benton County in Chapter 3. Each chapter provides an introductory section identifying any significant features of the county. This is followed by discussions of the changes to population, economic landscape, tax structure, and the visual landscape during the study period of 1960–2000. Completing the discussion for each county is a summarization of the significant changes.

CHAPTER 3: BENTON

COUNTY 1960-2000

“Sooner or later in the modern landscape, every country road leads to a highway, and all highways whether we follow them or not lead to the city.” --John B. Jackson (1995, 44)

Introduction

Figure 3-1--"Swinging bridge" at Warsaw. Photo by author.

“Welcome to the land of the Swinging Bridges,” greets the visitor at the entrance to Benton County.



Organized in 1835 and named after Missouri Senator Thomas Hart Benton, Benton County is the home of the Truman Dam and the majority of its facilities, including the powerhouse, visitor center and several parks. It is, therefore, appropriate to begin our discussion here.

Benton County is one of several counties in Missouri that is organized around the township system. There are a total of eight townships within Benton

County today. The Osage Plains occupy the northern half of the county, where all of the incorporated communities are located (Table 3-1).

Table 3-1			
Benton County Incorporated Communities			
Cole Camp	Ionia	Lincoln	Warsaw (county seat)

Warsaw, the largest community in the county, is located on the banks of the Osage River Arm of the Lake of the Ozarks. The southern half of the county is located in the Ozark Uplands. Numerous unincorporated communities are located in this area. Figure 3-1 shows the location of the incorporated communities and some unincorporated communities within Benton County.

Although traditionally agriculturally oriented in the north, Benton County is probably best known for the manufacture of gunstocks. E. C. Bishop and Reinhart Fajen both capitalized upon the abundant black walnut lumber to produce hundreds of thousands of gunstocks, thus making Warsaw the self-proclaimed “gunstock capital of the world” (fig. 3-2 to 3-4). The gunstocks were famous, as evidenced by a front page photo of Reinhart Fajen fitting former President Jimmy Carter in 1985 (White 1985). Other industries located in Benton County between 1960 and 2000 included the manufacture of furniture, clothing (uniforms), and supplies for sportsmen.

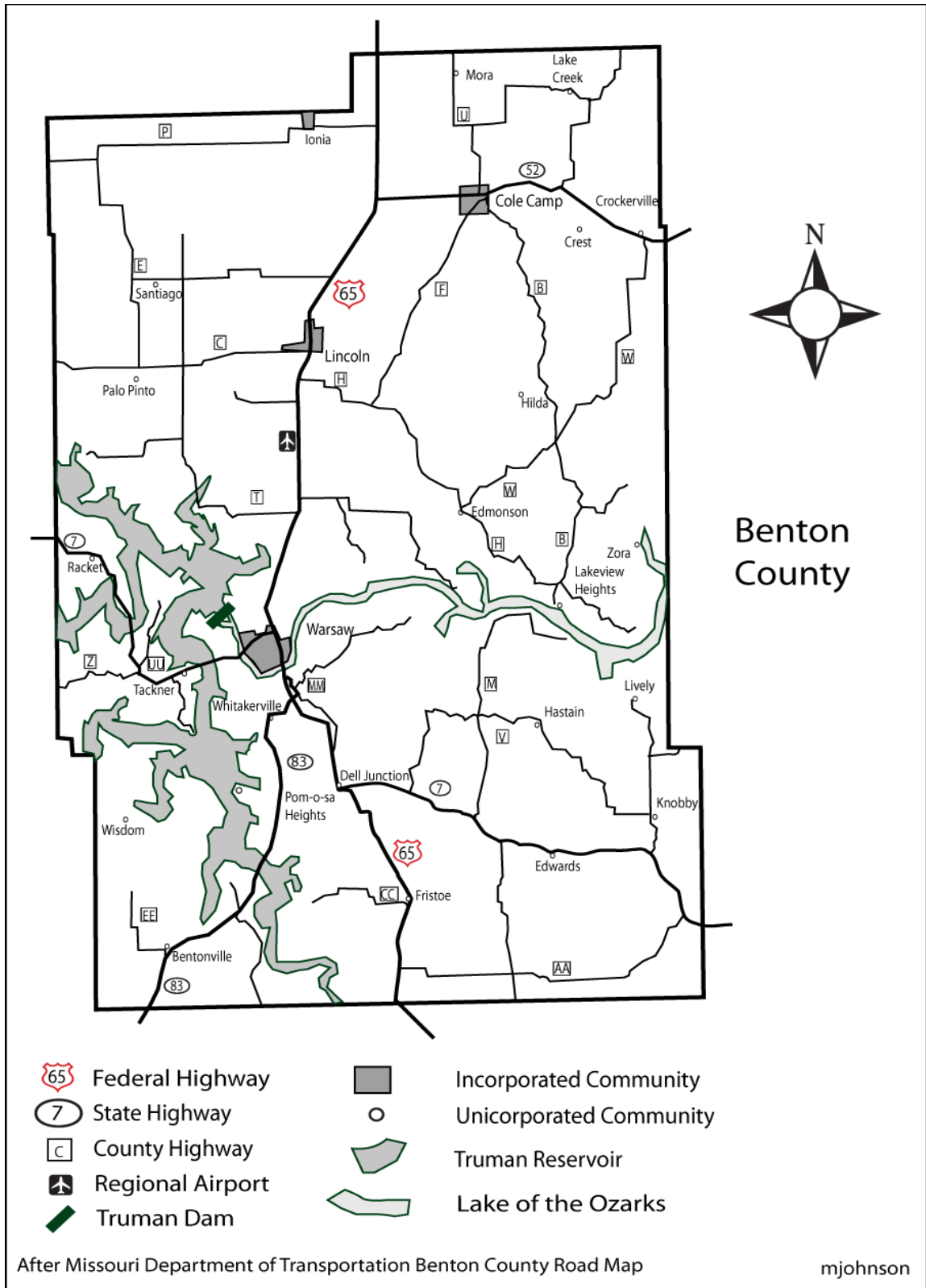


Figure 3-2. Benton County Map. (Missouri Department of Transportation 2009)

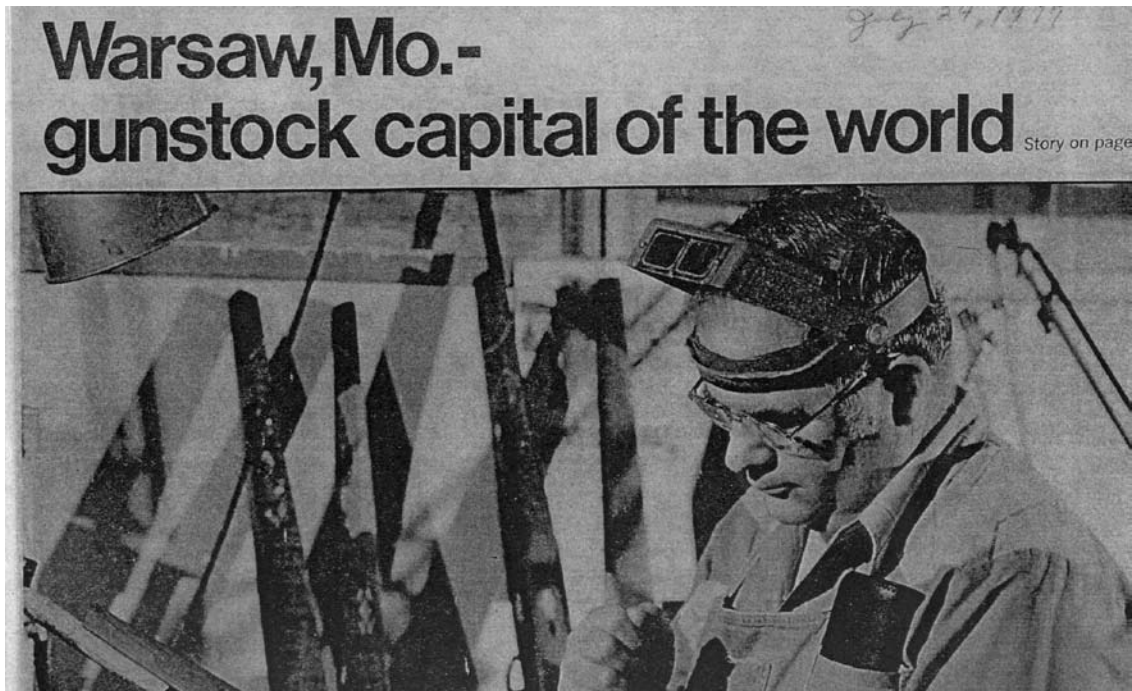


Figure 3-3. Headline and picture from the *St. Louis Post Dispatch*, July 24, 1977. Photo taken by Dick Weddle. Photo courtesy of the Benton County Historical Society (Weddle 1977).



Figure 3-4. E.C. Bishop Gunstock Factory 1950s. Photo courtesy of the Benton County Historical Society.



Figure 3-5. Reinhart Fajen Storefront on Main Street, Warsaw, Missouri. Photo courtesy of the Benton County Historical Society.

Warsaw became associated with the Lake of the Ozarks after the construction of Bagnell Dam (fig. 3-5). Economic development in the community reflected a growing awareness of vacationers'

needs and desires. Boat dealerships, marine repair shops, and motels and restaurants began to develop. Beginning in the 1930s and continuing through the 1970s, many resort and vacation areas appeared along the main highways, most specifically state highways 7 and 83 in Benton County. White Branch, Teal Bend (fig 3-7), Lakeview Heights, Pom-o-sa Heights, and Blue Branch were developed with housing, some of which is year-round.



Figure 3-6. Bagnell Dam which forms the Lake of the Ozarks. Photo by author.



Figure 3-7. Teal Bend along highway 7, western portion of Benton County. Photo by author.

This type of development continues today in areas such as Sterett Creek Village and Cedar Gate Heights (fig. 3-8 to 3-9).



Figure 3-8. House in the Sterett Creek Village Development to the north of Warsaw and adjacent to the Sterett Creek Public Use Area and marina. Photo by author.



Figure 3-9. View of the Truman lake from Cedar Gate development. In foreground are private stables. Photo by author.

State highway 7 west of Warsaw had considerable recreation oriented development prior to the construction of the Truman project with motels, restaurants, and curiosity and antique establishments. While Warsaw became known for recreation services and manufacturing, Lincoln, Cole Camp, and Ionia remained more associated with agricultural activities (fig. 3-10 to 3-12).



Figure 3-10. Agricultural support services at Ionia, Missouri. Photo by author.



Figure 3-11. Elevator at Lincoln, Missouri. Photo by author.



Figure 3-12. Agricultural support services at Cole Camp, Missouri. Photo by author.

The transportation system reflects the topography of the county. The rugged eastern and southern portions of the county, with its limestone and dolomite substructure, have made road construction challenging. Most of the

roads are aligned with ridge tops and river valleys. U.S. Highway 65 crosses the county north to south, passing through the eastern portions of Lincoln and Warsaw. This highway connects I-70 north of Sedalia with I-44 in Springfield to the south. State highways 7, 52, and 83 also provide transportation routes across the county. State highway 7 passes through Warsaw, connecting that community with Clinton and ultimately U.S. Highway 71 near Harrisonville to the west and the remainder of the Lake of the Ozarks to the east. State highway 83 begins in Warsaw at U.S. 65 and continues through Benton and Hickory Counties to connect with U.S. 54 to the south. State highway 52 passes through Cole Camp connecting places near the Lake of the Ozarks with Windsor and Clinton to the west and beyond (fig. 3-1).

Changing Population: 1960-2000

In 1900, Benton County's population was recorded as 16,522. The population continued to decline until it reached its lowest number in 1960, with only 8,737 people. During the 40 year period (1960-2000), the population of the county increased by 97 percent, as indicated in Table 3-2. This increase could lead one to speculate that the Truman project not only reversed the traditional outflow of people because of its construction, but that it was responsible for the near doubling of the total population. However, a closer examination of the

characteristics of the population change may not support this. Figure 3-13 illustrates the components of population change in Benton County.

Table 3-2				
Total Population for Benton County				
1960	1970	1980	1990	2000
8,737	9,695	12,183	13,859	17,180

Table 3-2--Decennial Population Totals: 1960-2000 for Benton County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

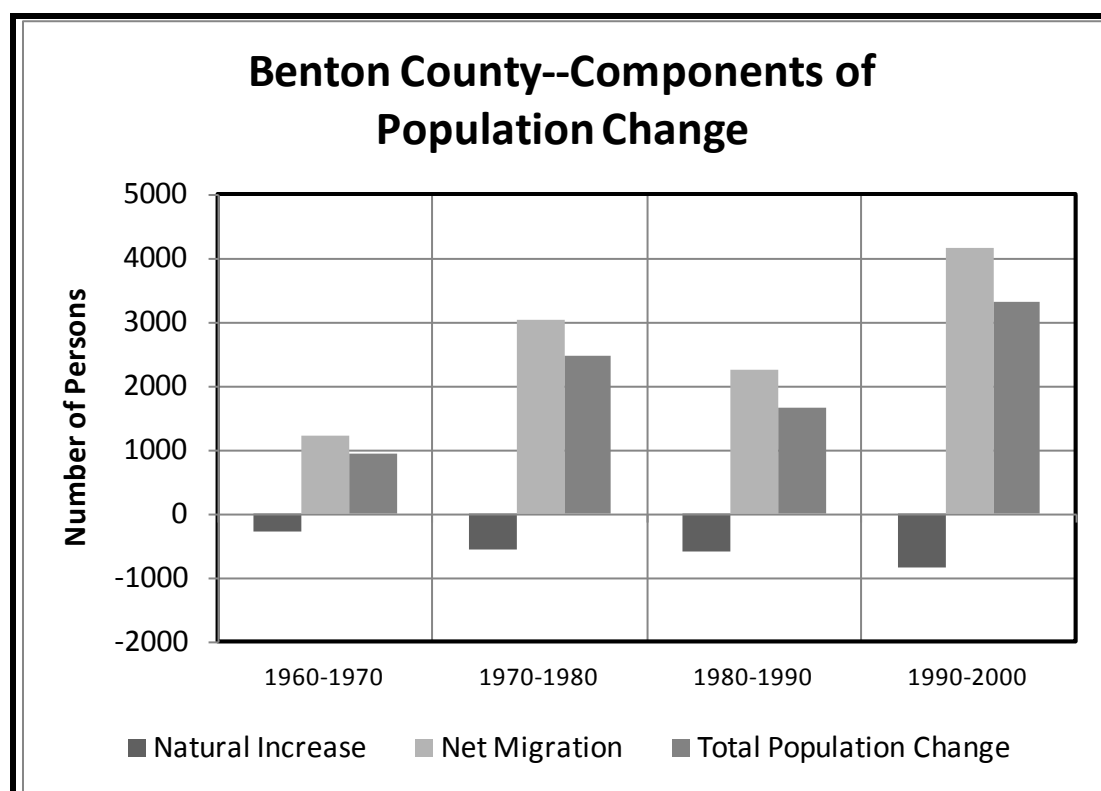


Figure 3-13. Components of Population Change for Benton County, 1960-2000. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

The components of population relate to natural increase (births minus deaths) and net migration (immigration minus emigration). As illustrated in Figure 3-9, during each decade, the rate of natural increase is negative, or below the x-axis (deaths exceeded births), while the migration rate is positive, or above the x-axis. Since the population change is positive for all four decades, the conclusion is that in-migration is responsible for not only compensating the negative natural increase, but also for the population increase for the county. Therefore, there is an increasing number of individuals moving into the county, but they do not necessarily produce families. The median age for the county would also seem to confirm this general pattern as indicated in Table 3-3 below.

Table 3-3				
Median Age of Population by Census Period				
1960	1970	1980	1990	2000
41.9	44.6	41.9	44.7	46.3

Table 3-3. Median Age: 1960-2000 for Benton County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

When comparing Benton County's increasing median age with that of the state of Missouri, we see a similar pattern emerging. However, Missouri's median age in 1960 was just over 30 compared to just over 36 by 2000. Benton County starts at a higher level and its increase was just over 5 years.

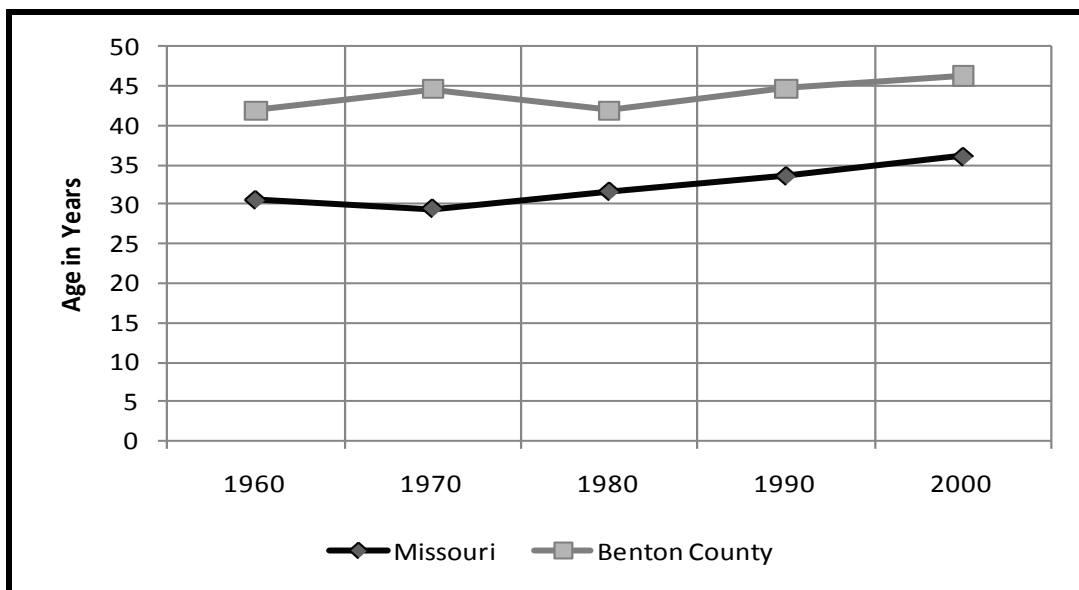


Figure 3-14. Comparison of median ages between Benton County and Missouri. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

The above table and figure would indicate that perhaps the individuals moving into Benton County are older. An examination of the population pyramids for the five censuses (figs. 3-15 to 3-19) taken during the study period provides additional insight into the structure and changes to Benton County's population.

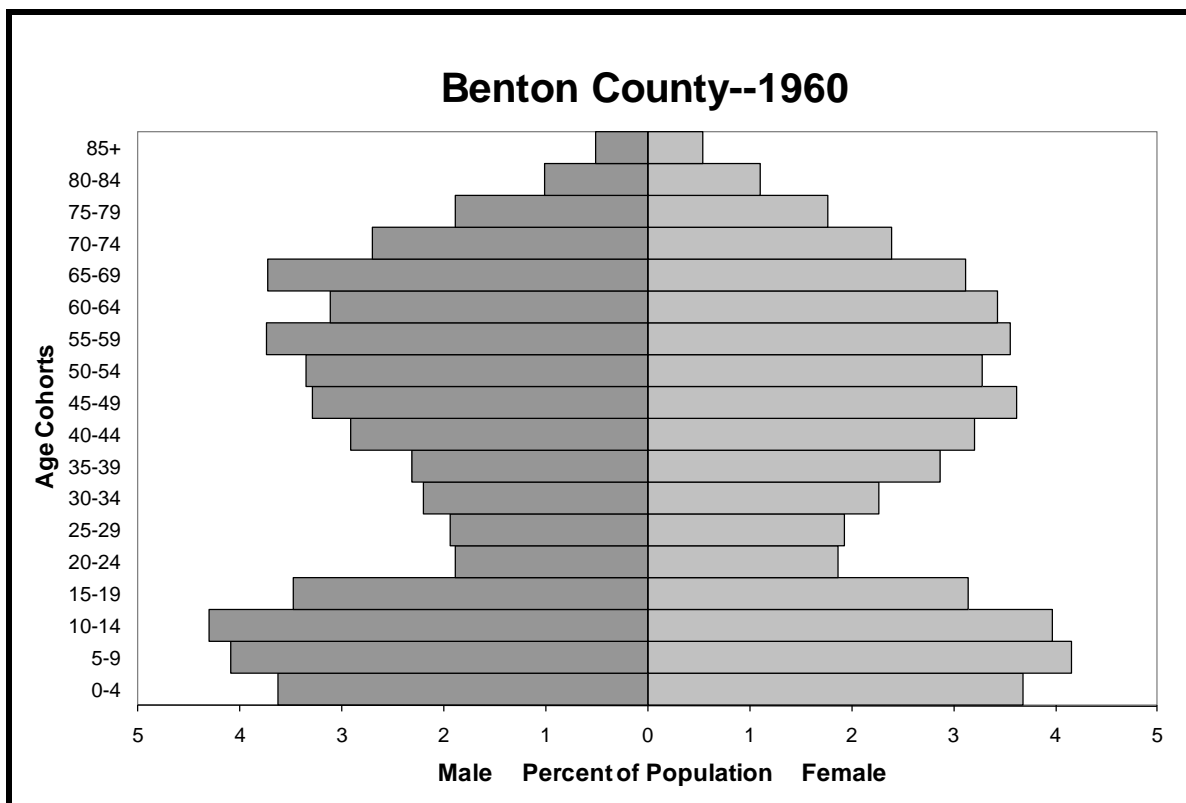


Figure 3-15. 1960 Population Pyramid for Benton County. (U.S. Department of Commerce, Bureau of the Census 1962.)

In 1960 Benton County had its lowest population since 1900. The population pyramid for 1960 has a broad base indicating a potentially growing population as a result of childbirth (Fik 2000). Indeed, this was the case as the number of younger persons, the “Baby Boom” generation, was increasing. There is one notable population characteristic indicated in the pyramid: the number of individuals in the 15-19, 20-24, and 25-29 year age cohorts was declining. This could be the result of a number of factors, including the lack of tertiary education possibilities in the county and the need of 18-year males to fulfill their military obligations through the draft. There is also another interesting aspect to the

population pyramid in that the number of individuals in several cohorts age 55 and over nearly match the largest of the “boomer” cohorts. In other words, there were a significant number of people either retiring, retired, or soon to be retired. In fact, the number of people over the age of 65 was 1,639 or approximately 19% of the total population. The number of under 15 year olds was 2,083 or approximately 24% of the population.

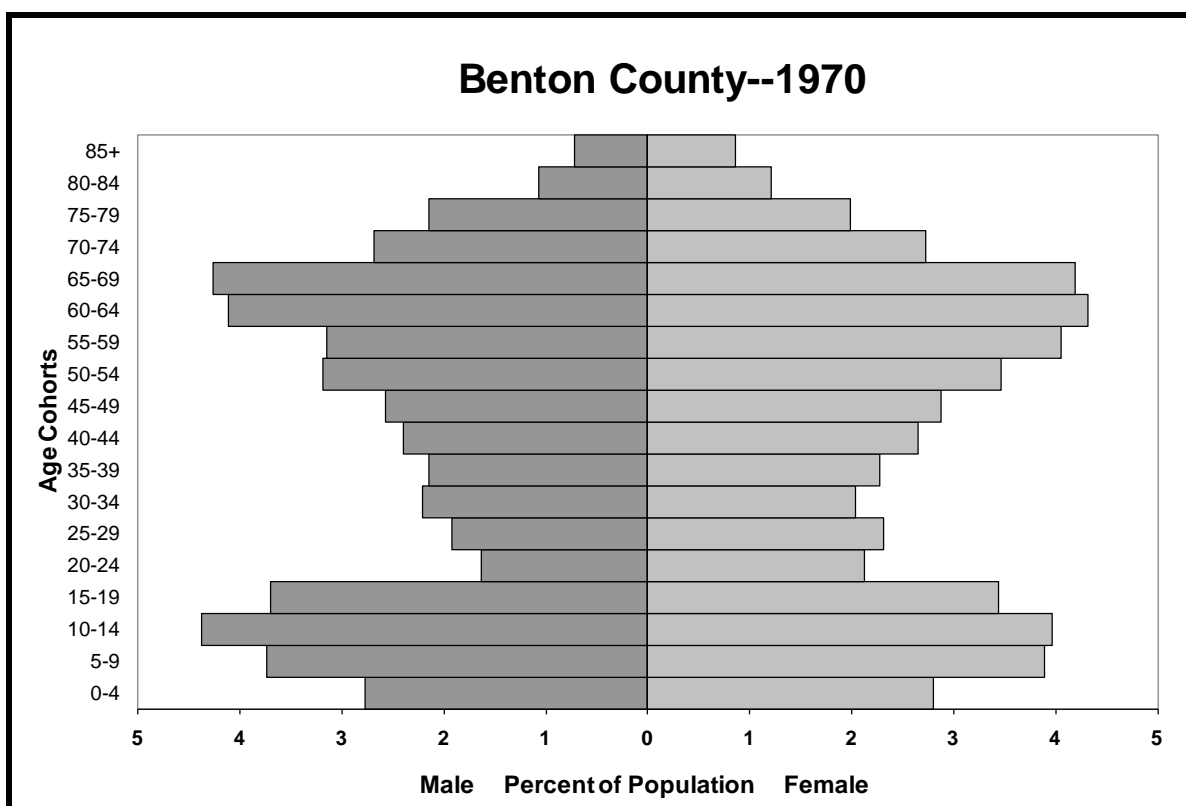


Figure 3-16. 1970 Population Pyramid for Benton County. (U.S. Department of Commerce, Bureau of the Census 1972).

The population pyramid for 1970 shows a very similar pattern to that of 1960 (fig. 3-15). This is slightly surprising because the very large numbers of “Baby Boomers” that should be showing up in the 5-9, 10-14, 15-19, and 20-24

year cohorts are not there. One can observe that the 20-24 and 25-29 year age cohorts have substantially lower populations than would be expected. Again, outside factors can help to explain this. The Vietnam Conflict would have involved a large number of males in the 18-25 year old groups, and the opportunities for tertiary education were located outside of the county. The major colleges and universities in Missouri would be particularly attractive to many males wishing to delay entry into the military and for females wanting to take advantage of enticements (such as preferential admissions and increased financial aid) for women to enter college. The total number of individuals under the age of 15 was 2,090 in 1970, or approximately 22%, a decrease of two percentage points. Those individuals 65 and over numbered 2,119, or slightly more than 22% of the population.

The construction of the Truman project was well underway by 1970, providing employment for numerous engineers, real estate appraisers, planners, construction managers, and construction personnel. One would expect a large working population to comprise a substantial portion of the county's total. However, the number of individuals in the 25-64 year age cohorts numbered only 4,428, or approximately 46% of the population. This percentage marks a decline from 1960 when the number of the working population was 47%, or 4,108. The construction of the Truman dam and facilities would certainly have

increased the population of workers in the county. What is shown here is a declining growth from natural increase and an increasing number of individuals moving into the county who are over the age of retirement.

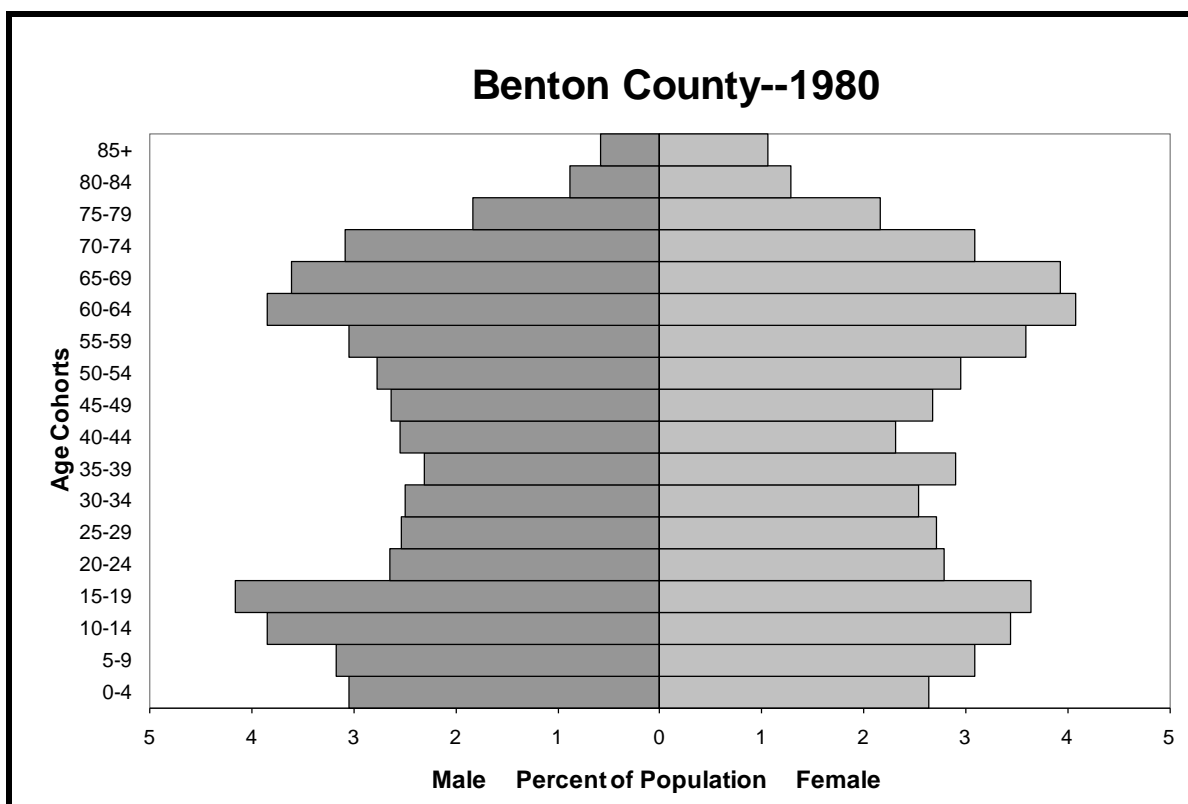


Figure 3-17. 1980 Population Pyramid for Benton County. (U.S. Department of Commerce, Bureau of the Census 1982).

The population pyramid for 1980 shows a continuation of decreasing numbers of young people and increasing numbers of older individuals. The “Baby Boomers” were not as noticeable as a significant population group in 1980. Their ages at the time of this census ranged from 16 to 36. The only cohort that is apparent from the “boomers” is 15-19. There is a continuation of several patterns: younger people leaving and few individuals returning upon receiving

their advanced education or completing their military obligation. In 1980, the population of those under the age of 15 comprised approximately 19% of the total with 2,346 individuals, and those 65 and older comprised nearly 22% of the total, with 2,624 individuals. As in the previous census period, more than 40% of the population was considered dependent; that is, not actively engaged in working and thus, not contributing significantly to the economy of the county with earnings and taxes. An increasing number of retirement-aged individuals continued to immigrate to the county.

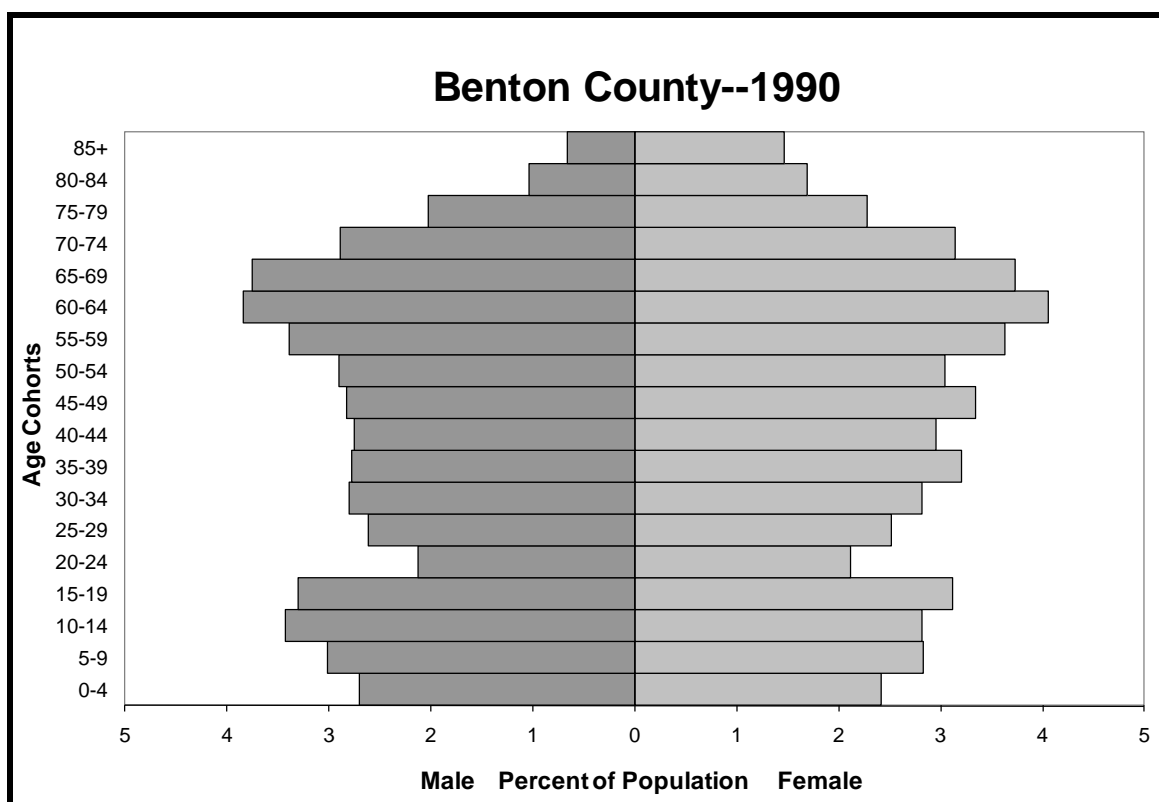


Figure 3-18. 1990 Population Pyramid for Benton County. (U.S. Department of Commerce, U.S. Census Bureau 1992).

In 1990, the population of the county reached almost 14,000 individuals. The pattern of an increasing proportion of the population of retirement age and decreasing proportion of the population found in the younger age cohorts continued. For 1990, the number of children under the age of 15 is larger in absolute numbers, but smaller in percentage--2,409 or 17%--than in 1980. Although there would be no need for drastic closing of the schools yet, the increase in numbers from the previous decade was significantly smaller than the increase in total population. The county increased 1,756 or 14.4%, while those under age 15 increased 63 or 2.7%. The population of those 65 and over totaled 3,160, an increase of 536 people or 20.4%. By now the "Baby Boomers," as a group, ages 26-46, were nearly unidentifiable on the pyramid. The population in the 20-24 year age cohort was significantly smaller than in the previous census (889 versus 600 ten years later).

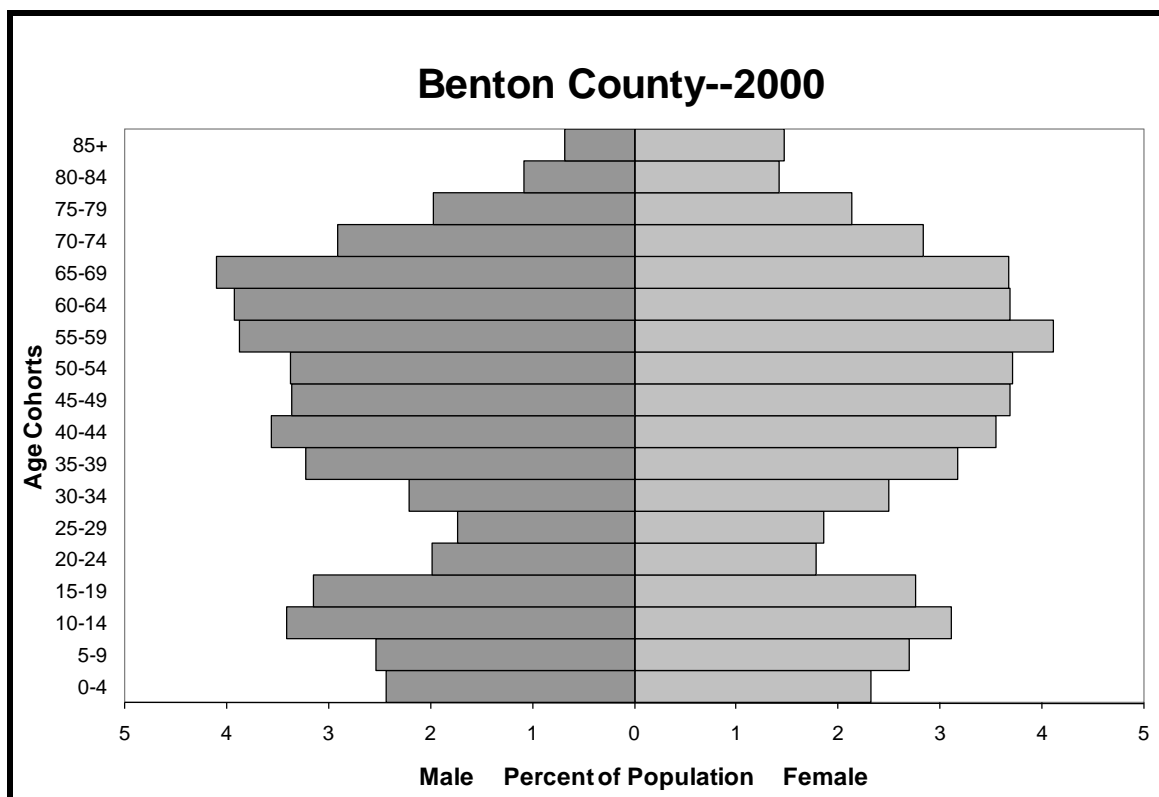


Figure 3-19. 2000 Population Pyramid for Benton County. (U.S. Department of Commerce, U.S. Census Bureau 2002).

By 2000, the population of Benton County had exceeded its previous high point in 1900. The character of the population reflects an ongoing increase in the older-age population cohorts, which comprised an even greater proportion than it had prior to the construction of the Truman project. By 2000, the population over the age of retirement constituted 23% of the population, with 3,828 members. Those under the age of 15 number 2,838, or 16.5% of the population. Again the population pyramid exhibits a significant decrease in the numbers of people between the ages 20-29. The “Baby Boomers,” by now aged 36-56, were

still not a definable group. The most definable group was those of retirement age.

The following conclusions may be made concerning the characteristics of the population changes for Benton County between 1960 and 2000:

1. Those individuals who graduated from high school have moved away in large numbers. The reasons vary from advanced education, military enlistment, job opportunities elsewhere, or perhaps even marriage to someone outside of the county.
2. Those individuals associated with the "Baby Boom" generation are not as definable as a group in this county by 1980.
3. Individuals of retirement age have moved into the county in large numbers. The reasons for this in-migration could vary from lower taxes, milder climate, return to the area of family, or retirement in an area where they had traditionally vacationed.

The one conclusion which may not be drawn from these data is that the Truman project is solely responsible for the changes in the demography of the population. The downward trend of population was reversed during the 1960s when the Truman project would have required the acquisition of large tracts of land, thus forcing the removal of a significant number of people. Even if those individuals had stayed after being bought out by the Federal government that

would not have led to an increase in population. The construction personnel, although present for the 1970 census, would not necessarily have remained once their jobs were completed. They would have either returned to the home office in Kansas City, Missouri, or possibly transferred to another duty station. Those local individuals hired for the construction, if they remained, would also not have increased the population after completion of the project. Therefore, there are many factors pointing to the in-migration of a significant number of individuals, especially of retirement age.

Another aspect of population is location. Benton County is divided into a total of eight townships. All of the incorporated communities are located in the four northern townships. In Table 3-4, the populations for the townships and the incorporated communities are listed for the five census periods. In Figure 3-20, the township populations are indicated for each of the censuses for the study period. It is notable that for 1960 and 1970 those townships through which U.S. 65 crosses had the largest populations. The southeastern and southwestern townships had the lowest population totals. Alexander Township in the far southwest had, and continues to have, the lowest population in the county. The northern townships are for the most part located in the prairie regions. Transportation routes are more direct and the soil conditions are more suitable

Table 3-4						
County Populations by Township and Incorporated Areas						
		1960	1970	1980	1990	2000
Benton County		8737	9695	12183	13859	17180
Alexander Township		445	273	274	360	380
Cole Township		541	768	1178	1510	1819
Fristoe Township		1048	1132	1601	1833	2212
Lindsey Township		1680	2169	2462	2990	4215
Warsaw City		1054	1423	1494	1696	2070
Tom Township		540	683	894	1375	1878
Union Township		557	593	1051	1082	1392
White Township		1744	1762	2034	1975	2244
Ionia Town		114	151	131	126	108
Lincoln City		446	574	819	723	1036
Williams Township		2182	2315	2669	2684	3040
Cole Camp City		853	1038	1022	1054	1028

Table 3-4. Benton County Population by townships, incorporated areas and census periods. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

for cultivation. Since 1960, only Alexander Township has lost population, which is probably due to land acquisition by the Corps of Engineers during the 1960s and 1970s and the resultant relocations required for the Truman project.

Those townships in which Warsaw and Cole Camp are located have the greatest populations, with more than 3,000 people each according to the 2000 census.

Many housing developments have been built in the southern townships and in areas either on, or next to, the Lake of the Ozarks in the east, or adjacent to

Federal and State land associated with the Truman project in the western areas.

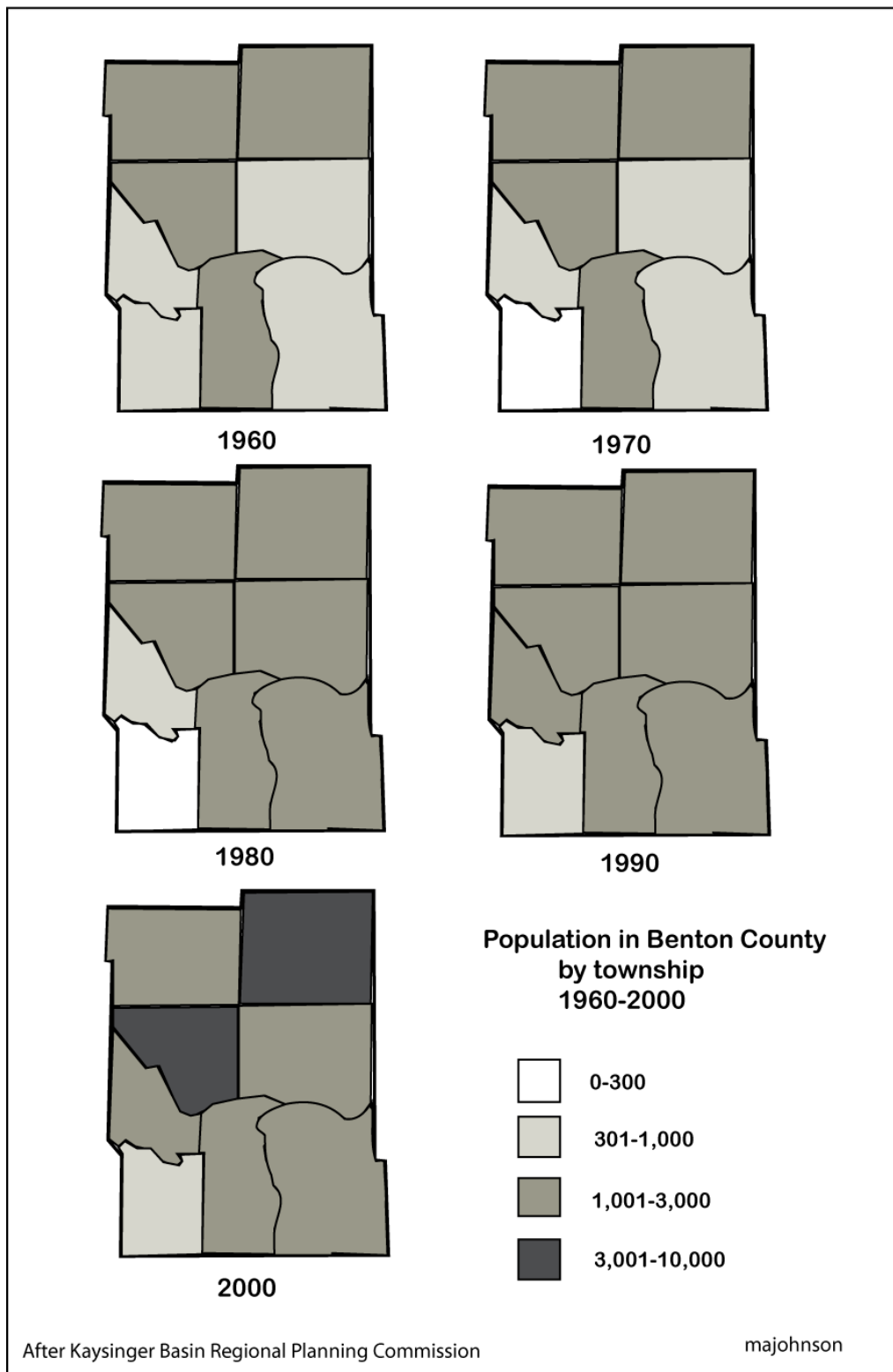


Figure 3-20. Population in Benton County by township, 1960-2000.

The southern townships located in the Ozark uplands provide scenic views and seclusion within the dense forest growth and, therefore, are attractive to vacationers and for year-round homes for those who are retired.

Changing business conditions: 1960-2000

Although Benton County was agriculturally oriented initially, it has already been shown that there was substantial manufacturing in the county during the time frame of this study. In addition, with the presence of the Lake of the Ozarks since the 1930s, the service sector, especially those businesses associated with tourism and water activities, would have augmented the existing businesses. The changes to the county's economy since 1960 can be better understood if discussed within the framework of the construction of the Truman project. Therefore, the time frame 1960-1965 will be regarded as pre-construction, 1966-1979 as construction, and 1980-2000 as post-construction. The data presented in the figures and tables below are derived from the analysis of the newspaper advertisements, want ads, sponsorship pages, special events, and holiday greetings in *The Benton County Enterprise*, a county-wide news source, and several census sources including, but not limited to, the Bureau of Economic Analysis regional and county profiles (available on-line), the U.S. Department of Commerce's 1960, 1970, 1980, 1990 and 2000 Decennial Census, *County Business*

Patterns, and the *Census of Agriculture*, initially published by the U.S. Department of Commerce and beginning with the 1990 census by the U.S. Department of Agriculture.

Benton County has historically exhibited substantially lower income levels than that experienced by Missouri in general. Figure 3-16 compares the median family incomes between 1959 and 2000. As can be noted, the increases are roughly parallel, thus indicating that the Truman project has had little if any effect upon the median income of families within Benton County.

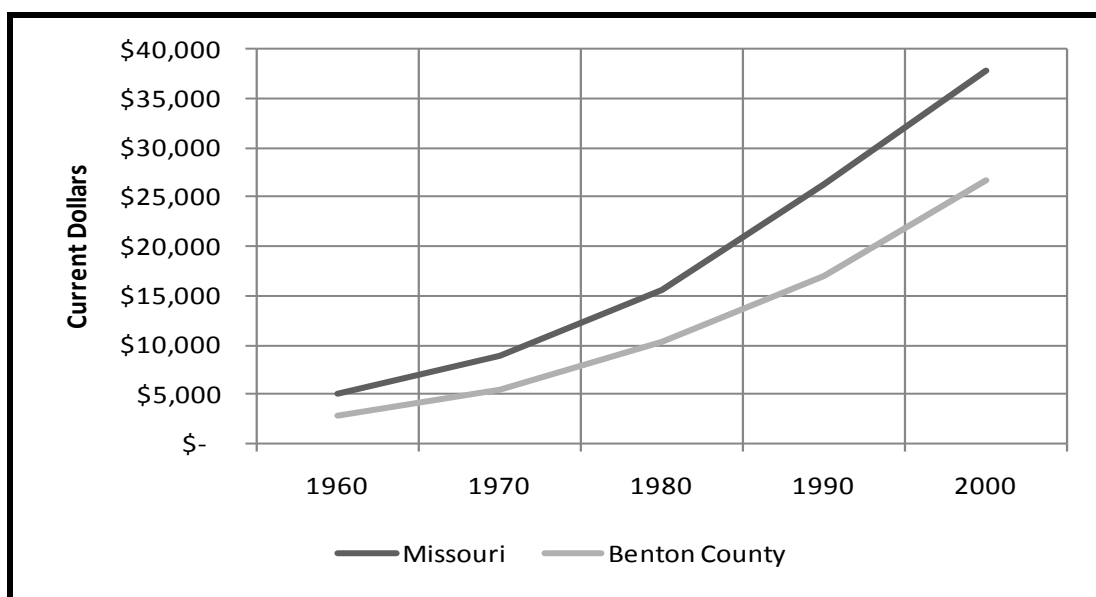


Figure 3-21. Missouri and Benton County median family incomes, 1960-2000. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1960, 1970, 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

Benton County's per capita personal income levels averaged approximately 68% of Missouri's level between 1969 and 2000. Although

fluctuating the most during the mid 1970s and mid 1980s, the per capita personal income levels did not necessarily respond to the influence of the Truman project, but rather to periods of fluctuating national economic events. As indicated in Figure 3-20, there is no discernible change as a result of the presence of the Truman project. Personal income levels rise generally at the same rate as those for Missouri and the United States.

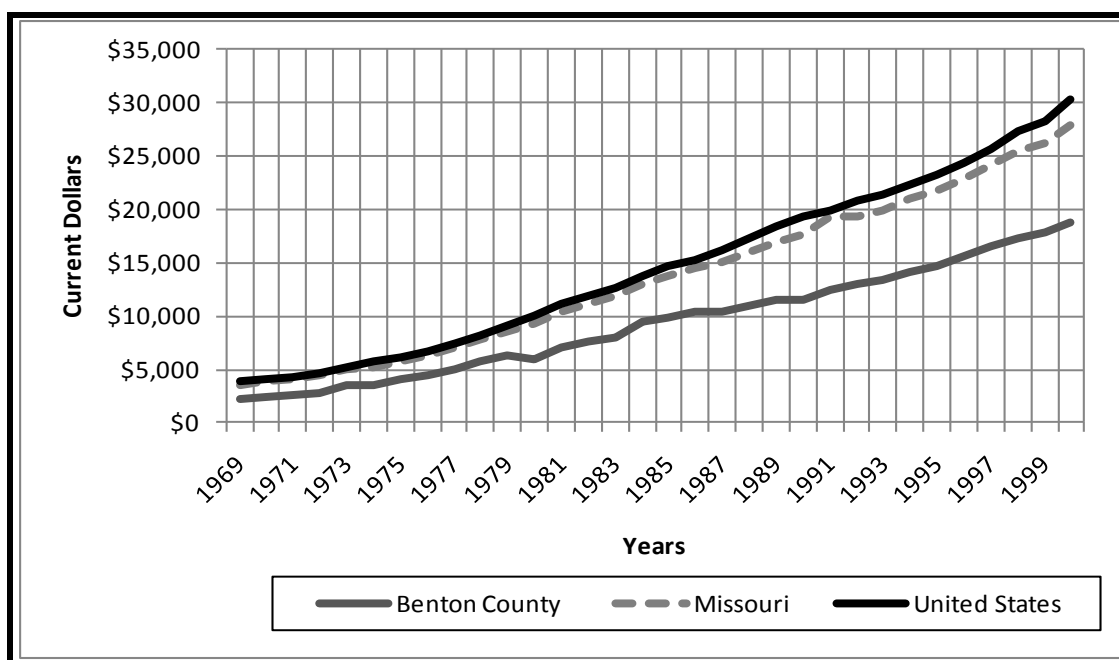


Figure 3-22. Relationship between Benton County, Missouri, and United States per capita personal income levels between 1969 and 2000. Source: U.S. Department of Commerce, U.S. Bureau of Economic Analysis 2009.

As indicated in the MERIC report, Benton County is a designated poverty center. The southeastern portion of the county is considered to be the most impoverished with the greatest portion of households having incomes less than \$25,000 per year in 2000. This area does not coincide with the Truman project,

but rather the Lake of the Ozarks. Figure 3-23 and Table 3-5 provide a comparison of the poverty rates for Benton County and Missouri for the years 1970-2000. As indicated on the graph, Benton County has had a higher rate of

Table 3-5				
Poverty Levels for Benton County and Missouri				
	1970	1980	1990	2000
Benton County	12.6	15.5	20.2	15.7
Missouri	11.5	12.2	13.3	11.7

Table 3-5. Poverty Levels in Missouri and Benton County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

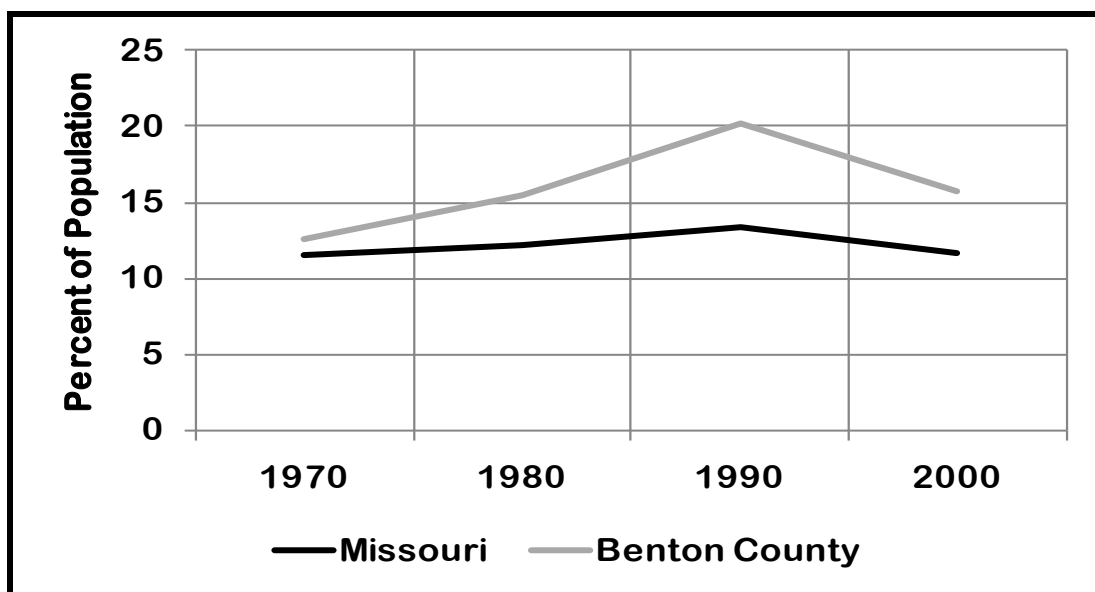


Figure 3-23. Poverty Levels in Missouri and Benton County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

poverty than Missouri, especially noticeable with the 1990 census when 20% of the population was designated as impoverished.

Agriculture.

Although Benton County had an agriculturally oriented economy for most of the twentieth century the importance of agriculture has diminished (fig 3-24). During the pre-construction period, the number of acres in farms was relatively stable at approximately 370, 000 acres. During the construction period (1966-1979) the acreage in farms fell, especially between 1964 and 1974. This period corresponds to that time when the Corps of Engineers was actively acquiring land for the Truman project. In Benton County alone, more than 50,000 acres were acquired for the Truman project, mostly in the southwestern portion of the county. During the post construction period, the number of acres in farms has continued to slowly decline, except between 1997 and 2002, when an additional 25,000 acres was returned to production.

Additional acreage may have been declared surplus by the federal government for areas not needed for the Truman project. Acreage may have been determined to be surplus by the State of Missouri for areas no longer needed for highway construction and management areas. In addition, acres previously taken out of production for housing or commercial development, may

now be farmed again. Regardless of the reason, more acres were being farmed in 2002 than previously.

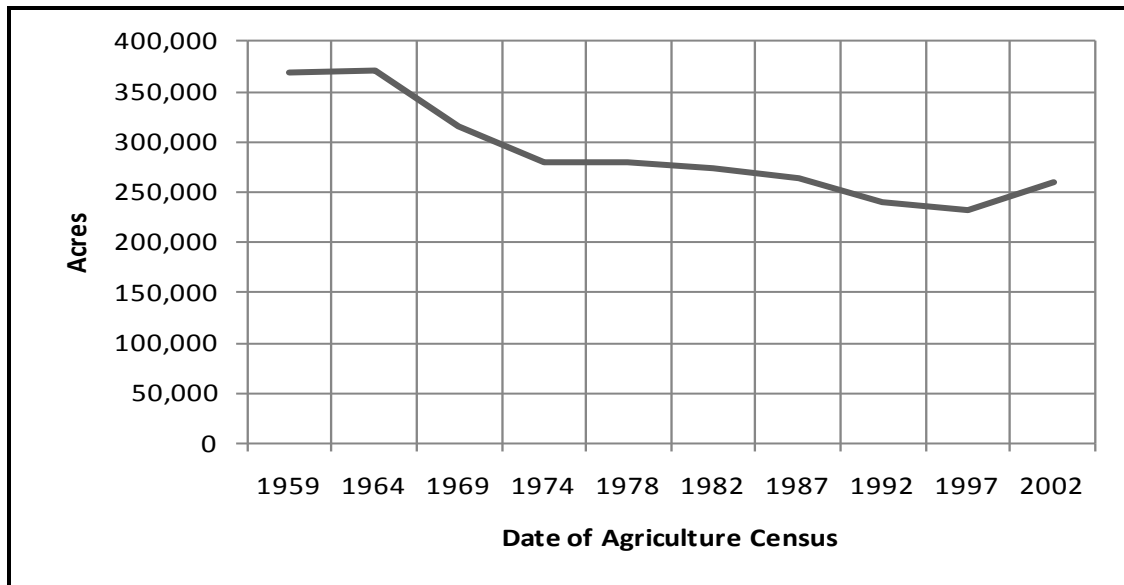


Figure 3-24. Number of acres in farms in Benton County. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The number of farms has also changed throughout the study period (fig. 3-25) as well as the average size of farm (fig 3-26). As indicated in the following figures, the number of farms has decreased and the average size of the farm has increased. The greatest decrease in the number of farms occurred during the construction period, specifically between 1964 and 1974. The number of farms decreased by more than 300 during this period, which coincides with the time frame when the Corps of Engineers was purchasing land for the Truman project. During the post-construction period, the number of farms has remained

relatively stable, with no major increases or decreases during any one 5-year period between the censuses.

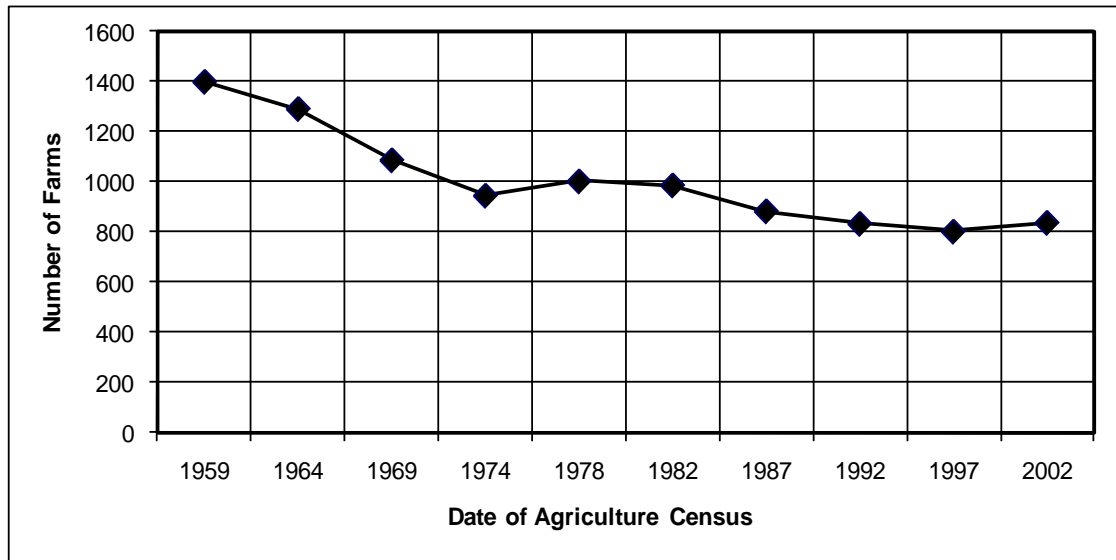


Figure 3-25. Number of farms in Benton County between 1959 and 2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The average size of the farm in Benton County increased between 1959 and 2002. This increase is similar to that exhibited in the entire state of Missouri during the same period of time. While the average size of a farm in Missouri increased by 83 acres during this period of time, the Benton County farm only increased by 45 acres. There was no major adjustment to the size of farms during the construction period as exhibited by the number of acres farmed. The Truman project has had no effect upon the size of the average farm located in Benton County.

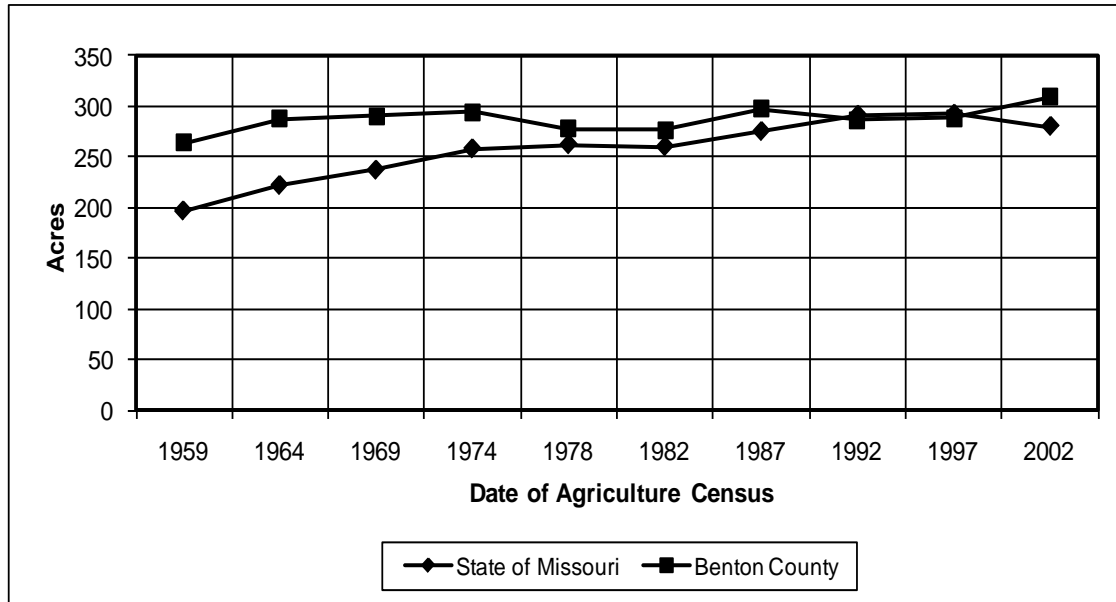


Figure 3-26. Missouri and Benton County average farm size during the period between 1959 and 2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

Non-Farm Businesses.

During the pre-construction period, the number of individuals either employed or self-employed was approximately 3,200 (U.S. Department of Commerce, Bureau of the Census 1962). The number of businesses employing an average of more than 650 individuals ranged from 169-185 (U.S. Department of Commerce, Bureau of the Census 1960, U.S. Department of Commerce, Bureau of the Census 1963, U.S. Department of Commerce, Bureau of the Census 1965, U.S. Department of Commerce, Bureau of the Census 1966).

By far the largest number of employees, and consequently the greatest payroll, was in the area of retail. The average annual payroll for retail during the pre-construction period was approximately \$614,000, with an average of 246 employees working in 80 different businesses. The second largest employer was in the area of manufacturing. Approximately 160 employees on average were employed in 7-9 companies and received an annual payroll of approximately \$518,000. Businesses associated with services (both professional and personal), wholesale trade, finance (including insurance and real estate) and transportation (including public utilities) each had approximately 50 individuals employed. However, the payroll for these four groups of businesses varied greatly, with services averaging the least at less than \$100,000 per year and wholesale trade averaging over \$275,000 per year. Agricultural support services, mining and contract construction businesses were represented but did not exhibit major fluctuations in activity levels, number of employees, or size of payroll from year to year

Several similarities exist between the reports of the Bureau of the Census and the businesses advertizing in the *Benton County Enterprise*. One noticeable similarity concerns the service sector. Benton County historically has not had a hospital. This lack of a central medical facility and the accompanying medical personnel would help to explain the low payroll in the service sector. Although

doctors (MDs and DOs) and hospitals did not advertize during the 1960s through the 1980s, announcements concerning office hours, new office locations and extended leaves, normally appeared in the local newspaper. During the pre-construction period this did not happen. The only medical professionals who advertized were chiropractors, dentists, optometrists, and audiologists. However, often these advertisements were associated with times of availability within the community. These individuals may not have employed any assistants, therefore, they would not appear on the records of the Bureau of the Census.

During the pre-construction period, the number of construction businesses increased (fig. 3-27). Although few advertized in the newspaper, these businesses made themselves known. During the 1960s, housing developments such as White Branch, located southeast of Warsaw across the Lake of the Ozarks, began. Most of the businesses that advertized were either general construction, or associated with an identifiable trade such as plumbing, electricity, and heating.

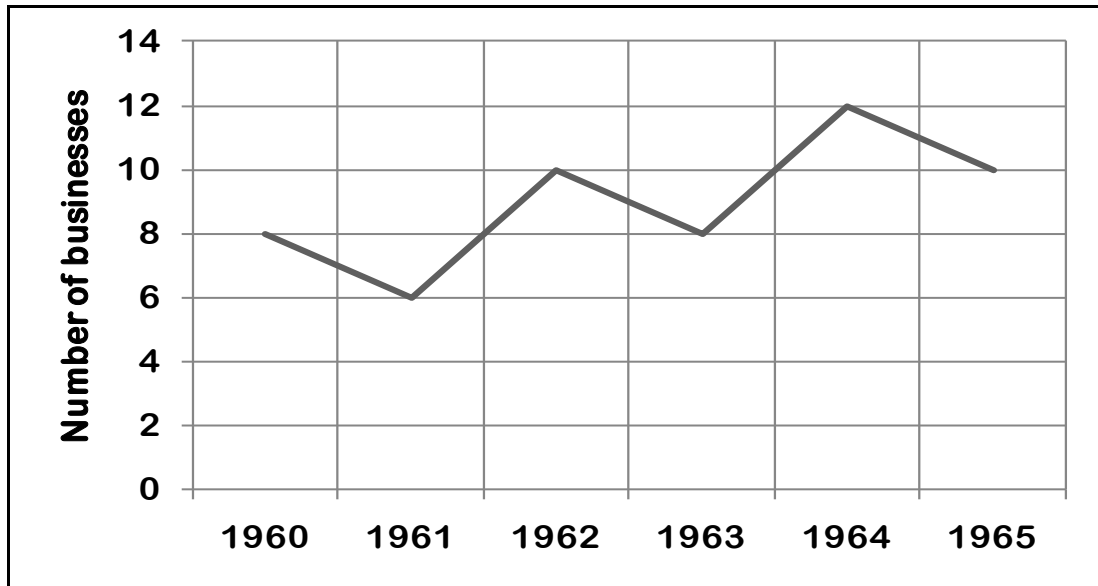


Figure 3-27. Contract Construction businesses which were advertized in the *Benton County Enterprise*, 1960-1965.

The construction period, from 1966-1979, was noticeably different in Benton County. As stated earlier, the building of the dam, powerhouse, and a majority of the project related facilities occurred here. These facilities included a 7,500 foot long dike parallel to U.S. Highway 65 (Sterret Creek Dike) plus several elevated road structures across the Osage River Arm of the Lake of the Ozarks, and new bridges and highways constructed by the State of Missouri for the transportation system around Warsaw. U.S. Highway 65 and state highways 7 and 83 required enlarged bridges and roadways to accommodate the anticipated tourist traffic associated with the Truman project. During the late 1970s, the construction of the public use areas and visitor center also affected the businesses within Benton County.

During the fifteen year construction period, retail trade once again had the largest number of employees, but not the largest payroll. Contract construction had the highest payroll with half as many employees, leading to the conclusion that during this period on average the construction worker was paid significantly more than the retail worker. The payroll also varied greatly from year to year, as shown in Figure 3-28. Although not heavily advertized in the *Benton County Enterprise*, the number of individual construction businesses advertizing almost doubled by the end of 1979 (fig. 3-29). The actual number of construction businesses, however, nearly quadrupled by 1979 (fig. 3-30). These businesses included general contracting, excavating, well drilling, concrete foundation work, roofing, electrical, heating, and plumbing firms. Some of the businesses were related to heavy construction, such as concrete work, while others were geared for the construction of new homes, including manufactured (mobile or modular) housing. It was also during this period that the number of supply businesses which support construction (lumber yards and hardware stores) increased (fig. 3-31).

Manufacturing increased during this period. By the end of the construction period, the number of manufacturing firms had nearly doubled. The steady increase in the number of firms also reflected a steady increase in the number of employees and the increases to payroll (fig. 3-28).

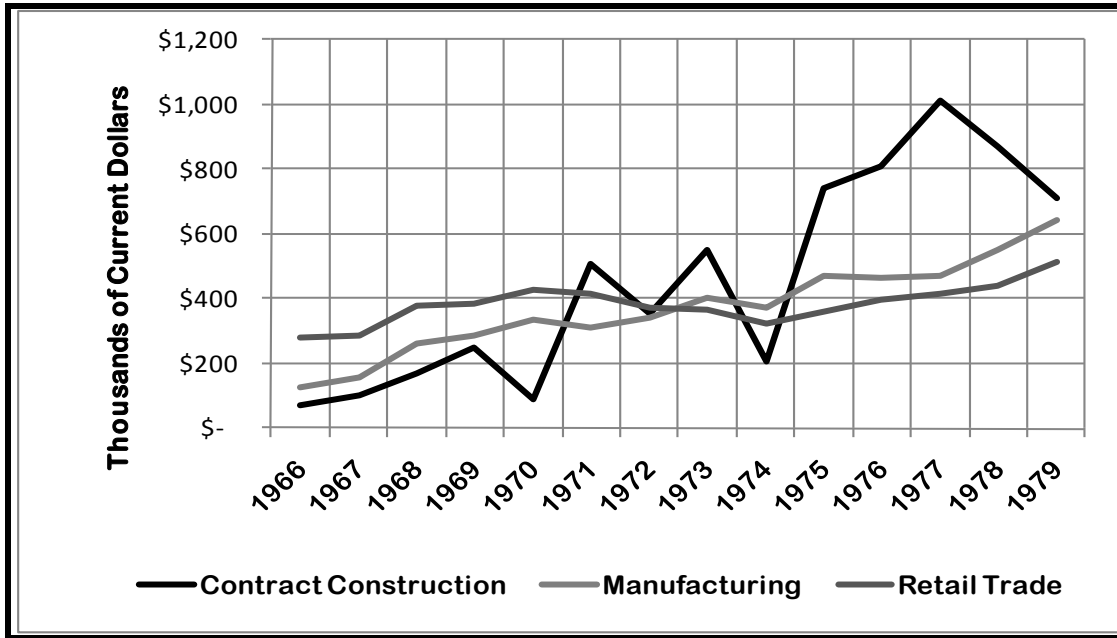


Figure 3-28. Comparison of payrolls for Contract Construction, Manufacturing, and Retail Trade during the construction period, 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri*, 1966 through 1979.

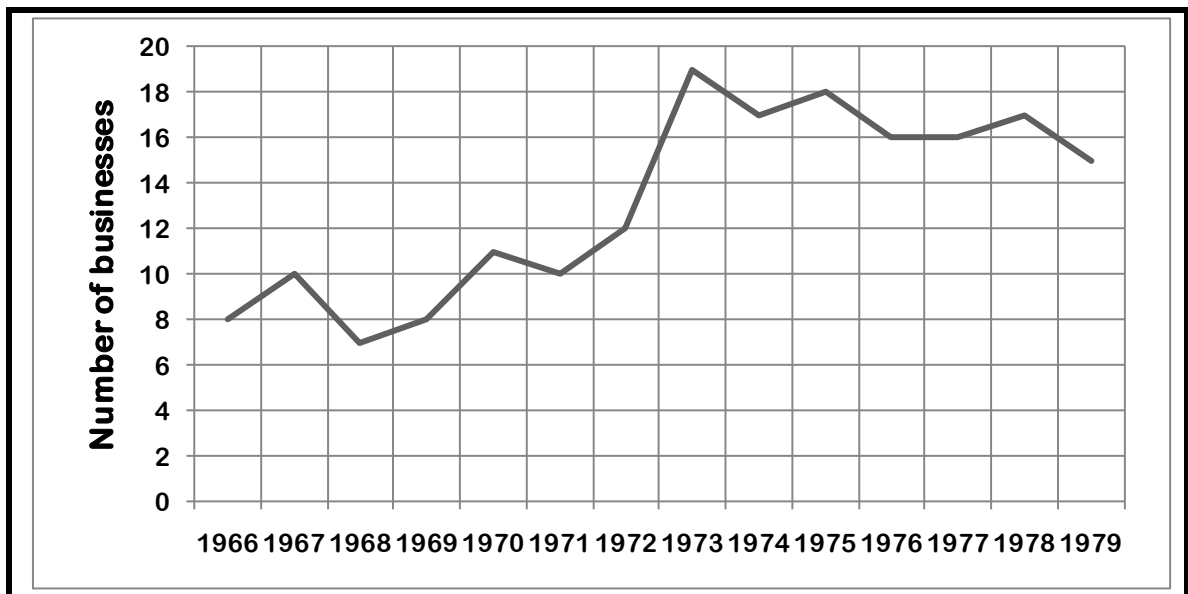


Figure 3-29. Number of contract construction businesses advertizing in the *Benton County Enterprise* during the construction period, 1966-1979.

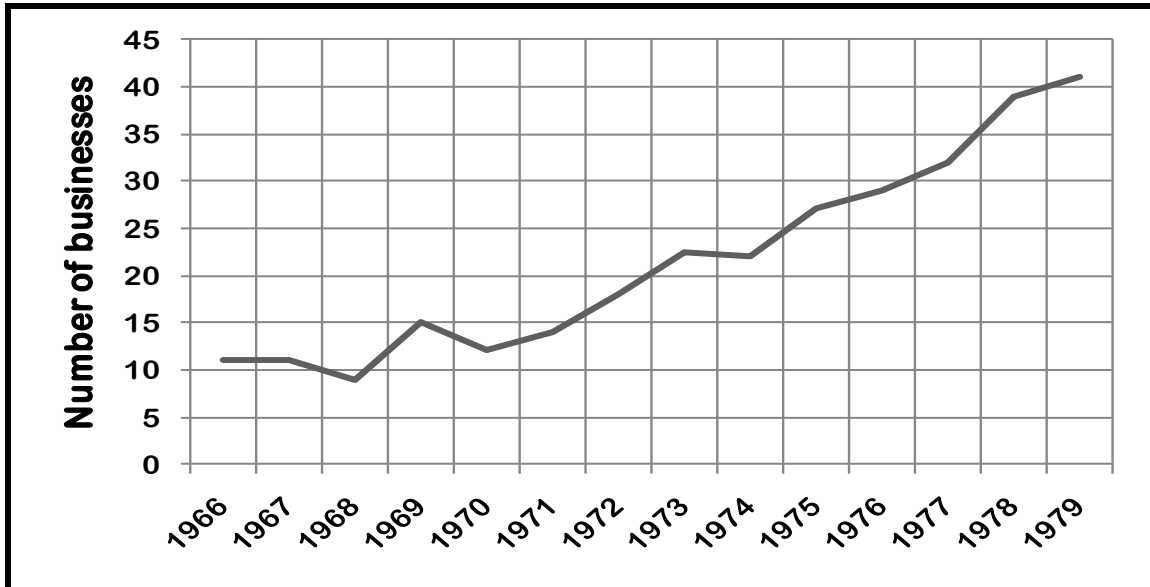


Figure 3-30. Number of contract construction businesses reported in the *County Business Patterns* for Missouri during the construction period, 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri, 1966 - 1979*.



Figure 3-31. The lumber yard in Mora, located in northeastern Benton County. Photo by author.

The number of restaurants and companies catering to the needs and desires of tourists increased. Numerous antique and craft businesses opened, not only within the city limits of Warsaw, Lincoln, and Cole Camp, but also outside the incorporated areas and in smaller communities.

With the increasing number of people in the county, it is surprising that the number of service related businesses did not increase as rapidly (fig. 3-32). The number of businesses and employees did increase by 40 percent which would indicate the opening of new businesses rather than the expansion of existing businesses. It is noteworthy that it was during the construction period that the first national food service franchise is seen in Benton County. Pizza Hut opened facilities in both Lincoln and Warsaw along U.S. Highway 65 (fig. 3-33). Restaurants and lodging along state highway 7 in the western portion of the county are locally owned and not related to any national franchise.

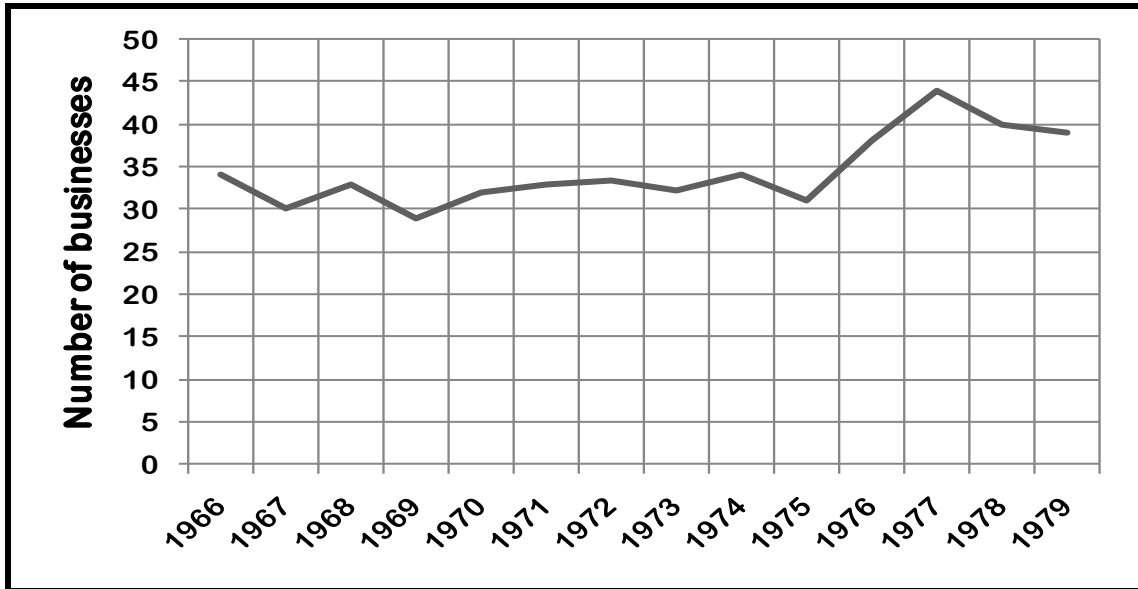


Figure 3-32. The number of service related businesses in Benton County during the construction period, 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri*, 1966 through 1979.



Figure 3-33. The Pizza Hut in Lincoln, Missouri, along U.S. Highway 65. Photo by author.

The number of finance (includes real estate and investments) businesses increased by almost 50% during the construction period (fig. 3-34). Most of the new businesses within this category were related to real estate. This does not seem unlikely, as the population of the county continued to increase, and the number of developments outside incorporated communities such as at Pom-o-sa, Blue Branch, and Teal Bend also continued to increase. Additional developments near the Lake of the Ozarks continued to expand. The land acquisitions of the Corps of Engineers in Benton County were, for all practical purposes, completed by 1975. Most real estate transactions after that time took place in the western portions of Henry and St. Clair Counties and eastern Bates and Vernon Counties. The number of banking institutions increased during this period, as well as investment companies and insurance agencies.

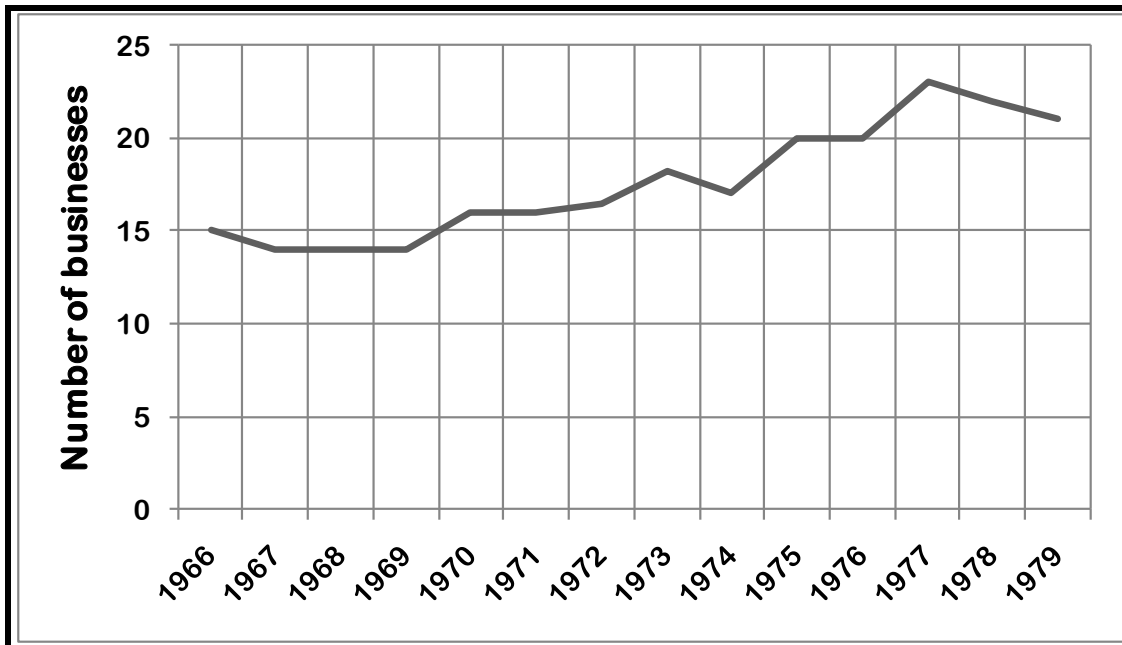


Figure 3-34. Number of financial, insurance, and real estate businesses in Benton County during the construction period, 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri 1966-1979*.

After the completion of the Truman project, Benton County's population continued to increase. Along with that increase came an expanding number of businesses located mostly along the major highways bringing visitors to the Truman project and the Lake of the Ozarks. Within Benton County, there are four public use areas with marinas. Many businesses located themselves along routes to those larger public use areas, taking advantage of tourist traffic. It is not unusual, then, to expect that the number of businesses might increase and the number of businesses trying to capture the tourist dollar would also increase.

The number of businesses geared to meet the needs of the remaining farmers appears to be steady based upon the number advertizing in the *Benton County Enterprise* (fig. 3-35). The census data for these businesses were

surpassed in the *County Business Patterns*, primarily to avoid reporting confidential data. As the number of farms decreases, this situation would seem likely to continue in the future. Farmers would be able to get the supplies necessary in neighboring counties, or in the community of Sedalia, located north about 30 miles from Warsaw.

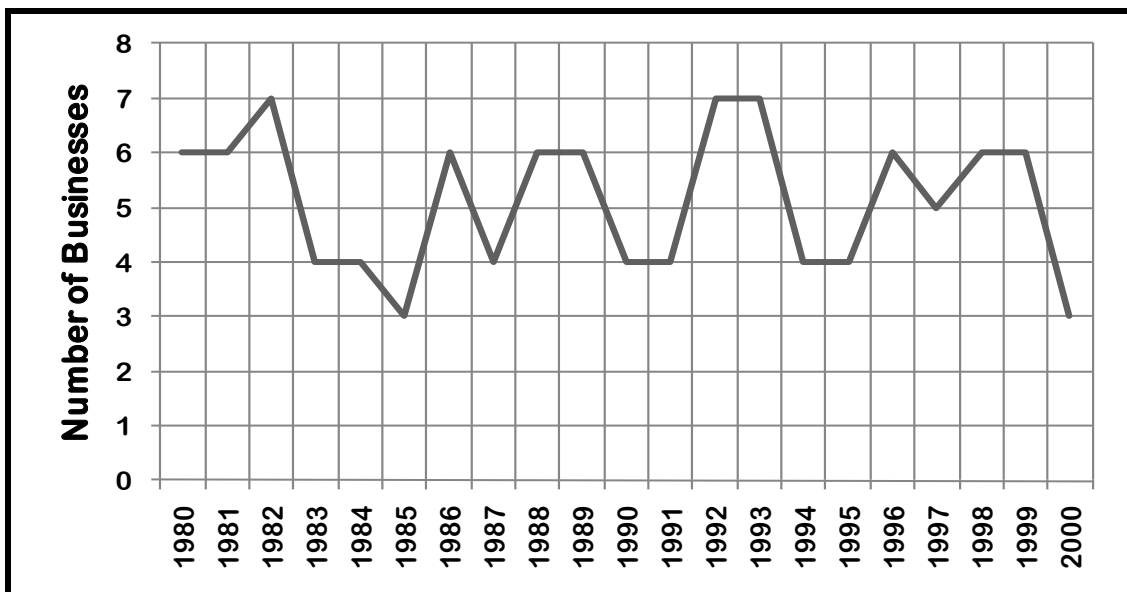


Figure 3-35. The number of agriculture support businesses advertised in the *Benton County Enterprise* during the post-construction period, 1980-2000.

The four largest sources of employment and payroll for Benton County come from contract construction, manufacturing, retail trade and services. As illustrated in Figure 3-36, the total number of businesses for these four categories continues to increase. The number of manufacturing firms increases modestly. The number of retail businesses peaks in 1994 and begins to decline with a modest increase between 1998 and 2000. Contract construction businesses continue to increase, showing approximately a 50% growth. The county's

population continues to increase. Numerous building projects were completed during this period of time. The construction industry would seem to be faring well. The greatest amount of growth in numbers of businesses is in services. This would seem logical considering the growth of the county's population.

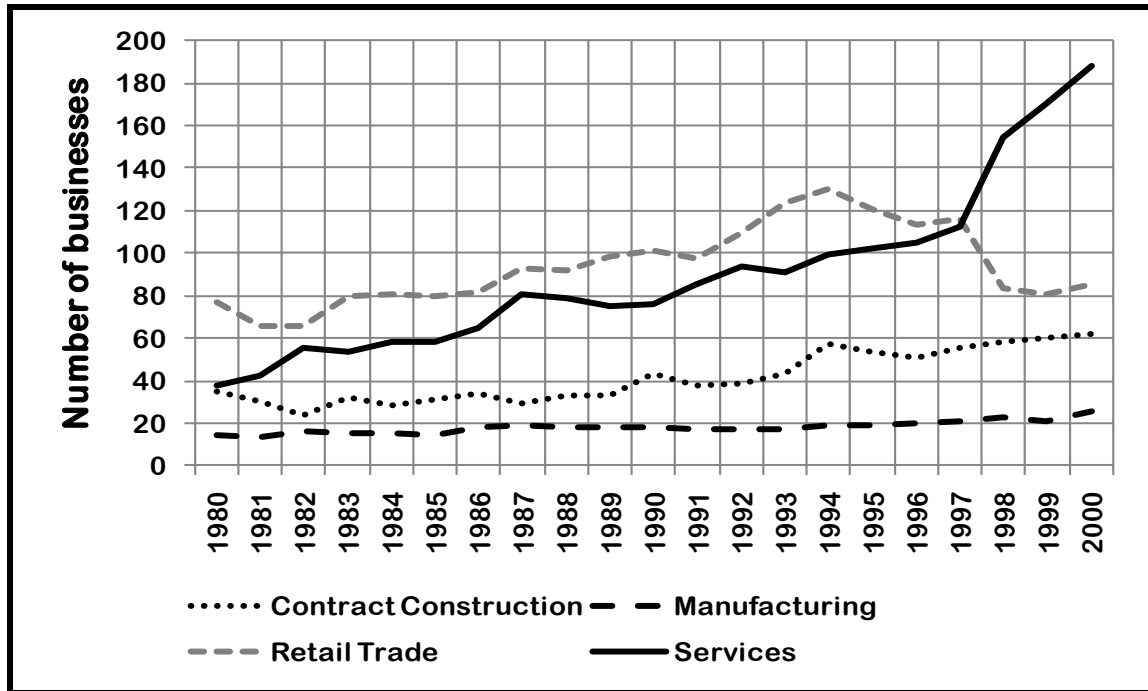


Figure 3-36. Number of contract construction, manufacturing, retail trade, and service businesses in Benton County during the post-construction period, 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri* 1980 through 2000.

Healthcare businesses fall in the service category. The increasing number of healthcare related businesses advertizing in the *Benton County Enterprise* (fig. 3-37) would seem logical, especially in light of the increasing population of the county and the increasing number of retirees who were apparently migrating into the county. These facilities were more in demand during the post

construction period because of the changing character of the population. Many of the newer facilities were associated with the regional hospitals in Sedalia (Bothwell) and Clinton (Golden Valley). In addition, new clinics with physicians advertizing their specialties were now common. It was no longer unacceptable for physicians and hospitals to advertize. Competition between the hospitals was obvious through their advertizements. In addition, both hospitals were emphasizing clinics and specialists in the areas of weight management, smoking cessation, physical therapy, and neurology.

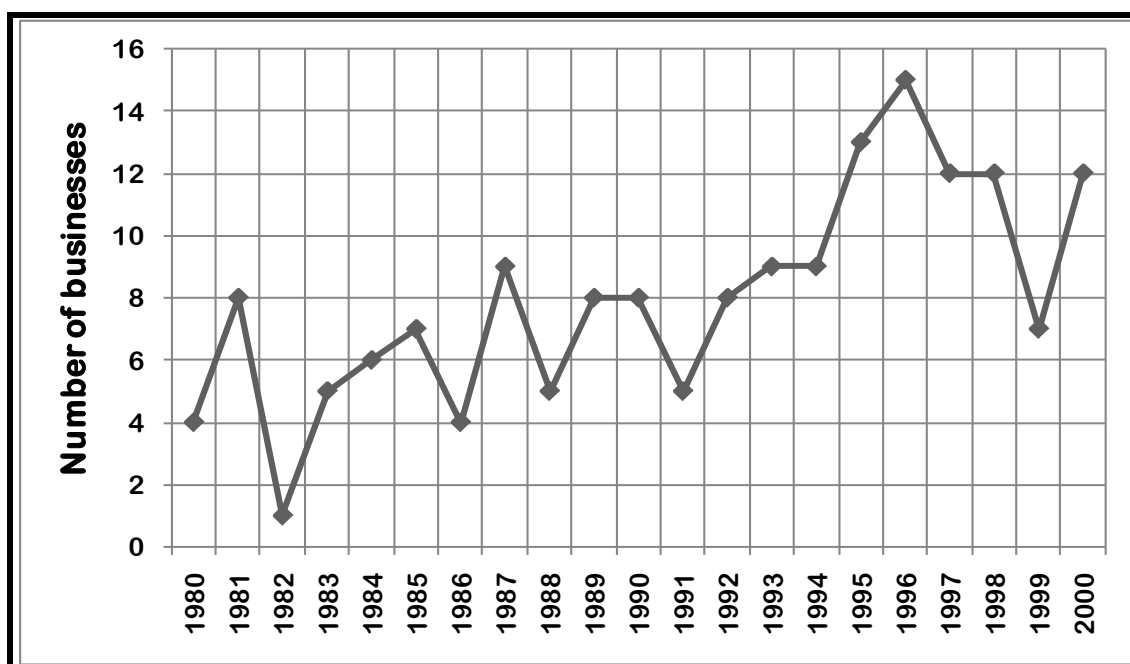


Figure 3-37. Number of healthcare related businesses advertizing in the *Benton County Enterprise* during the post-construction period, 1980-2000.

The number of employees in the services also increases greatly, especially in 1997 as indicated in Figure 3-38. This increase in numbers of employees also translates into a very large payroll. The service and retail trade categories have

the largest payrolls in the county (fig. 3-39). Again the increasing population would seem to be a driving force for this. In addition, the increased number of tourists traveling along U.S. Highway 65 from the north to Truman, Lake of the Ozarks, and the southern Missouri lakes would be an additional source of revenue. Warsaw and Lincoln developed their business areas along U.S. Highway 65. The introduction of large box-stores such as Wal-Mart have reduced the need for many smaller businesses, such as clothing stores, grocery stores, and pharmacies. In the case of Warsaw and Cole Camp many new businesses such as novelty stores, antique and curiosity stores have opened. The downtown areas in both of these communities are almost theme-oriented, attracting those tourists seeking a shopping experience in a quaint community with authentic ethnic food (Cole Camp) (fig. 3-40) or crafts and antiques (Warsaw and Cole Camp) (fig. 3-41).

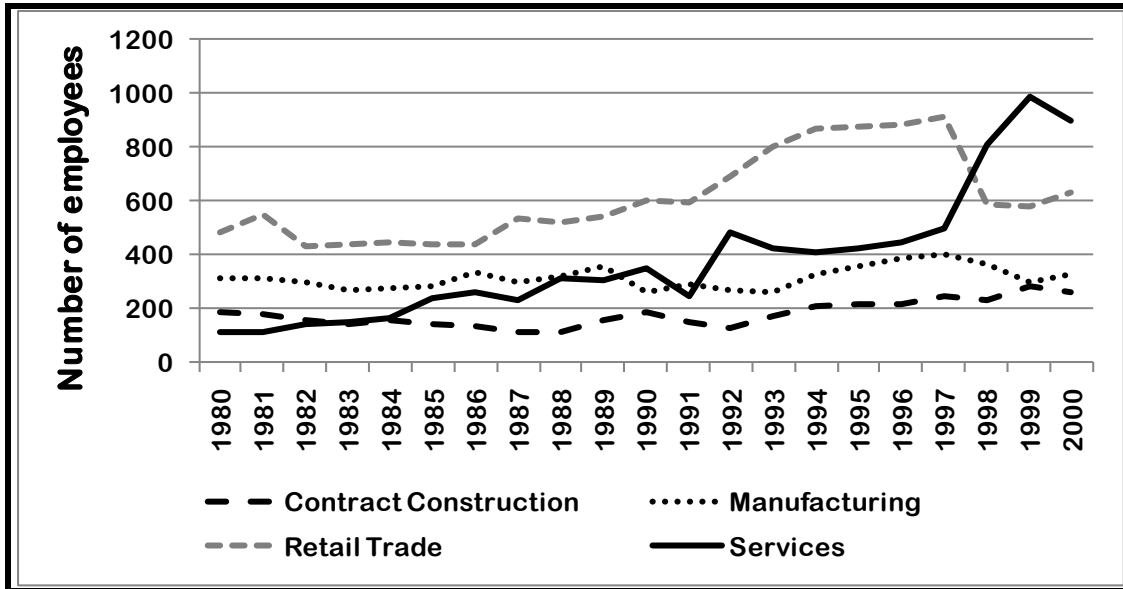


Figure 3-38. Number of employees in contract construction, manufacturing, retail trade and services in Benton County during the post-construction period, 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri* 1980 through 2000.

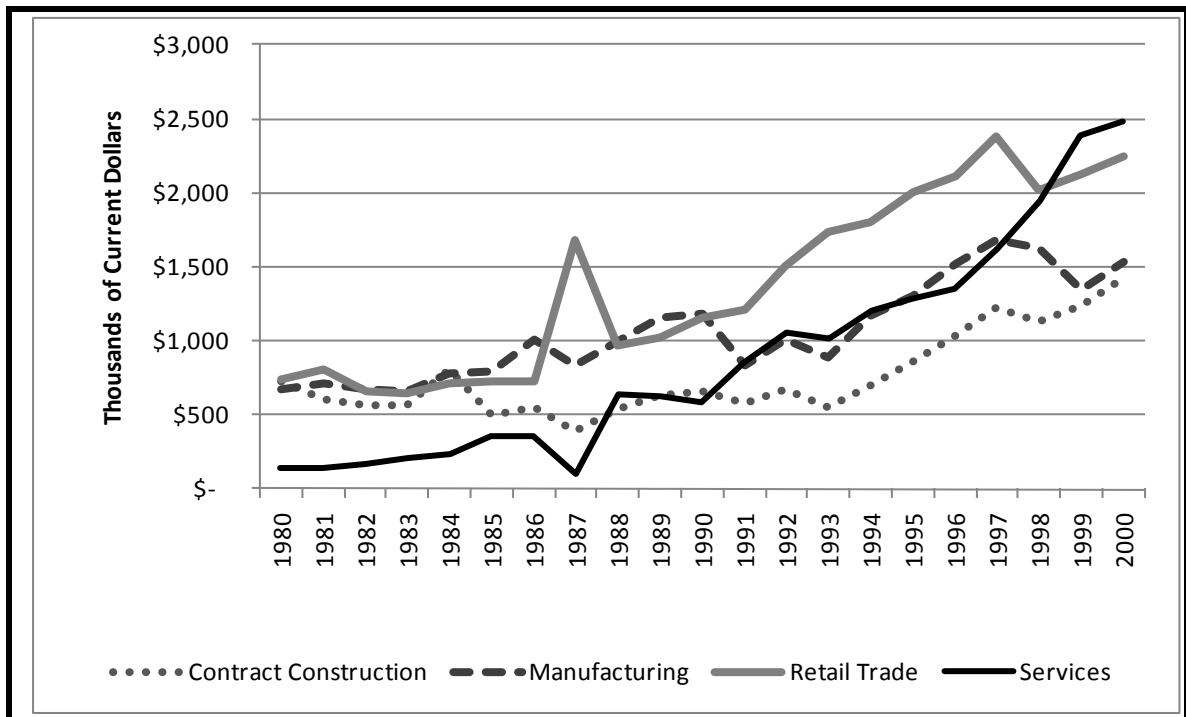


Figure 3-39. Annual payroll for contract construction, manufacturing, retail trade and services in Benton County during the post-construction period, 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns, Missouri* 1980 through 2000.



Figure 3-40. Handel Haus, ethnically identified business in downtown Cole Camp. Photo by author.



Figure 3-41. Main Street (Old Highway 7) in downtown Warsaw. Photo by author.

Concluding thoughts based upon the above information, several possible conclusions may be drawn concerning the effect of the Truman project upon the business structure of Benton County.

1. Personal income and median household income for Benton County during the study period remained fairly constant in relation to the figures for Missouri and the United States. Benton County's personal income remains about 68% of that of Missouri, and approximately 63% of that for the United States. Since these amounts were relatively constant throughout the study period, the effect of the Truman project would be considered minimal.
2. The reduced number of farms and total acres in farms between 1964 and 1974 in Benton County was the direct result of the Truman project. More than 50,000 acres of land were purchased in Benton County. Most of the land acquired by the Corps of Engineers was in agricultural production. However, the continuing reduction in the number of farms and the increased size of farms is more of a trend that is characteristic of agricultural lands in the state of Missouri.
3. The largest employers in the county remained relatively constant. Contract construction, manufacturing, and retail trade all contributed

significantly to the employment opportunities in Benton County, as well as to the overall payroll dollars. One category of business which exhibited tremendous growth was the service businesses. This was especially notable during the mid to late 1990s. The rapid increase in the number of businesses led to many employment opportunities, and tremendous growth in the payroll for the county. Part of this increase was due to the rapid increase in the number of healthcare related businesses. The major increases in services and retail trade would be the direct result of an increasing population. That increasing population could possibly be related to the presence of the Truman project.

Changing tax structure: 1960-2000

Understanding the changes to the primary sources of county government revenue can assist in determining the effects of the Truman project upon the local governments. The general operation of Benton County had been financed primarily by the collection of property taxes. A portion of the property taxes collected are also specifically designated as the major source of funding for the school districts and road and bridge districts within the county. These taxes were based upon the assessed valuation of property. As land in the assessment

pool decreases, the total valuation for the county should also decrease unless one or both of the following happen: 1) an increase to the valuation of the remaining properties, or 2) an increase in development which increases the property value to a higher use and an increase in the assessment valuation occurs.

During the pre-construction period, the valuation for the county increased slightly every year (fig. 3-42). This increase was probably related to changing land use, from agriculture to housing or business. Beginning with the construction period, the actual valuation increases but when converted to the 2000 dollars, a different pattern results. The assessed valuation is trending downward. This represents the period of real estate acquisition by the Corps of Engineers for the Truman project and by the State of Missouri for improvements to the transportation network in Benton County. During the post construction period, the downward trend continued until 1985 when a reassessment took effect. The assessed valuation increased by \$29,000,000 which represented a 68% increase in land assessment values approximately. Since the reassessment, the trend in valuation steadily increased until 1999, with a modest decrease in 2000. The increases were probably associated with the increased number of businesses within the county, as discussed in the previous section, and the increase in housing as evidenced by the increasing population of the county.

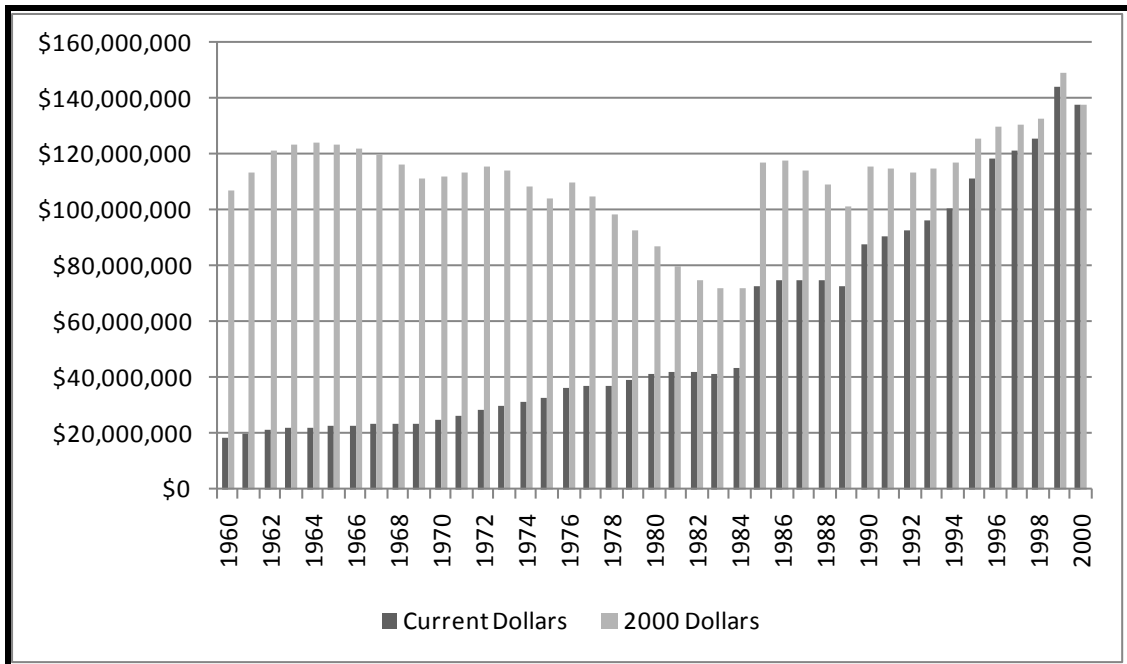


Figure 3-42. Comparison of assessed valuation between current dollars and 2000 dollars. Source: Annual financial statements published in the *Benton County Enterprise* in the spring of the subsequent year.

During the pre-construction and construction periods, the collection of property taxes in Benton County remained relatively constant with a few spikes occurring in the mid and late 1970s, which related more to the collection of back taxes than current taxes. A probable cause of this situation would be the transfer of property and payment of back taxes as a requirement of that sale (fig. 3-43). It is notable that the amount of land/property being taxed would decrease during the construction period, but the county was able to maintain property tax collections at a relatively constant level in spite of the removal of property from the tax rolls by the federal government.

Although the property was reassessed in the 1980s after the completion of the Truman project, during the pre-construction and construction periods an increase in the collection of property taxes did not occur; in fact, there was a decrease for a period of approximately five years. Beginning in the 1990s there was a gradual increase in the collection of property taxes.

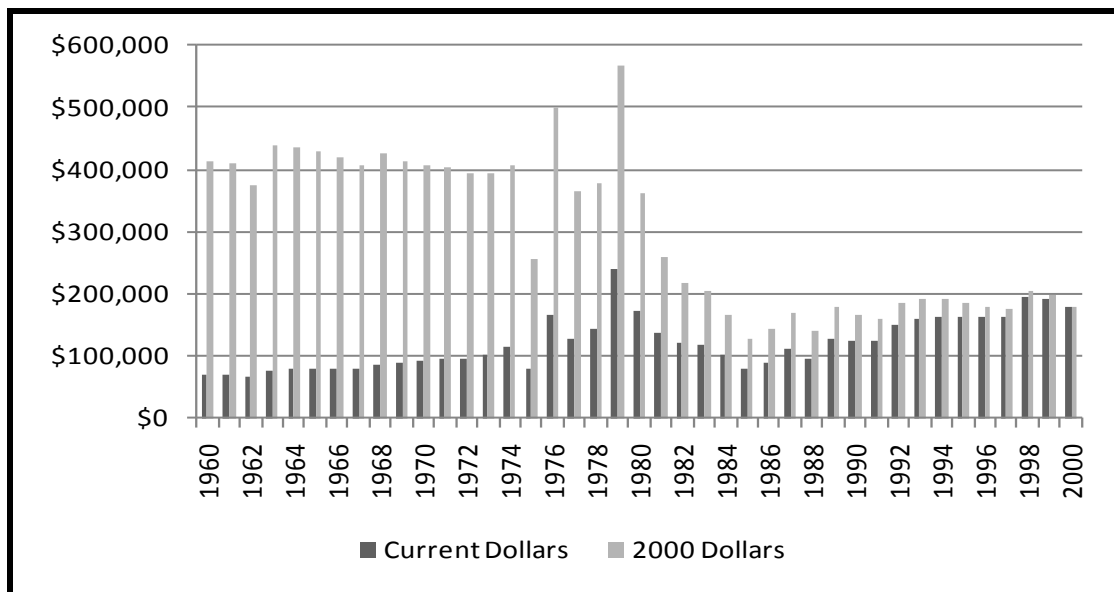


Figure 3-43. Property taxes collected both in current and 2000 dollars for the period 1960-2000. Source: Annual financial statements published in the *Benton County Enterprise* during the spring of the subsequent year.

The total receipts collected by the county remained relatively constant during the pre-construction period (fig. 3-44). The construction period saw much more fluctuation in the collection of revenues for the county's general fund. This inconsistency probably related to the inability of the county to effectively collect taxes. However, with the completion of Truman and the 1985 reassessment the collection of revenues continued to increase. This is interesting since property

tax revenue did not increase. The increase in fund collection relates to the collection of a sales tax beginning in 1980, just as the Truman project was completed (fig. 3-45). With the completion of the project, there was an anticipated increase in the number of people coming through the county. The collection of the sales tax would assist the county in maintaining infrastructure and services. This new source of revenue has increased consistently throughout the post construction period. The trend increases during the 1990s in comparison to the 1980s, which probably relates to the relative health of the U.S. economy and the availability of disposable income of the average tourist.

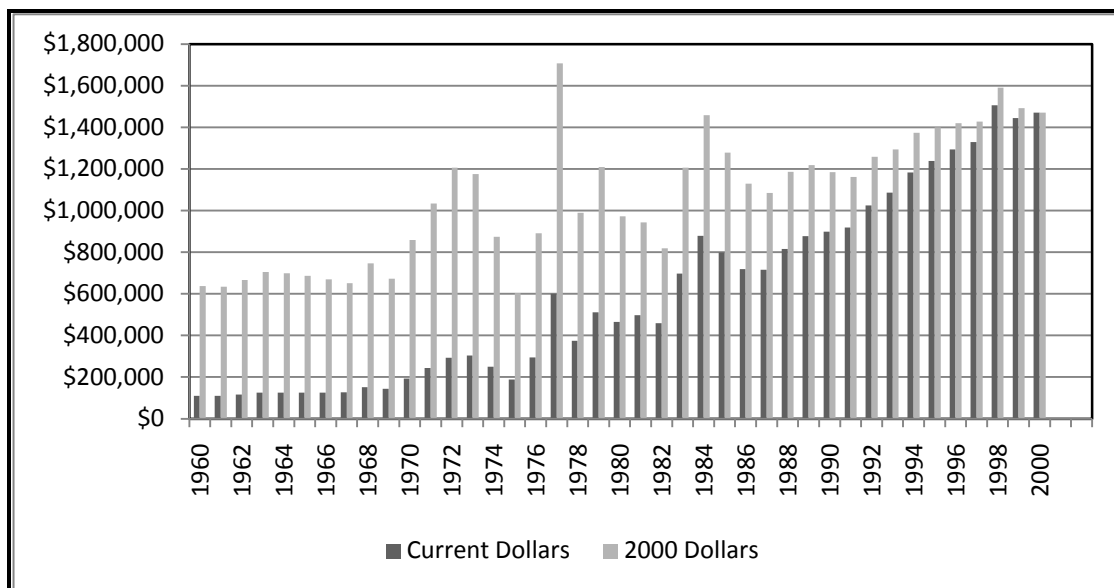


Figure 3-44. Total receipts for the county general fund in both current and 2000 dollars for the period 1960-2000. Source: Annual financial statements published in the *Benton County Enterprise* in the spring of the subsequent year.

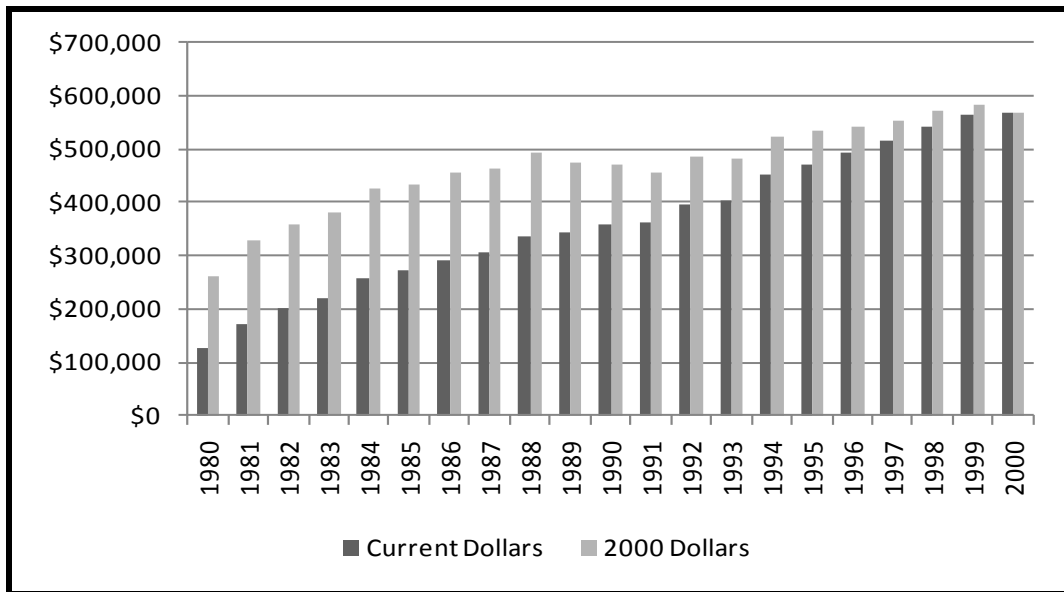


Figure 3-45. Total sales tax contributions to the county general fund in both current and 2000 dollars for the period 1980-2000. Source: Annual financial statements published in the *Benton County Enterprise* in the spring of the subsequent year.

Based upon the information presented in the above figures several observations can be made relative to the presence of the Truman project and changes in tax structure.

1. The property taxes collected for Benton County's general fund did not increase significantly in 1985 or during subsequent years. Prior to the reassessment, except during the early 1980s, the property taxes collected generally matched the upward trend exhibited by the increasing assessed valuation. However, since the reassessment, the collection of property taxes has remained essentially level. This pattern does not reflect a change in structure because of the presence of the Truman project alone. If it did, the assessed valuation of the

county would have decreased as property was removed from the tax rolls during the late 1960s and early 1970s, thus resulting in reduced collection of the related property taxes as well. After the completion of the Truman project, a logical course of action by the county would be a property reassessment. The new valuation of the county would result in a substantial rise in property taxes collected.

2. The sales taxes collected have steadily increased since implementation in 1980. The sales taxes allowed collection of revenues from tourists coming to, or passing through the county. It allowed collection of revenues from those who utilize the services and infrastructure of the county besides the residents. The possibility for a substantial increase in sales tax revenues could be attributed to the Truman project. As the number of tourists increased because of the recreational opportunities at Truman, there was a potential for increased tax collections related to increased sales. Although prior to Truman there were a substantial number of tourists visiting Benton County, that number increased as the opportunities for tourist related activities expanded within the county. Consequently the amount of taxes collected would reflect the visitation numbers for both Truman Lake and Lake of the Ozarks.

3. The total receipts to the county's general fund have steadily increased since the late 1970s. The upward trend became more pronounced during the 1980s and 1990s. This increase coincided with the completion and operation of the Truman project. The increases in the 1990s, interestingly enough, also coincided very nicely with the annual event of "Heritage Days," which occurs both at the Truman Visitor Center and at Drake Harbor in Warsaw during the month of October. This event is co-sponsored by the Truman Visitor Center, the Benton County Historical Society and the Chamber of Commerce. Thousands of tourists come to participate in activities at the historic village at the visitor center and to shop at vendor stations throughout the community. Therefore, the county has been able to maintain a steady stream of income.
4. There appears to be a relationship between the Truman project and the collection of tax revenues. Concerning the property reassessment valuation, however, there does not appear to be a direct relationship between that and the presence of Truman except in the timing and collection of property taxes based upon that valuation.

Visual landscape changes

The most obvious change to the landscape of Benton County is the Truman dam structure and the resultant lake. The change from heavily forested river valleys to a relatively placid lake development has also changed the surrounding areas. Large tracts of upland areas have changed from farms to public use areas and fish and wildlife management areas. At or near the entrance to the public use facilities change has also occurred, with new commercial development and community expansion.



Figure 3-46. Osage River Valley (Lake of the Ozarks) upstream from Warsaw, circa 1950. Photo courtesy of the Benton County Historical Society.



Figure 3-47. Approximately the same area viewed as Figure 3-46, but now from the Truman visitor center. Outlet channel for the power plant is to the far right the area just downstream of the dam is the remnant of Osage River (Lake of the Ozarks). Photo by author.

Other Truman related landscape changes involve the public use facilities.

The parks often have camping sites, boat ramps and swimming areas. These facilities are publically owned and operated. Therefore, private ownership of facilities does not occur in most areas. Access by the public is a requirement of any area owned by the Federal government. Below are photographs of some of the public use facilities in Benton County.



Figure 3-48. Shelter area in the Shawnee Bend day use area upstream from the Truman Dam. Photo by author.



Figure 3-49. Boat ramp located in the Fairfield Access park on the Pomme de Terre arm of Truman lake. Photo by author.

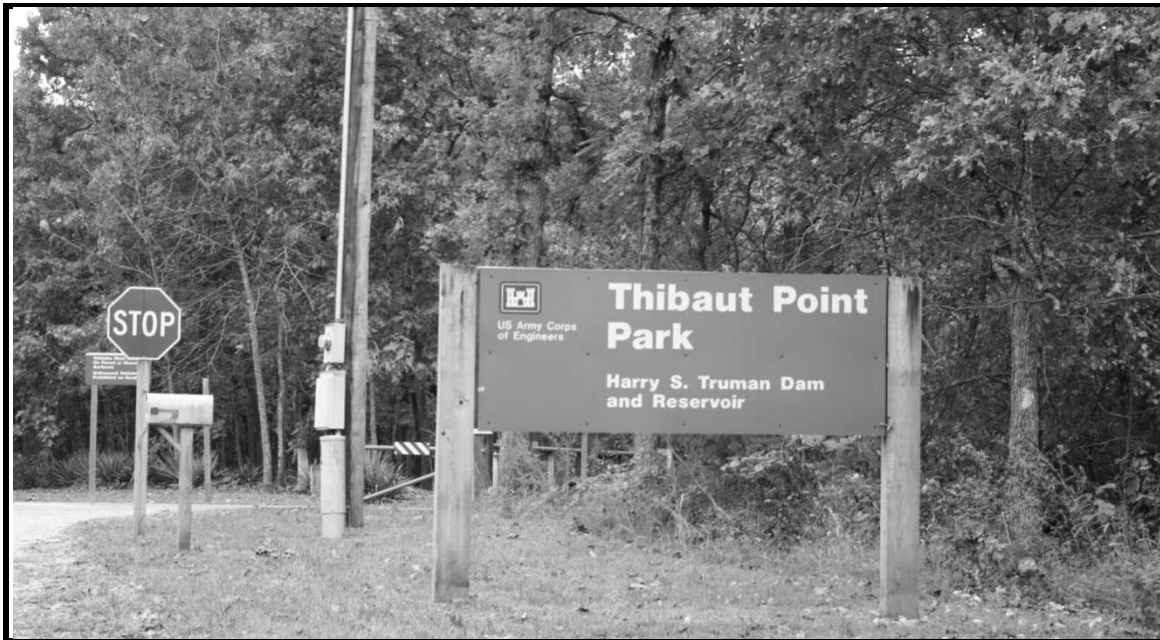


Figure 3-50. Entrance to Thibaut (pronounced Tee-bow) Point Park. This park is reserved for group camping, boating and swimming. Located on the Tebo arm of the Truman lake. Photo by author.



Figure 3-51. Entrance to the visitor center at Kaysinger Bluff Park. The center not only offers interpretive displays but a panoramic view of the project from Kaysinger Bluff. Photo by author.

Some facilities at the Truman project are operated by private individuals or concessionaires. These facilities include a marina and docking facilities and in some cases lodging, food service, repair services, and RV and tent camping.



Figure 3-52. Marina at Osage Bluff Park on the Pomme de Terre arm of Truman lake. Photo by author.

Private businesses are often found either adjacent to or close by the entrance to the public parks. Usually convenience stores with gasoline service, they may also offer boat and RV storage, and RV parking. The RVs may be more or less permanent, with shelters constructed for the RV or trailer and a vehicle. Below are photos of one such development located on county road "T," just outside of the Thibaut Point Park.



Figure 3-53. Boat and RV storage outside of Thibaut Point Park. The above units are designed to hold a boat or small camper. Larger units are stored in an adjacent area. Photo by author.



Figure 3-54. RV parking outside of Thibaut Point Park. This particular area allows weekly, monthly, and yearly rentals. Note the storage units and the canopy for this particular RV. Photo by author.



Figure 3-55. RV parking with shelter outside of Thibaut Point Park. Photo by author.

In Benton County, land has been transferred to the Missouri Park Service for a state park. Within the park are camping, swimming and boating options for both the individual visitor or for groups. A marina offers docking, storage, and launching facilities. Just outside of the park is a convenience store.



Figure 3-56. Entrance to Harry S. Truman State Park located at the confluence of the Osage and South Grand arms of the Truman project. The state park offers day use facilities, marina, campground, swimming beaches and several boat launch areas. Photo by author.

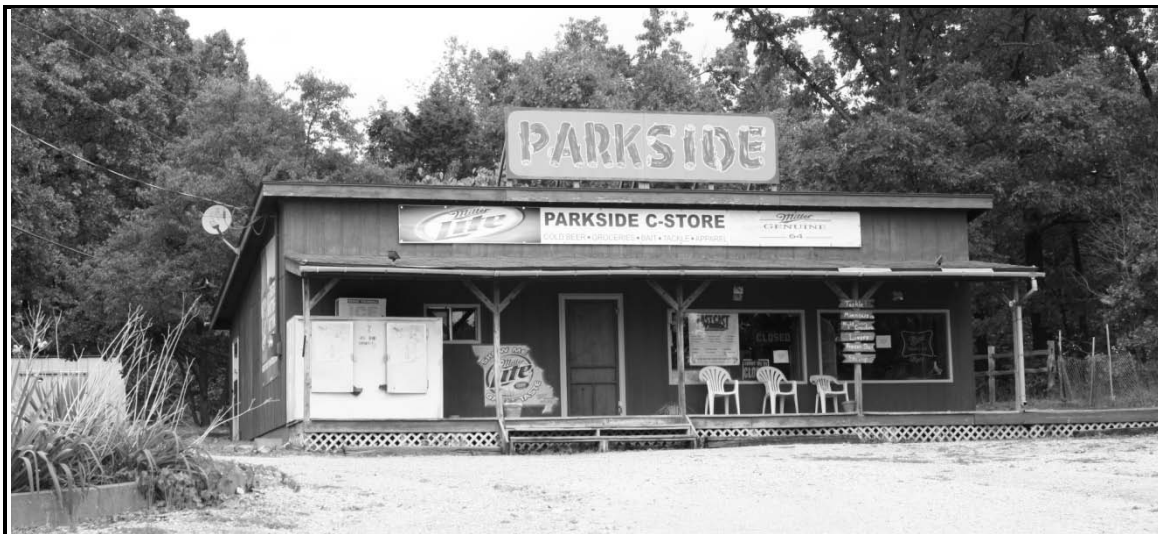


Figure 3-57. Convenience store located just outside of the State Park entrance. Although there are no boat and RV storage areas or gasoline pumps, this particular convenience store does offer cabins for rent. Photo by author.

Changes in the incorporated communities usually involved the increase in businesses along the major highways either passing through or adjacent. Below are photographs from Lincoln, Missouri, along U.S. Highway 65 (with newer development) and in the downtown areas.



Figure 3-58. Intersection of U.S. Highway 65 and the main street through Lincoln. Photo by author.



Figure 3-59. Market on U.S. Highway 65 in Lincoln. Photo by author.



Figure 3-60. Main Street in downtown Lincoln. Photo by author.

In Warsaw, the downtown area has been enhanced with the preservation of numerous locally significant and interesting historic structures, such as the former Texaco station and the Mechanic's Bank of St. Louis. The Texaco station is now part of a restaurant and bar and the bank building is now the Benton County Jail.



Figure 3-61. Former Texaco station now part of a restaurant and bar located on Old Highway 7 in downtown Warsaw. Photo by author.



Figure 3-62. Downtown Warsaw looking from Court House Square west down Main Street (Old Highway 7). Photo by author.



Figure 3-63. Benton County Jail. Another historic building serving a different purpose. Originally a bank building, built in 1856, the structure has served as the jail since 1912. Photo by author.

Other changes have occurred in Cole Camp. Located at the junction of state highway 52 and county roads F and U, the community has developed an ethnic identity associated with its German heritage.



Figure 3-64. Downtown Cole Camp. State highway 52 crosses from left to right at the traffic signal. Photo by author.



Figure 3-65. The Red Baron in Cole Camp offering food and sundries to the tourist. Photo by author.



Figure 3-66. The Cole Camp Museum and Print Shop located on the main street. Photo by author.

Changes to the local landscape have also been especially noticeable along the major highways. Unincorporated communities within Benton County have enhanced their numbers and also the offerings for tourists to stop, shop, and

camp. Below are several photographs from the communities of Racket and Tackner located in the western portions of Benton County along state highway 7.



Figure 3-67. Seasonal community church located in Racket, west of Warsaw on state highway 7. RV parking and storage is available behind the church building. Photo by author.



Figure 3-68. Located next to the Racket Community Church is the Truman Lake Opry. During the summer season, there are shows given by local and nationally recognized groups several times a week. Weekend shows continue through part of the spring and fall. Photo by author.

Between Racket and Tightwad, Missouri, there are numerous boat and RV storage facilities. Some are located adjacent to the highway as indicated in the following two figures, and some removed from the main highway. Usually located near the storage facilities or with them are RV parks as indicated in Figure 3-71.



Figure 3-69. Boat storage and RV park on state highway 7 near Racket. Photo by author.



Figure 3-70. Boat storage facility located in Racket across state highway 7 from the community church and the Opry. Photo by author.



Figure 3-71. RV park just east of Racket on state highway 7. Photo by author.



Figure 3-72. The Stone House, former antiques and flea market hub in the unincorporated community of Tackner, just west of Warsaw on state highway 7. Photo by author.

Concluding Thoughts.

Based upon the previous discussion the following can be related to the Truman project, even if only marginally.

1. Benton County population has continued to increase in spite of the negative rates of natural increase. Individuals migrating to the county are the only means of population increase and replacement. The majority of the increase has occurred since the Truman project was completed.
2. The business character of the county is changing. Although agriculture is still a significant industry, the amount of land available for farming activities has decreased as a result of the conversion of land to a reservoir, public use facilities, and fish and wildlife management areas. Contract construction and manufacturing, although significant to the economy of Benton County, appear to be declining in importance and replaced with retail trade and services. The greatest expansion of these last groups of businesses occurred in the 1990s during the post-construction period.
3. The collection of taxes, especially since the advent of the sales tax, has continued to increase at a rate that appears to meet the needs of the county. The collection of property taxes continues, but the revenues

from this source have less and less effect upon the finances of the county.

4. The changes to the visual landscape are most noticeable along the major highways (federal, state and county). The changes are for the most part associated with tourism at the Truman project and Lake of the Ozarks. Storage facilities, RV parks, restaurants, convenience store/service station complexes and lodging are the most obvious. In the Lincoln and Warsaw areas, the presence of national franchises along U.S Highway 65 has increased the opportunities for the tourist to stop, spend money, and pay taxes. The public use facilities have provided recreational opportunities for many tourists. Commercial developments adjacent to the parks have also provided business opportunities to the local entrepreneur, as these businesses are mostly locally owned and operated.

CHAPTER 4: HENRY COUNTY 1960-2000

As a small child, I wondered why most of the otherwise knowledgeable, accomplished adults who surrounded me seemed to have almost no idea about how to live a satisfying life. It was clear to me even then that the answer wasn't money or power, but somehow, the ability to control and enjoy one's experience. –Mihaly Csikszentmihaly (in Gallagher 1993, 11-12)



Figure 4-1. The Tigtwad Bank. According to the authors of the *Pictorial Memories of Henry County, Missouri*, "People from all over the country have an account at the Tigtwad Bank just for the fun of it," (Church et al. 2000, 64). Photo by author.

Introduction

Organized in 1835 as Rives County and later renamed in honor of the revolutionary patriot Patrick Henry, Henry County is located in west central Missouri about halfway between Kansas City and Springfield (Lamkin 1919).

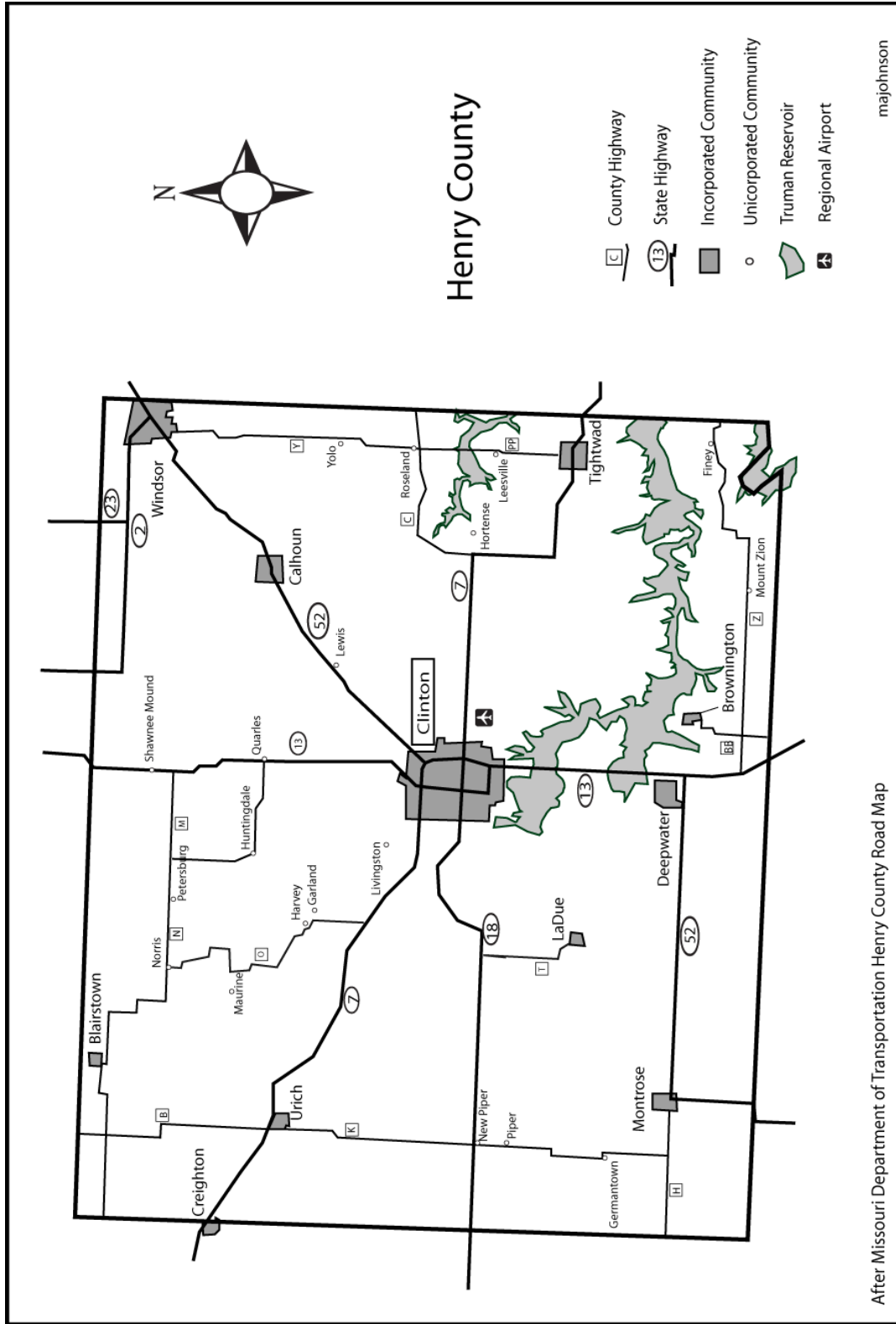
Located approximately in the center of Henry County, Clinton is the county seat

and the largest incorporated community. A list of all incorporated communities is provided in the following table.

Table 4-1			
Incorporated Communities in Henry County			
Blairstown	Brownington	Calhoun	Clinton
Deepwater	Hartwell	La Due	Montrose
Tightwad	Urich	Windsor	

Like Benton County, Henry County is organized around the township system. There are a total of nineteen townships within Henry County. The majority of the county may be found in the Osage Plains physiographic region as discussed previously. The incorporated communities are widely dispersed within the county. Figure 4-2 shows the location of all incorporated and some unincorporated communities within Henry County.

Henry County has traditionally had an agriculturally oriented economy characterized by medium to large farming operations associated with cash cropping and animal production (History of Henry and St. Clair Counties, Missouri 1883). Probably the most notable of the agricultural products were baby chicks. During the early to mid 1900s, Clinton and Windsor were commonly known as the “baby chick capitals of the world.” Several hatcheries produced baby chicks for farmers across the Midwest. The post offices in both



After Missouri Department of Transportation Henry County Road Map

Figure 4-2—Henry County Map (Missouri Department of Transportation 2009).

communities shipped thousands of the chicks in specially designed packages and guaranteed rapid delivery. This industry ended during the mid-1950s.



Figure 4-3. Wall mural celebrating Clinton as the “Baby Chick” Capital. Photo by author.

Henry County also has a long history of cheese production. The cheese producers have relied on the area dairy farmers for milk and cream in sufficient quantities to make cheese that is shipped throughout the country. Several dairy farms and cheese producing factories were located in and around the Clinton area.

Included in the mix of primary economic activities in Henry were mining operations, particularly coal. Most of this mining took place in the western and northeastern portions of the county near the communities of Germantown and

Montrose in the west and near the communities of Calhoun and Windsor in the northeast. Beginning in 1958, the Kansas City Power and Light Montrose Station was in full operation and the locally mined coal was shipped directly to the plant for electricity generation (Church et al. 2000).



Figure 4-4. Tebo Mine Operation in northeast Henry County, circa 1960. Photo courtesy of the Henry County Historical Society.



Figure 4-5. Tebo Mine—Bucket from shovel—in northeastern Henry County, circa 1960. The giant dipper on the Bucyrus-Eric stripping shovel picked up almost 200 tons of rock and dirt with every shovelful. Photo courtesy of the Henry County Historical Society.

Henry County has also been the home for many manufacturing firms.

Near the communities of Brownington and Deepwater, clay factories operated from the late 1800s to the end of World War II. These factories were attracted by



Figure 4-6. Clay pipes and bricks on display from the clay pipe factories in Deepwater. Photo by author.

the large deposits of clay and coal to produce brick and clay tile pipes (Lamkin 1919). Windsor was the home of many factories. The most recent was the International Shoe Factory (fig. 4-6), operating between 1931 and 1985 (Walker 1985). Other industries in Windsor have included a broom factory and a button factory. Clinton has also had numerous manufacturing activities, including the production of fireworks, punch presses, small appliances, boats, clothing

(uniforms) and packaging materials. Many of these pre-date the time frame for this study, others began during the study time frame, while still others have continued throughout this time frame and remain in existence today.



Figure 4-7. International Shoe Factory in Windsor. The Company closed in 1985. Photo courtesy of the Henry County Historical Society.

Assisting with the distribution of these agricultural and manufactured goods has been a transportation system centered primarily around the community of Clinton (fig. 4-2). Four state highways converge on Clinton. The north-south routes include state highways 7 and 13, while the east-west routes are state highways 18 and 52. Windsor, in the northeast corner of the county, is served by state highways 2, 23, and 52. All incorporated communities except

Blairstown and Brownington are served by state highways. These communities are served by designated county roads.

Additional transportation facilities have served Henry County. Henry County's railroad service was primarily provided by the Missouri, Kansas, and Texas Railroad (MKT or commonly called the Katy) (Church et al. 2000). The railroad served the local factories in and around Clinton, and also hauled coal from the mines near Calhoun and Windsor to the Kansas City Power & Light Company's thermal electric-generating plant near Montrose. MKT spur lines to the elevators in LaDue and Montrose were also maintained by the railroad company during the 1960s and 1970s. Both Clinton and Montrose had active stations in the 1960s and 1970s. Since the mid-1960s, there has not been any passenger service to Henry County. Although passenger service was initiated, it never succeeded. The regional airport, located about 4 miles east of Clinton, now serves the needs of private and corporate airplanes.

Changing Population: 1960-2000

Henry County's population peaked in 1890 with 28,235 people (Henry County Library 2008). Since that time, its highest census population was recorded as 21,997 in 2000. (U. S. Department of Commerce, Bureau of the

Census 1972) Table 4-2 indicates the total population for Henry County by census.

Table 4-2				
Henry County Total Populations				
1960	1970	1980	1990	2000
19,226	18,451	19,672	20,080	21,997

Table 4-2—Population totals for Henry County 1960-2000. Source: U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980, 1990, 2000.

Between 1970 and 2000 the population of Henry County increased by more than 3,000. Although this ending population does not exceed the 1890 peak, it did reverse the trend which occurred through most of the twentieth century. The increase in population, however, did not come from natural increase, but from a net inflow of people, as the following figure suggests. The components of population change consist of natural increase (births minus deaths) and net migration (immigration minus emigration). Like Benton County, Henry County has a negative rate of natural increase. But the net migration has not been of the same rate as that of Benton County. Since there is an increase in population for three of the four decades studied, the increase is due to the net migration. This increase is especially evident in the 1990s.

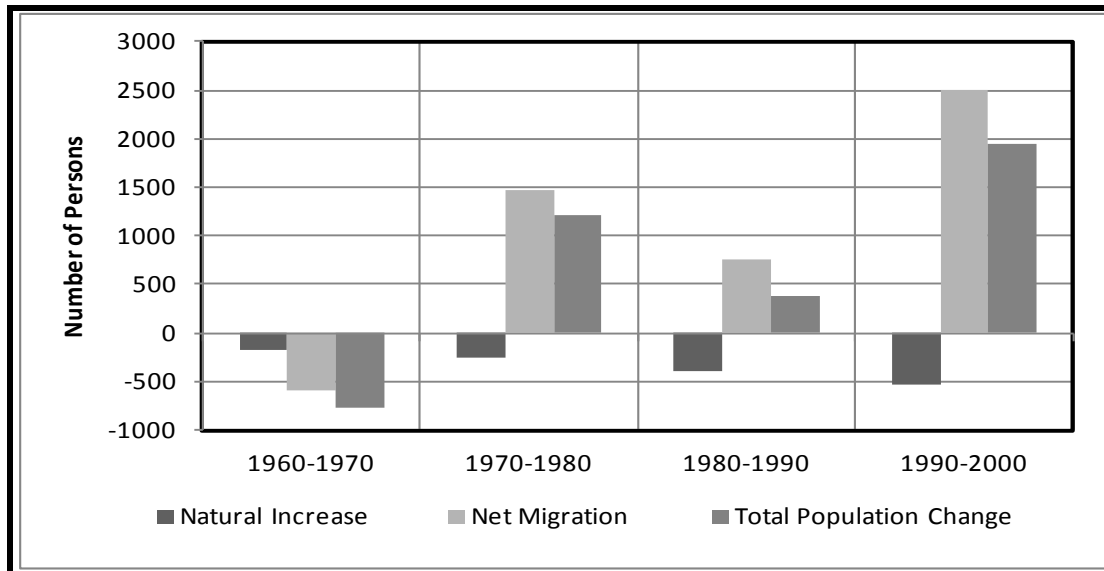


Figure 4-8. Components of population change, Henry County, 1960-2000.
 Source: U. S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

Another aspect of the changing nature of the population is the changes to the age structure. Table 4-3 indicates the median age for each of the censuses. Henry County's median age gets younger until 1980, at which point the median age increases by four years by 2000. When considering the median age with the components of change, it would appear that the population increases from migration are initially associated with younger individuals and families.

Table 4-3				
Median Age of Population by Census Period				
1960	1970	1980	1990	2000
39	38	36.5	38.3	40.4

Table 4-3—Median Age: 1960-2000 for Henry County. Source: U. S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

Comparing Henry County's median age with that of Missouri, we see a dissimilar pattern emerging. Missouri's median age lowers between 1960 and 1970, and then increases. This difference is most noticeable when comparing the increase in age by between 1960 and 2000. Henry County increased in age by 1.4 years, while Missouri increased by 5.6 years.

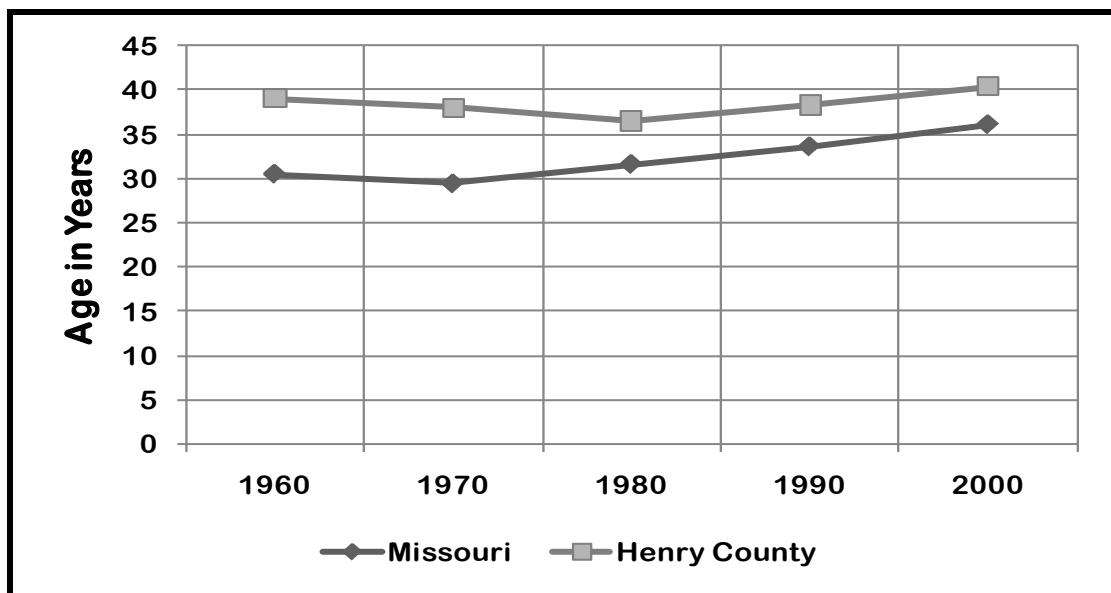


Figure 4-9. Comparison of median ages between Henry County and Missouri. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

During the period 1960-2000 the population of Henry County has changed both in location and in age structure. Examining the population pyramids provides some insight into the age structure and demographic characteristics of the populations.

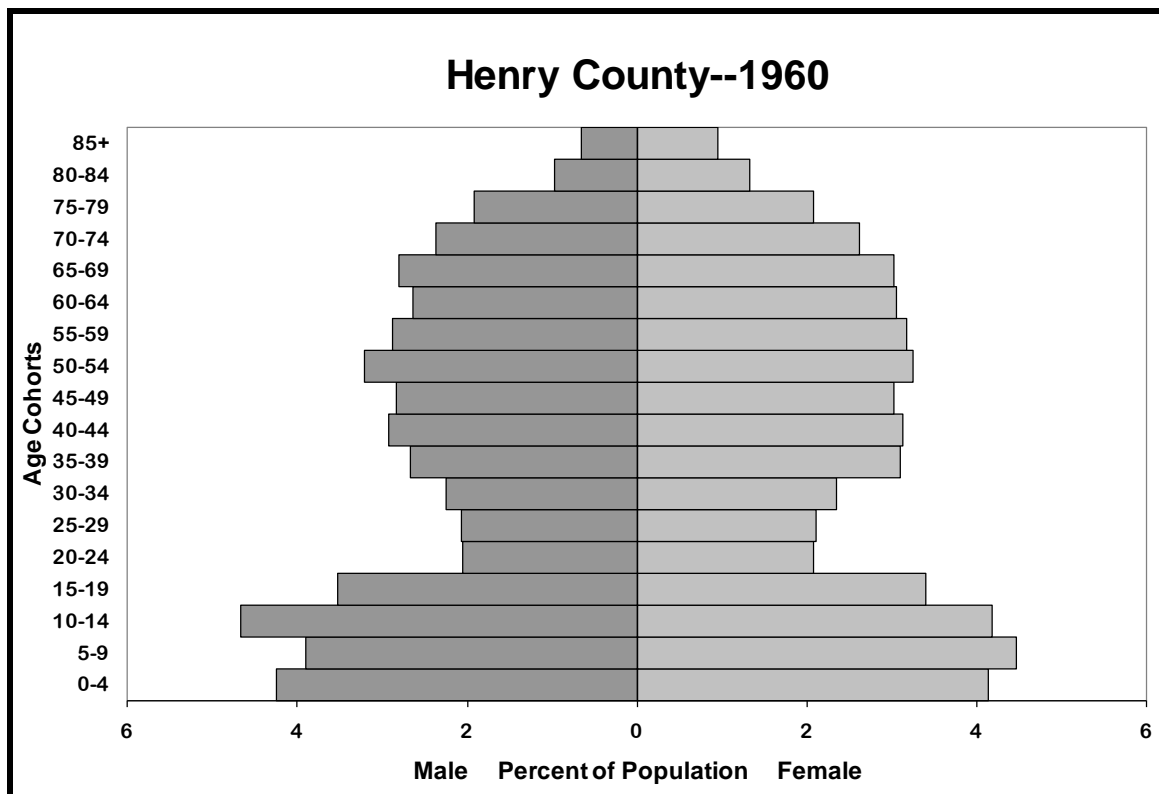


Figure 4-10. 1960 Population Pyramid for Henry County. (U.S. Department of Commerce, Bureau of the Census 1962).

By 1960, Henry County's population had fallen to just over 19,000. The population pyramid has an indented cone-shaped base (Fik 2000). This shape suggests that the population growth is showing signs of declining over time. The bulge exhibited by the 0-4, 5-9, and 10-14 age cohorts are those associated with the post-World War II "baby boom." Although larger than any other single

cohort, this group is getting smaller. Another noticeable characteristic of this population is the very limited numbers of individuals in the 20-24, 25-29, and 30-34 age cohorts. This could be the result of several factors: 1) reduced fertility rates during the "Great Depression" of the 1930s and the World War II years; 2) the lack of tertiary education opportunities within the county except for a beauty school in Clinton, and 3) the military requirements for males over the age of 18. As seen in Benton County's 1960 pyramid, the number of individuals over the age of 55 is substantial, with the largest single number of individuals in the 85 plus age group. This large number of older adults could be an indication of a population either ready to retire or retired. The number of individuals over the age of 55 is larger than the number of individuals under the age of 15, 2,950 versus 2,494.

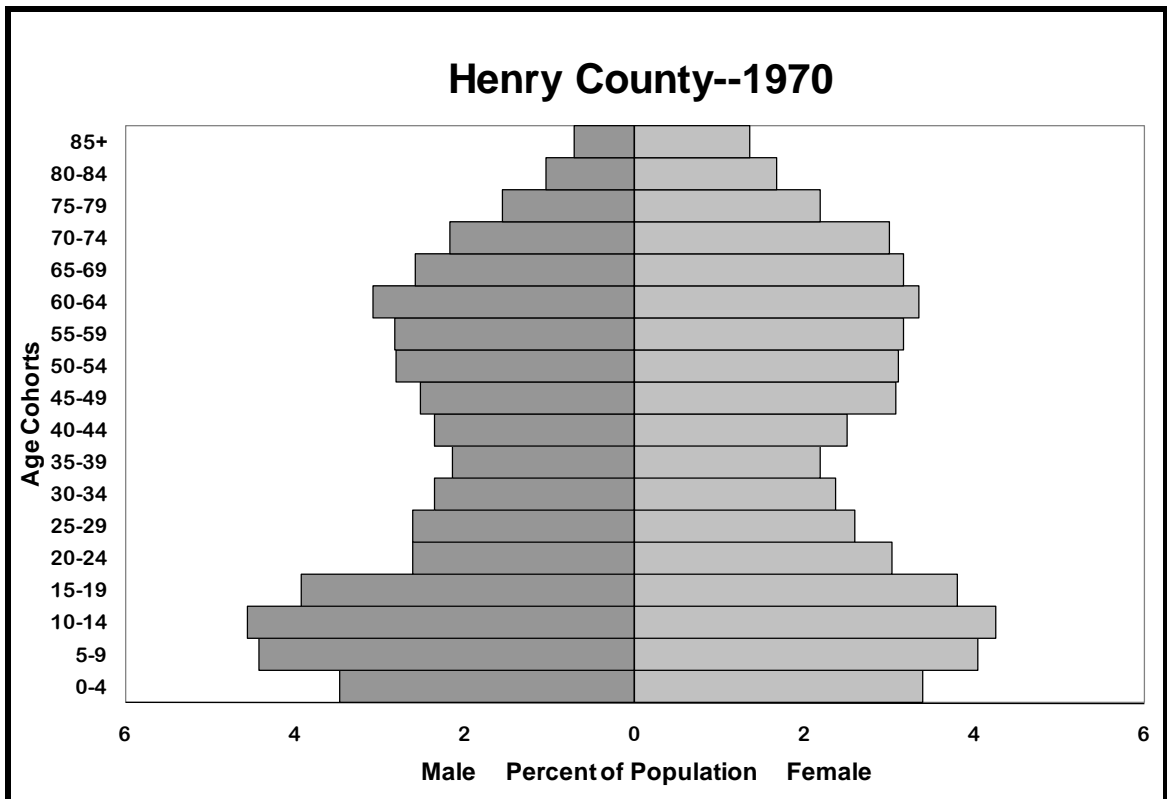


Figure 4-11. 1970 Population Pyramid for Henry County. (U.S. Department of Commerce, Bureau of the Census 1972).

In 1970 Henry County's population was at its lowest level since the late 1800s. The population pyramid for 1970 shows a different pattern from that displayed in 1960. There is a very large number of "Baby Boomers" showing up in the 5-25 year cohorts as expected. However, the 20-29 year age cohorts have substantially lower populations than would be expected, especially for the 20-24 year cohort. Again, outside factors can help to explain this. The Vietnam Conflict would have involved a large number of males in the 18-25 year old population and the opportunities for tertiary education are located outside of the county. The major colleges and universities in Missouri would be particularly

attractive to males wishing to delay entry into the military and for females wanting to take advantage of opportunities to enter college. The total number of individuals under the age of 15 is now 4,452 or 24% of the population, a decrease of two percentage points. Those individuals 65 and over now number 3,589 or 19.5% of the population. The Truman project was well under construction by 1970 providing employment for numerous engineers, real estate appraisers, planners, construction managers, and construction personnel. One would, therefore, expect a very large working population which would comprise a substantial portion of the county's population. In fact the number of individuals in the 25-64 year age cohorts amounts to only 7,944, or approximately 46% of the population. This does not compare favorably with the 1960 situation, when the number of the working population was 8,585, or almost 47% of the population. The construction of the Truman Dam and facilities would certainly have enhanced the population of workers with a greater number of individuals and greater proportion of the population in the working age cohorts. What we see is a pattern of a declining number of individuals from natural increase, and an increasing number of individuals moving to the county who are over the age of retirement.

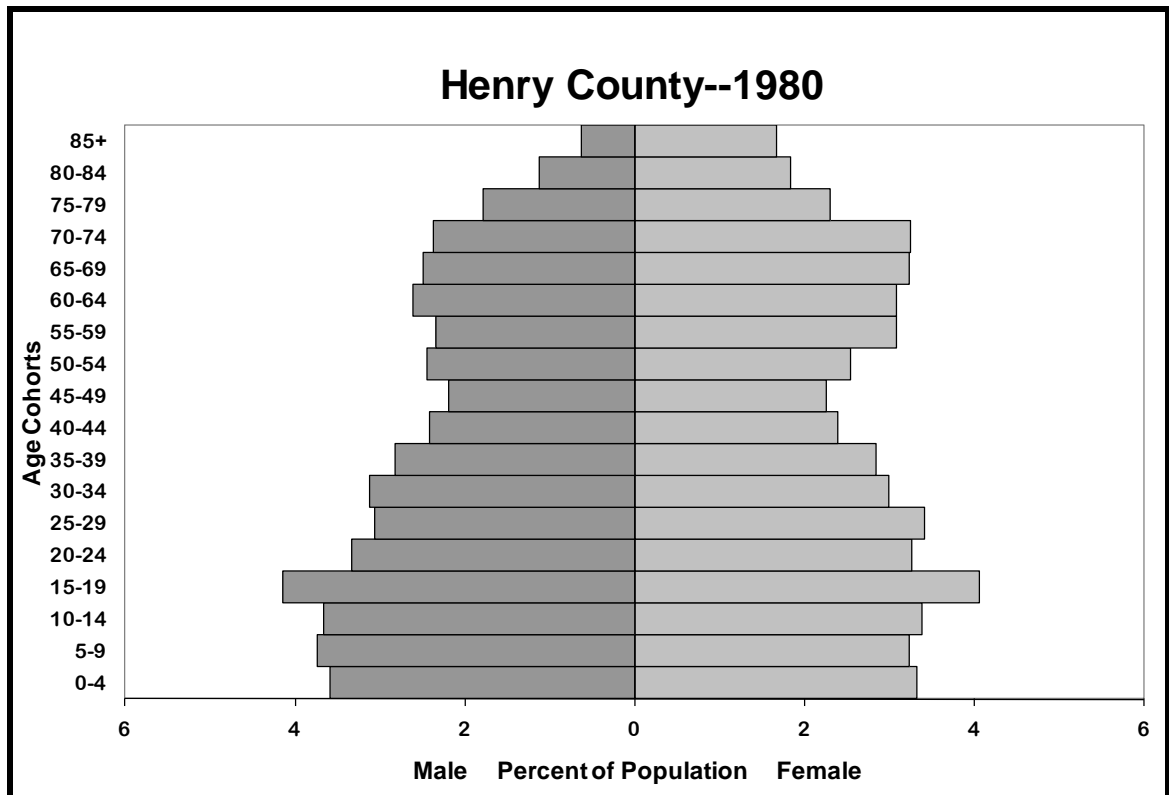


Figure 4-12. 1980 Population Pyramid for Henry County. (U.S. Department of Commerce, Bureau of the Census 1982).

The population pyramid for 1980 shows a continuation of decreasing numbers of individuals in the 20-24 and 25-29 cohorts in relation to their total number in the previous census. However, at this census we see an increasing number of children in the population as compared to the previous census. The only noticeable remnant of the “baby boomers” is found in the 20-24 age cohort. The numbers in the 40-44, 45-49, and 50-54 cohorts are significantly smaller than the age cohorts older and younger. This age group represents those born in the late 1920s and during the “Great Depression.” Another characteristic which is quite noticeable is the larger number of females versus males. This is not

normally characteristic of a rural population (Kaysinger Basin Regional Planning Commission 1974) but is similar to the situation in urban areas. The number of individuals in the age cohorts 65 and over is slightly less than the number of individuals under the age of 15, 4,067 versus 4,117. There appears to be a continuation of the younger members of the county leaving and we are not seeing any significant numbers returning after losing them to tertiary education, military, or other opportunities outside the county. At this time more than 40% of the population is not actively engaged in working and, therefore, not contributing significantly to the tax base or payroll earnings. We see an increasing number of retirement aged individuals coming into the county. We also see a decreasing proportion of the population providing the tax base upon which the county and communities within the county may draw.

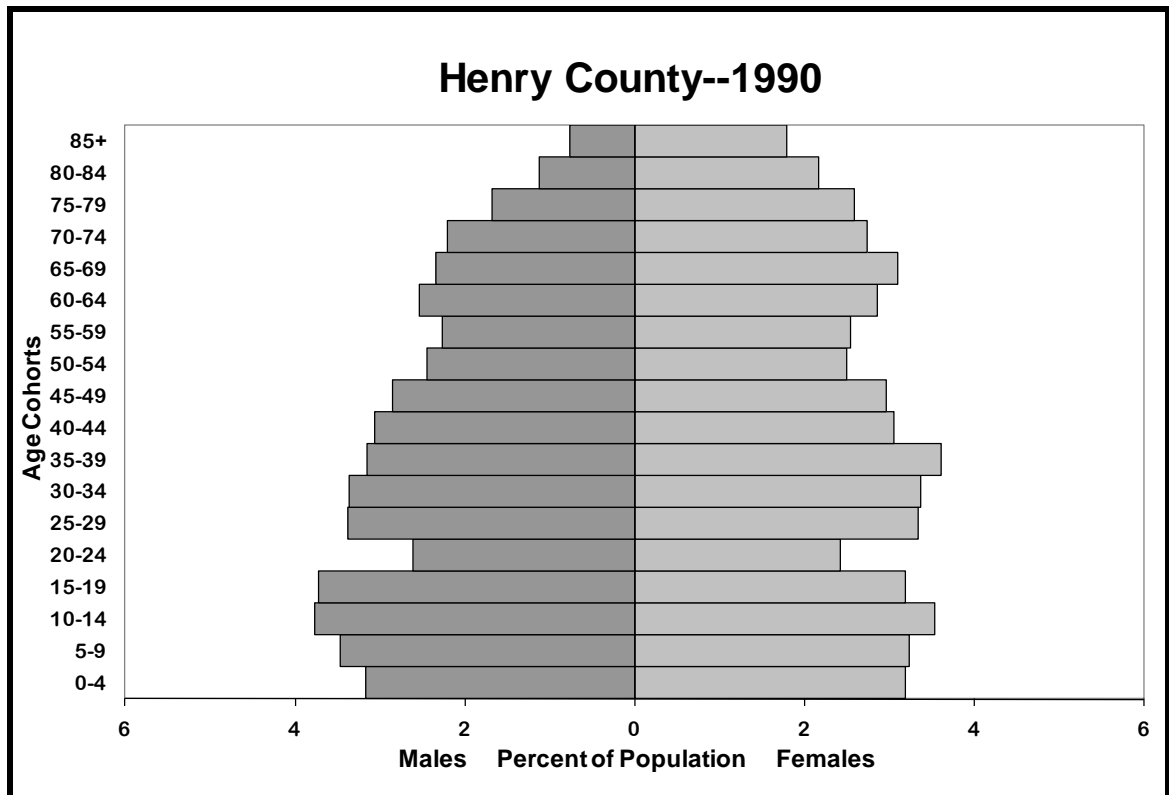


Figure 4-13. 1990 Population Pyramid for Henry County. (U.S. Department of Commerce, U.S. Census Bureau 1992).

In 1990, the population of the county reached more 20,000 individuals. But the pattern of increasing proportion of the population of retirement age especially among females, and a decreasing percentage of the population in the younger cohorts continues. For 1990, the number of children under the age of 15 is smaller than in 1980, with 4,070, or just over 20%. The population over the age of 65 totaled 4,123 (20.5%) and is larger than the young age cohorts for the first time. By now the "Baby Boomers," age 26-46 are no longer visible. The population in the 20-24 year cohort is significantly smaller than were their numbers in the previous census: 1,036 versus 1,297 ten years earlier. But now

there appears to be some return of individuals to the county, beginning with the 25-29 age cohort. Referring to the data concerning median age, the 1990 census has an older population than the two previous censuses. The number of females continues to be greater than males—10,498 versus 9,665.

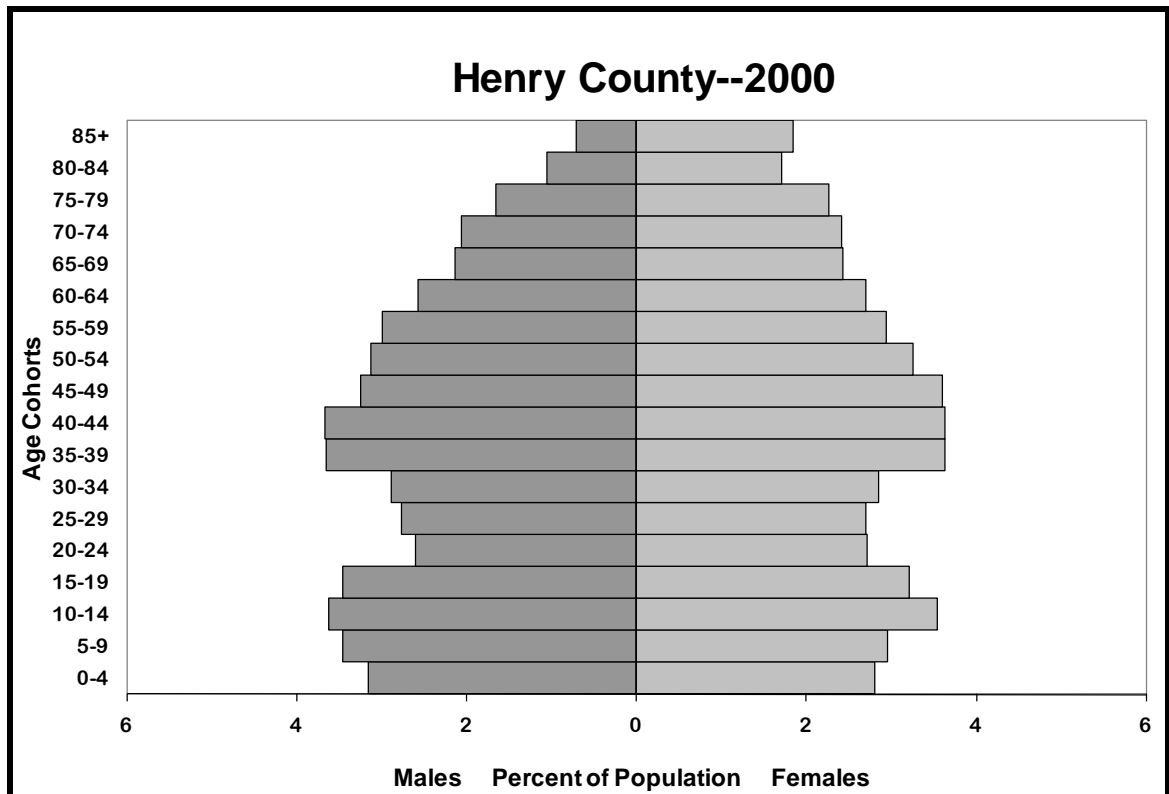


Figure 4-14. 2000 Population Pyramid for Henry County. (U.S. Department of Commerce, U.S. Census Bureau 2002).

The character of the population reflects an ongoing dynamic. The under 15 year age cohorts now comprise a larger portion of the population than do those of retirement age, 4,299 (19.5%) versus 4,023 (18.3%). This switch does not follow the pattern displayed by Benton County. The dependent population is now less than 40%. The population exhibits a significant decrease in the

numbers between the ages 20-34, but there is a significant increase beginning at age 35. The "Baby Boomers," now age 36-56, are a definable group again.

In all censuses, there is a noticeable reduction in the 20-29 age cohorts for both males and females, but most noticeably for males. This pattern of reduction probably can be attributed to several factors.

1. The lack of tertiary education opportunities within the county except for a cosmetology school in Clinton. The next closest institution of higher learning is at Central Missouri State University in Warrensburg. Other universities and colleges can be found in Columbia, Rolla, Springfield, and in Kansas City, all less than 150 miles from Henry County. These schools would be attractive for both males and females. Beginning in the late 1960s and continuing throughout the entire study time frame the special status of females on campuses receiving federal funding and the requirements of Affirmative Action would provide an attraction for females to leave the county.
2. The lack of employment opportunities within the county. Many young individuals, especially those who received advanced education outside the county may have sought employment outside of the county as well. This is most noticeable with the "baby boomer" generation of the 1960s and the generation just ahead. It should be

noted that many “baby boomers,” once they left for additional training or employment, may not have returned as yet. Many young adults, especially males, may have sought employment and training opportunities in the military, which brings us to the third factor.

3. The military requirements for overseas conflicts such as that in Vietnam during the late 1960s and early 1970s drew heavily upon the populations of young males.

Another interesting pattern in the population pyramids is the large number of individuals over the age of 65. There is also a growing presence of individuals over the age of 84. This increasing number of retired individuals is evidenced by the rise of the median age for Henry County during the study time frame. By 2000 the median age had reached 40.0 years (U.S. Department of Commerce, Bureau of the Census 2002).

The location of the population in Henry County has changed significantly since 1960. In Table 4-4, the populations for the townships and incorporated communities in Henry County are listed for the five census periods. One can begin to see a shift from the more rural western townships to the more urban townships associated with Clinton in the center and Windsor in the northeast (fig. 4-14). During the period 1960 to 2000 there has been a general depopulating

Table 4-4						
County Populations by Township and Incorporated Areas						
Henry County		19226	18451	19672	20044	21997
Beer Creek Township		316	263	243	206	178
Bethlehem Township		472	394	477	538	624
Big Creek Township		363	277	267	259	305
Bogard Township		607	534	502	544	655
Blairstown City		177	161	144	185	141
Urich City (pt)		8	0	5	NA	NA
Clinton Township		7296	7710	8001	8089	8784
Clinton City (pt)		6836	7343	7846	8703	9311
Davis Township		368	333	258	208	231
La Due Village					20	39
Deepwater Township		984	867	752	643	625
Montrose City		526	531	498	440	417
Deer Creek Township		407	335	327	275	327
Fairview Township		1049	847	728	750	871
Deepwater City		712	565	475	441	507
Fields Creek Township		404	423	1033	1306	1491
Clinton City (pt)		89	161	520	NA	NA
Honey Creek Township		244	206	228	221	194
Hartwell Village		0	0	13	14	16
Leesville Township		589	600	663	768	959
Tightwad Village					50	63
Osage Township		475	356	397	483	772
Brownington Town		130	95	112	84	119
Shawnee Township		344	305	383	384	420
Springfield Township		311	212	247	259	256
Tebo Township		736	629	768	795	853
Calhoun City		374	360	427	450	491
Walker Township		340	286	252	226	216
White Oak Township		704	721	785	728	744
Urich City (pt)		400	433	504	498	499
Windsor Township		3217	3153	3361	3362	3492
Windsor City (pt)		2714	2734	2940	3044	3087

Table 4-4. Henry County population by townships, incorporated areas, and census periods. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

of the western townships. It is not until the 2000 census that we see any significant return to one northern township. The Truman project required large tracts of land in the central and eastern portions of Henry County. The area directly to the south, east, and west of Clinton was purchased in fee; however, flowage easements were required for thousands of acres of land to the south and west. These easements require that no dwellings remain on the land. Consequently, the reduction in several townships is not surprising.

The townships in the southeast maintained their population levels throughout the study period. Although the Corps purchased large tracts of land for the project, several developments expanded in the east. The community of Tightwad became incorporated and several other existing developments expanded. Businesses continued to develop along state highway 7 in the east, beginning at Tightwad and moving westward towards Clinton. The township directly south of Windsor has not regained its population since 1970. This is due primarily to the purchase of land for the Truman project. In general, all but the two urban townships (Clinton and Windsor) suffered decreases in population between 1960 and 1970. There was no significant increase in populations in the affected townships until the 1990s, which is reflected in the 2000 census.

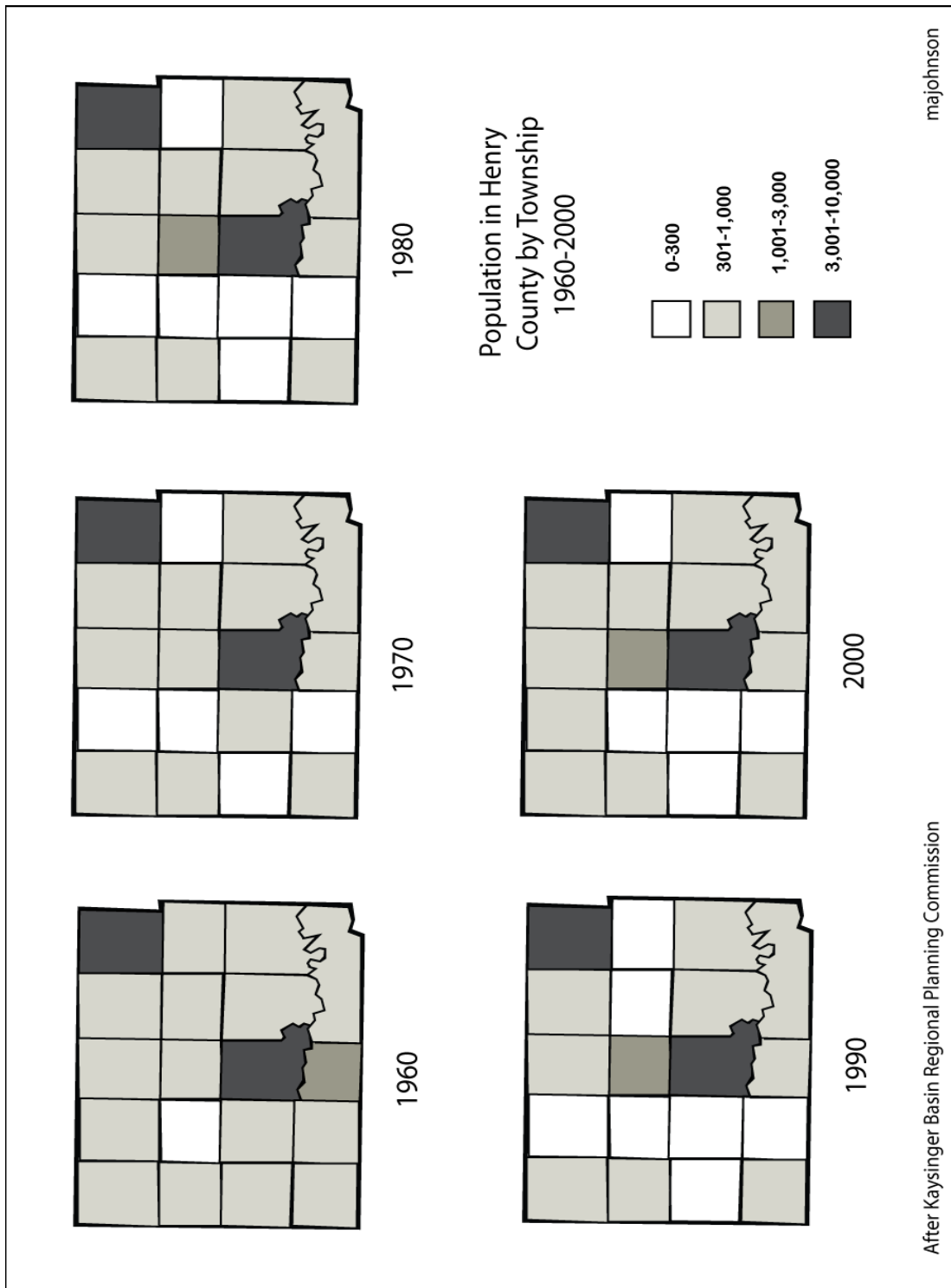


Figure 4-15. Henry County township populations, 1960-2000. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

As stated previously, the population of Henry County reached the lowest level with the 1970 census and has continued to increase ever since. All townships except those associated with the two urban centers of Windsor and Clinton experienced a period of population decrease. The greatest percent of increase occurred during the periods 1970-1980 (6.6%) and 1990-2000 (9.7%). In all decades the rate of natural increase was negative, thus leaving migration into the county as the sole source of people to account for the increase in population. Finally, there is a graying of the population, with a growing number of individuals in the retired age group of 65 and over.

Changing business conditions: 1960-2000

Like Benton County, the changes to the business conditions in Henry County will be discussed within the framework of the construction of the Truman project. Consequently, 1960-1965 refers to the pre-construction period, 1966-1979 refers to the construction period, and 1980-2000 is the post-construction period. The data presented in the figures and tables below are derived from several U.S. Department of Commerce census reports including the *Decennial Census*, *County Business Patterns* and the *Census of Agriculture*, initially published by the U.S. Department of Commerce but beginning in the 1990s by the U.S. Department of Agriculture, and from an analysis of the newspaper

advertisements, want ads, sponsorship pages, special events, and holiday greetings in the *Clinton Daily Democrat*, the county-wide newspaper.

Like Benton County, Henry County has exhibited lower income levels than those experienced by the state of Missouri in general. Figure 4-16 compares the median family incomes between 1959 and 2000 between Henry County and Missouri.

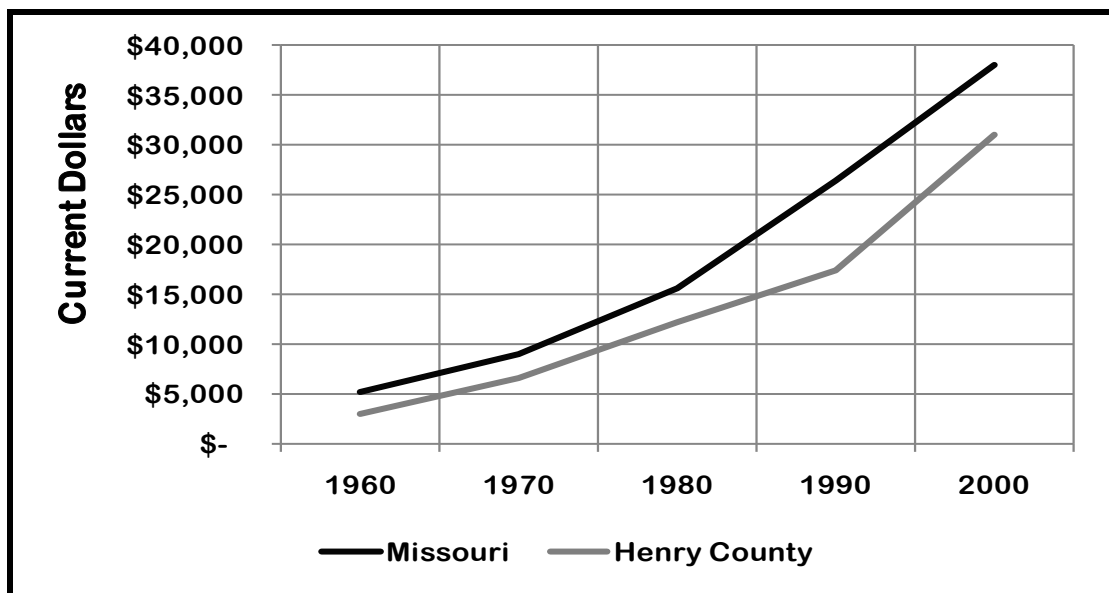


Figure 4-16. Comparison of Missouri and Henry County median family incomes, 1960-2000. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1960, 1970, 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

The per capita personal income levels for Henry County averaged approximately 82% of Missouri's level between 1969 and 2000, and approximately 77% of the United States level during the same time period.

Figure 4-17 highlights the relationship between Henry County and Missouri,

while Figure 4-18 illustrates the relationship between Henry County, Missouri, and the United States.

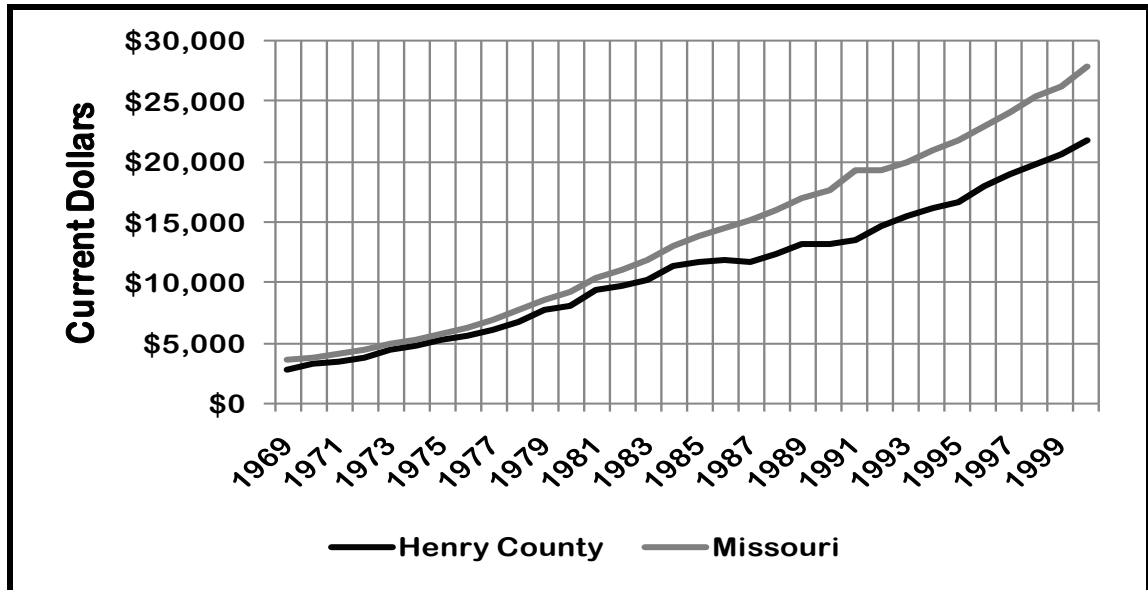


Figure 4-17. Per capita personal income levels for Henry County and Missouri, 1969-2000. (U. S. Department of Commerce, U.S. Bureau of Economic Analysis 2009).

Although Henry County's per capita personal income levels average about 82% of Missouri's, it can be noted that during the 1970s, the difference between the two was rather slight. During many years, Henry County's level was between 90 and 94 percent of Missouri's. Beginning with the mid 1980s, the difference between Henry County and Missouri widened, so that now the difference between them is between 68 and 75 percent.

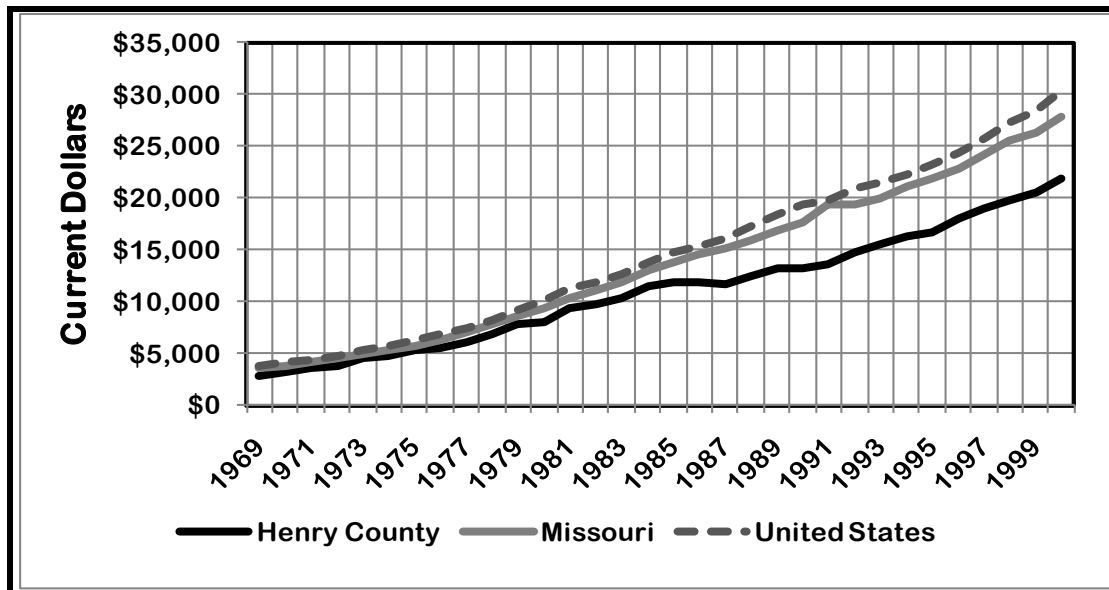


Figure 4-18. Relationship between Henry County, Missouri, and United States levels of per capita personal income between 1969 and 2000. (U. S. Department of Commerce, U.S. Bureau of Economic Analysis 2009).

As indicated in the previous figure, the gap between Henry County, Missouri, and the United States has increased especially beginning in the mid 1980s. The economy of Henry County has not grown in the same direction as the rest of the state or the country. One possible explanation would be the influx of low paying service related jobs replacing higher paying employment which may be leaving the county. This would be in agreement with the MERIC 2002 report on income inequality within the state of Missouri and consistent with the Popst, et al. report of 1996 on recreation employment values.

As indicated in the MERIC report, Henry County is not considered to be a poverty center. The following table and figure indicates the relative poverty levels for the state and Henry County between 1970 and 2000.

Table 4-5				
Poverty Levels (%) in Missouri and Henry County				
	1970	1980	1990	2000
Missouri	11.5	12.2	13.3	11.7
Henry County	8.2	11.2	18.1	14.3

Table 4-5. Poverty Levels in Missouri and Henry County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

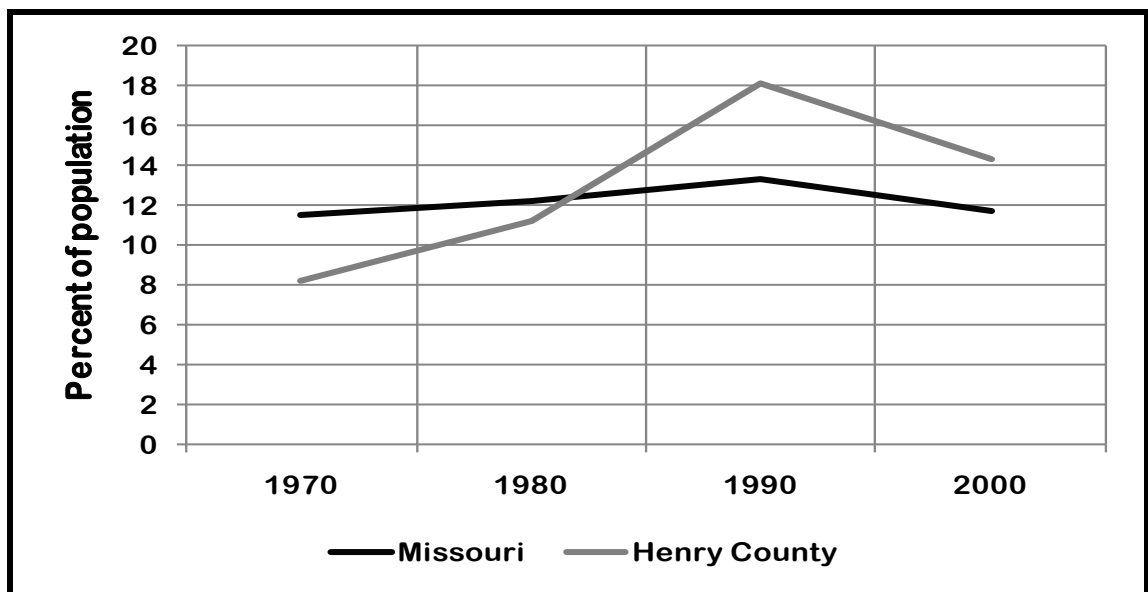


Figure 4-19. Poverty Levels (%) in Missouri and Henry County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

Henry County has traditionally been an agriculturally oriented economy.

Although manufacturing has occurred primarily in Clinton, Deepwater and

Windsor, agriculture has remained an important economic activity. This

situation did not change with the construction of the Lake of the Ozarks, as very little of that reservoir came into Henry County, and that portion was confined to the river channel. However, businesses in the easternmost communities along state highway 7 did provide the tourists with attractions, such as antique and curiosity shops, restaurants, and lodging.

Agriculture

Each of the incorporated communities, with the possible exception of the smallest, had either a Mutual Farmers Association (MFA) present or a cooperative elevator such as that shown in Figure 4-19.



Figure 4-20. The Farmers Cooperative in Calhoun. Photo by author.

Through the 1960s, 1970s, and into the 1980s, Clinton hosted the annual Soil and Crop Seminar in January for area and regional farmers. Agribusiness,

hardware, and lumber companies sponsored this event and had vendor displays at the meeting. However, by the late 1970s and early 1980s the vendors also included those associated with the farm family, such as car dealerships, furniture stores, and also the newer fast-food restaurants or national franchised restaurants.

The importance of agriculture in the economy of Henry County, however, has diminished. Between 1960 and 2000, the number of acres farmed in the county has been reduced (fig. 4-21). Much of the land removed from production can be directly related to the real estate acquisition by the Corps of Engineers. As indicated in Figure 4-21, the greatest amount of land removal occurred during two distinct periods. First, between 1969 and 1974 land was purchased in fee for the lake area. In addition, lands were also purchased for the public use facilities and fish and wildlife management areas. In Henry County, most of this activity occurred in the eastern and south central portions of the county. The second occurred between 1978 and 1982, when some additional lands were purchased in fee in the central and western areas of the county. The majority of the land requirements were purchased with a flowage easement for the Truman flood control pool. Additional lands were also purchased for fish and wildlife mitigation in the form of management areas.

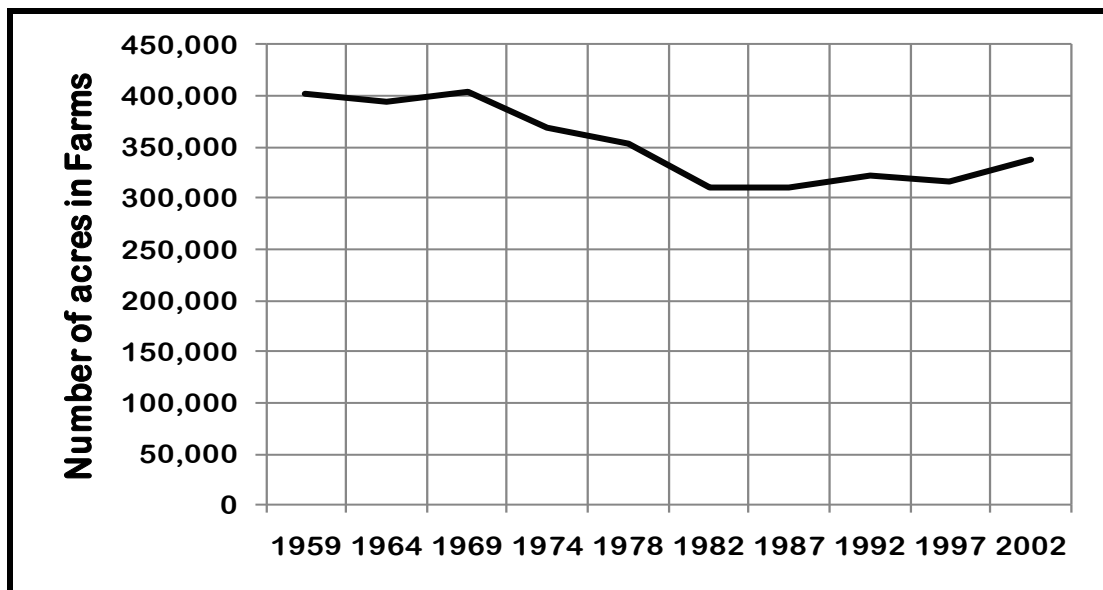


Figure 4-21. Number of acres in farms in Henry County. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The number and average size of farms has also changed in Henry County.

There are fewer farms and the average farm size has increased. These are similar to what is happening in Missouri and nationally. In Henry County, between 1969 and 1974, the number of farms was reduced by approximately 300 and between 1978 and 1982 the number of farms was reduced by nearly 100. Between 1959 and 2002, the total number of farms has been reduced by more than 800.

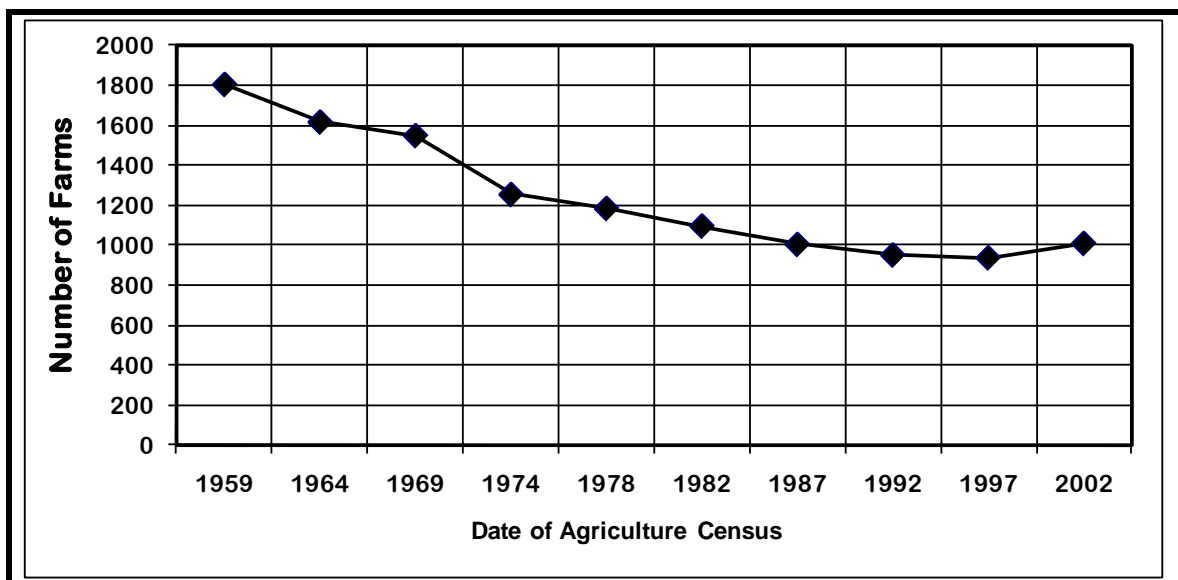


Figure 4-22. Number of farms in Henry County between 1959 and 2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The average size of the Henry County farm increased by more than 110 acres between 1959 and 2002. Missouri's average farm size increased by more than 80 acres during the same period of time. Henry County's average farm size is larger than Missouri by more than 50 acres. This difference has been relatively consistent throughout the study period. Larger animal and cash cropping operations are characteristic of the western farms.

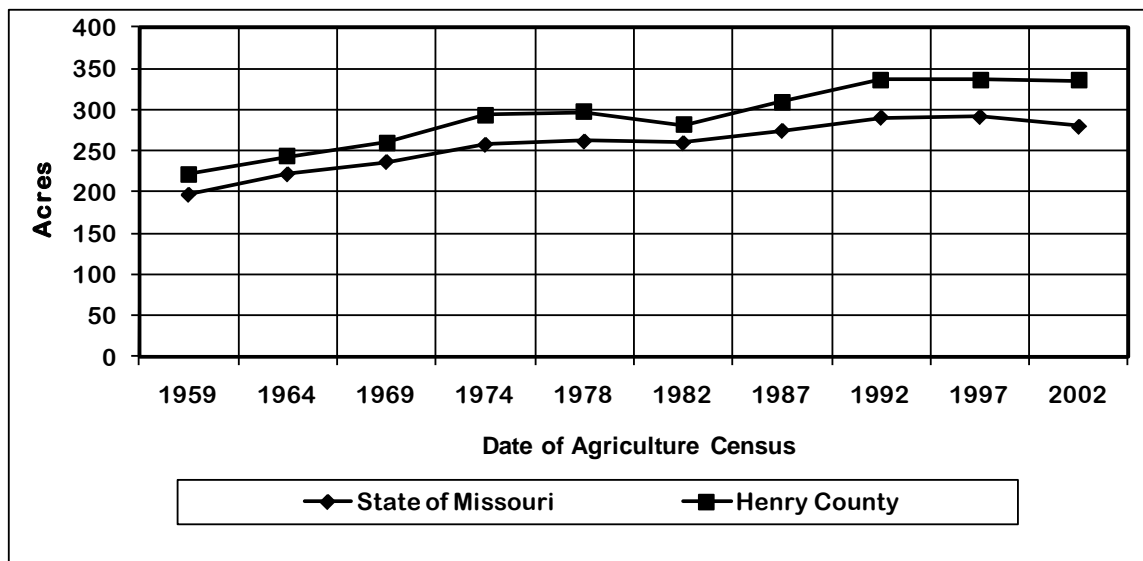


Figure 4-23. Missouri and Henry County average farm sizes during the period 1959-2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The apparent increase in the number of acres in farms and the increase in the number of farms are caused by additional land being made available for farm production. The mining operations in western and northeastern Henry County ceased in the 1980s. Many of the more recently mined areas (since the early 1960s) were reclaimed during the strip mining operations, and may now have been returned to agricultural production. Additional lands may have also been made available through surplus designation by the federal and state governments.

Non-Farm Businesses

The number of employed or self-employed individuals during the pre-construction period in Henry County stood at approximately 6,900 (U.S. Department of Commerce, Bureau of the Census 1962); more than 470 businesses employed a total of more than 3,200 individuals (U.S. Department of Commerce, Bureau of the Census 1960; U.S. Department of Commerce, Bureau of the Census 1963; U.S. Department of Commerce, Bureau of the Census 1965; U.S. Department of Commerce, Bureau of the Census 1966). This number is considerably higher than Benton County.

During the construction period the number of employees averaged just over 4,220. In the post-construction period, the number of employees increased to just less than 6,000 on average, with the greatest increase occurring in the 1990s (fig. 4-24). During the same period, the annual payroll increased by almost 1500%. Again the greatest increase occurring during the 1990s. From the following figures, one can also observe a rapid increase in employment during the first part of the construction period, 1966 through 1970. The second major increase in the payroll occurred during the 1970s, reaching a plateau in the 1980s. The increase in the number of employees can be seen in several sectors of the local economy. The increase in payroll is due to external factors rather than to a significant increase in the number of employees.

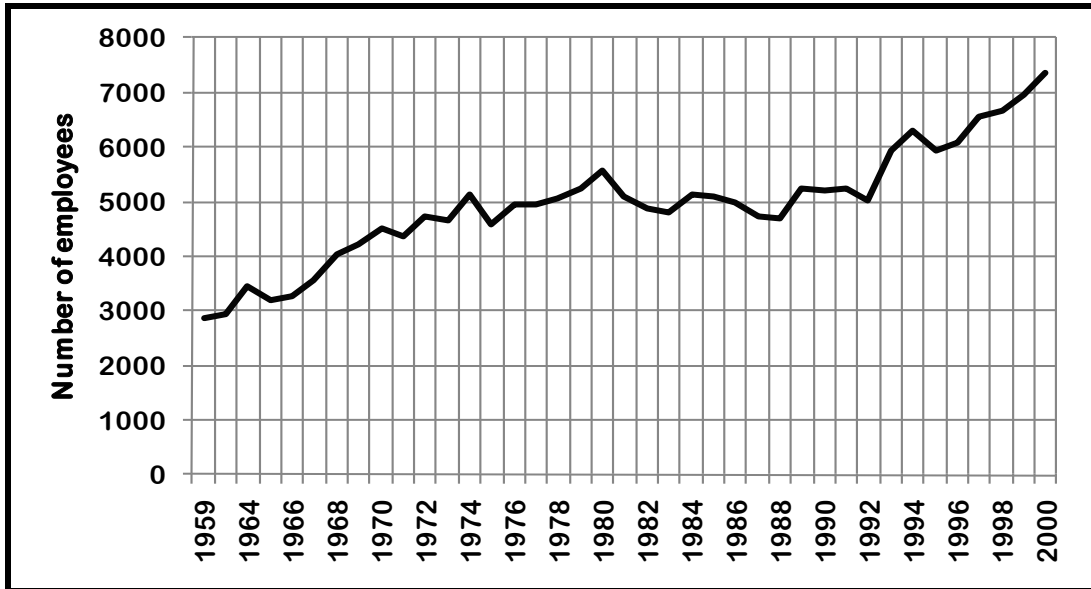


Figure 4-24. Number of employees in Henry County, 1959-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1959-1990. U.S. Department of Commerce, U.S. Census Bureau, *County Business Patterns*, 1991-1997. U.S. Department of Commerce, U.S. Census Bureau, *Censtats Database*, 1998-2000.

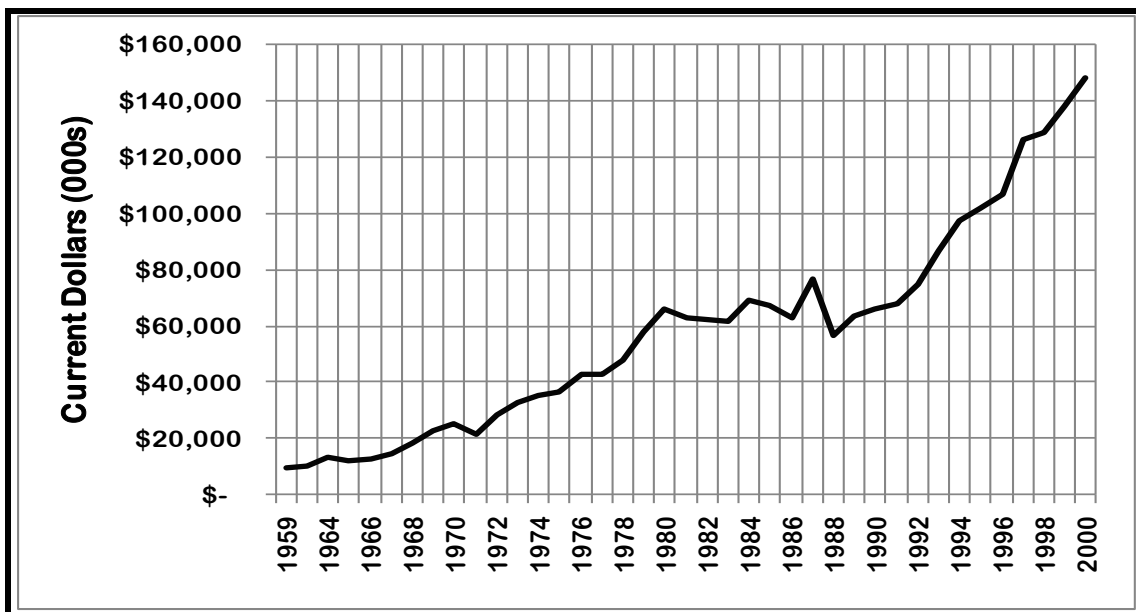


Figure 4-25. Annual payroll for Henry County, 1959-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1959-1990. U.S. Department of Commerce, U.S. Census Bureau, *County Business Patterns*, 1991-1997. U.S. Department of Commerce, U.S. Census Bureau, *Censtats Database*, 1998-2000.

Historically, mining played an important economic role in Henry County. Coal strip mining in the western and northern portions of the county modified a significant portion of the landscape. Most of the mined coal was used at the Kansas City Power and Light (KCPL) facility near Montrose. However, when Peabody closed their mines in the mid 1980s the coal for the power station was supplied from the coal fields in Wyoming. The following figure was taken at Peabody Coal's Tebo Mine. This particular shovel was among the largest in the world, removing several tons of overburden at a time.



Figure 4-26. "The world's largest mobile land machine." The stripping shovel built by Bucyrus-Erie for Peabody's Tebo Mine. See Figure 4-4 for size comparison of the bucket. Photo courtesy of the Henry County Historical Society.

Although mining provided a substantial number of well paying jobs, the most significant employer in Henry County during the pre-construction period was manufacturing. During the 1960s, approximately 20% of the county's entire payroll came from manufacturing. By comparison manufacturing in the state of Missouri, supplied approximately 40% of the state's payroll. Henry County's manufacturing payroll substantially diminished in importance during the construction period. By 1979, manufacturing provided just over 10% of the total payroll for the county.

Besides cheese production, manufacturing in the pre-construction period included several small-to-medium sized firms which produced fireworks, punch presses, and clothing in Clinton and shoes in Windsor.



Figure 4-27. International Shoe Company (circa 1955). Photo courtesy of the Henry County Historical Society.

The newer manufacturing companies established during the construction and post-construction period are located primarily in the Clinton industrial parks; Gerhart along state highway 7 (fig. 4-28), and Golden Valley on state highways 7 & 13 (fig. 4-29) on the north and northeast side of Clinton.

Companies currently located in the parks include Capri packaging, Tracker Marine, Schreiber Foods, and Champion Brands. By 1979, manufacturing was again the leading employer in Henry County, providing nearly 30% of the annual payroll.



Figure 4-28. Entrance to Gerhart Industrial Park near the intersection of state highways 7 and 13, north of Clinton. Photo by author.



Figure 4-29. Sign at the entrance to the Golden Valley Industrial Park with the names of the occupants. Photo by author.

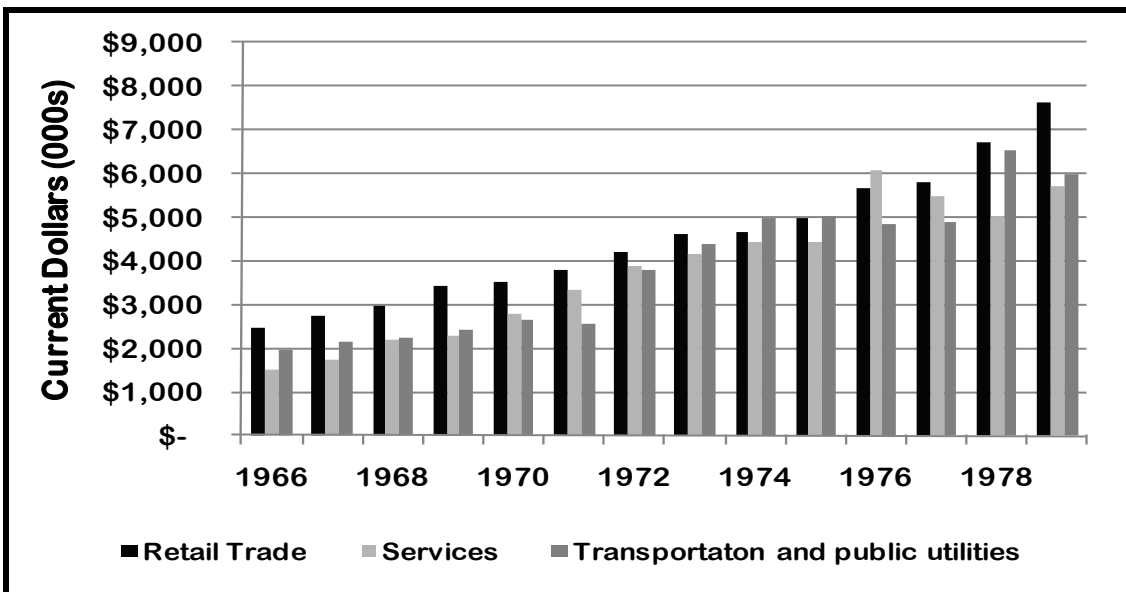


Figure 4-30. Annual payrolls for retail trade, services, and transportation and public utilities sectors in Henry County, 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-1979.

During the construction period three of the largest employers in Henry County were retailers, services, and transportation and public utilities. Based upon the information in Figure 4-30 above, with the exception of three years, the retailers had the largest payroll of the three sectors (fig. 4-31). The largest number of businesses advertized in the *Clinton Daily Democrat* were retailers. In 1960, these businesses were primarily located around and near the court house square (fig. 4-32). Other locations included places along the highways which crossed Clinton. In the 1970s a new business area developed at the junction of state highways 7, 13, 18 and 52 on the east side of Clinton. Four mall areas were ultimately developed. Anchoring this area are several national franchise restaurants (McDonalds, Wendy's, County Kitchen and Applebee's for example) and Wal-Mart (fig. 4-33).

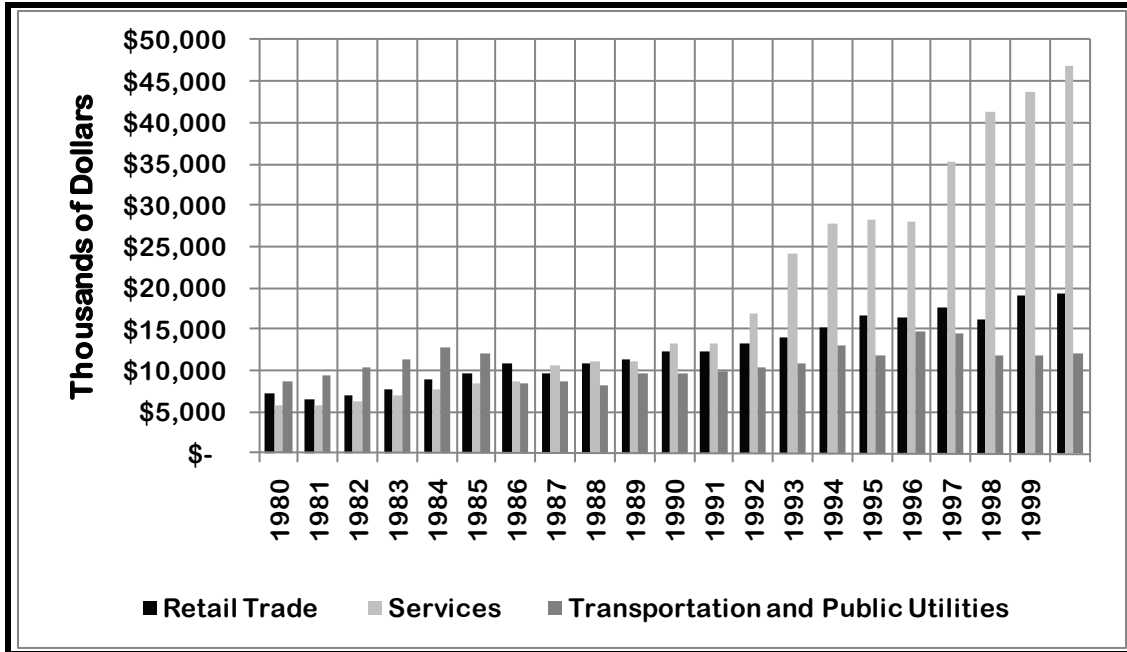


Figure 4-31. Annual payrolls for retail trade, services, and transportation and public utilities sectors in Henry County, 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1980-2000.



Figure 4-32. View of mostly retail businesses along the west side of Court House Square, Clinton. Photo by author.



Figure 4-33. View along state highway 7 on the east side of Clinton. Note the presence of McDonalds and Wendy's. Photo by author.

In the area of services, several items are noteworthy. During the pre-construction and construction periods, healthcare facilities normally did not advertize. Although recorded in the census data, these facilities were underrepresented in the newspaper ads. The only medical professionals who did advertize were chiropractors, audiologists, optometrists, and dentists. Often the ads were more an announcement of office hours, extended leaves, or opening or moving an office location. As many of these professionals did not employ assistants, they would also be underrepresented by the census employment data.

Another area of services is lodging. During the pre-construction and construction periods, lodging was primarily located in the central portion of Clinton, in facilities such as the Cozart Hotel (fig. 4-34). After the completion of the highways 7 and 13 bypasses to the east of Clinton, the lodging moved to

highway locations. Most lodging is now located near the junction of state highways 7, 13, 18 and 52 (fig. 4-35).



Figure 4-34 Cozart Hotel, downtown Clinton, circa 1960s. Photo courtesy of the Henry County Historical Society.



Figure 4-35. Motel located near the junction of state highways 7, 13, 18 and 52 on the east side of Clinton. Photo by author.

In Windsor, the changes to business have been most noticeable in the central business district. Abandoned buildings with the closing of businesses are obvious. In the Figures 4-36 and 4-37, one can observe the changing nature of business in the same buildings on Main Street. The International Order of Odd Fellows occupies the same building (next to Greife's), but Vincent's Shoe Store moved across the street and has since closed. The Vincent building was subsequently given a new façade along with the adjacent building to the right. The next two buildings to the right, including Rexall Drugs, have received new facades as well. Greife's has since closed. Parking, so prominent in the center of the streets, (notice markings on street) during the 1960s is no longer noticeable.



Figure 4-36. Windsor Main Street scene circa 1960. Photography by James Sutherland, courtesy of the Windsor Historical Society.



Figure 4-37. Windsor Main Street scene September 2009. Photo by author.

Like Clinton, Windsor does have some national franchise development that is slightly removed from the downtown area. Windsor does not have the distinctive highway development of Clinton. The Dairy Queen, close to the Windsor schools, has been on the same site since 1951. New to the area, since the 1970s, are the Pizza Hut and Dollar General.

One final comment about the location of businesses in Henry County, with the exception of Windsor, Clinton is the only community with nationally recognized franchises such as McDonalds, Wendy's and Wal-Mart. These businesses all have access from highway 7 but not 13. The significance is that these two highways provided the greatest potential for tourism customers. The north-south highway 13 continues south into St. Clair County and the lake region of southern Missouri. Highway 7 takes traffic directly to the main portion

of the Truman project and continues through Warsaw to the Lake of the Ozarks. Access to shopping centers is for the most part confined to highway 7 and Business Route 7. The lack of opportunities to access the businesses most attractive to the tourist from highway 13 is noteworthy. Opportunities to capture tourist dollars, therefore, are numerous along highway 7, but are limited along highway 13.

Another service showing significant change between the pre-construction and post-construction periods is healthcare. Based upon advertizing in the *Clinton Daily Democrat*, this is one of the business sectors showing the greatest amount of development and growth is healthcare. The number of healthcare firms advertizing in the newspaper nearly doubled between 1980 and 2000, with the vast majority of this growth occurring during the 1990s. Although there is only one hospital now in Henry County (during the 1960s there were two), there are numerous clinics and medical support and supply companies which have opened within the 1980s and 1990s. The Golden Valley Medical Center which opened in the mid-1970s was one of the first in Missouri to allow both medical doctors (MDs) and doctors of osteopathy (DOs) to practice in the same facility.

The following figures (4-38 to 4-40) relate specifically to the contract construction industry. As can be seen, during the construction period there is a spike in the number of employees and the annual payroll. However, that spike

did not translate into more firms. The number of employees during the late construction period did fluctuate, but not the extent that it did during the early part of that time period. Since the completion of the Truman project the number of contract construction employees has risen, most sharply during the 1990s. The increase in employees has also translated into a higher annual payroll especially in years 1999 and 2000. The number of firms did not increase until the 1990s

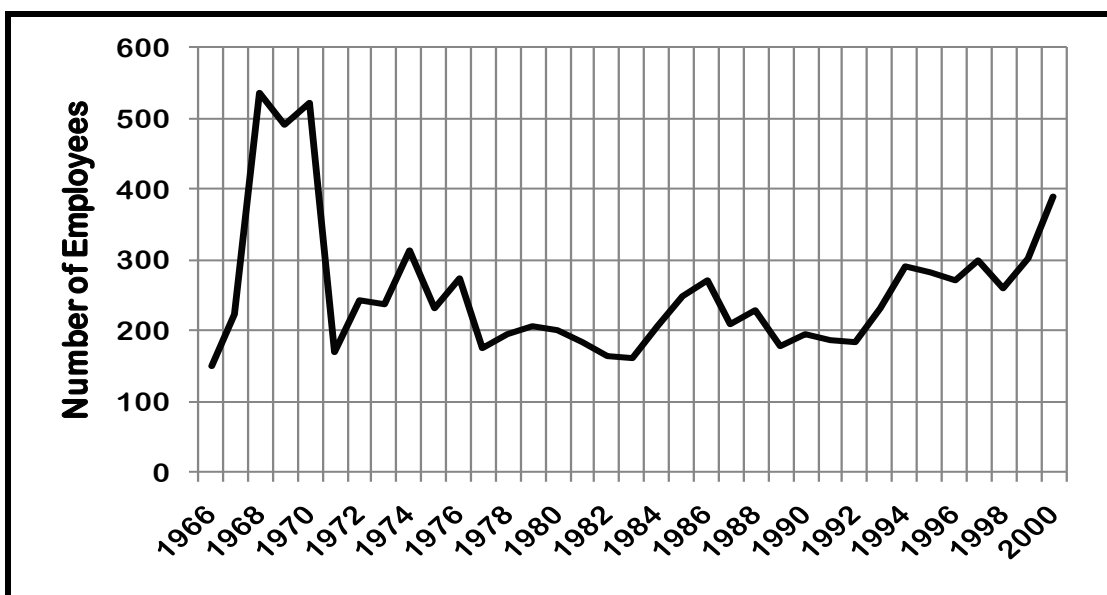


Figure 4-38. Number of employees in contract construction during the construction (1966-1979) and post-construction (1980-2000) periods in Henry County. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-2000.

when the number of firms nearly doubled. When taking all three characteristics into account, it can be seen that the increase in contract construction firms ultimately led to an increased demand for employees and the resultant increase in payroll. The newer firms could possibly be smaller in size. They may also be

working with smaller projects rather than large ones that were necessary in the late 1960s.

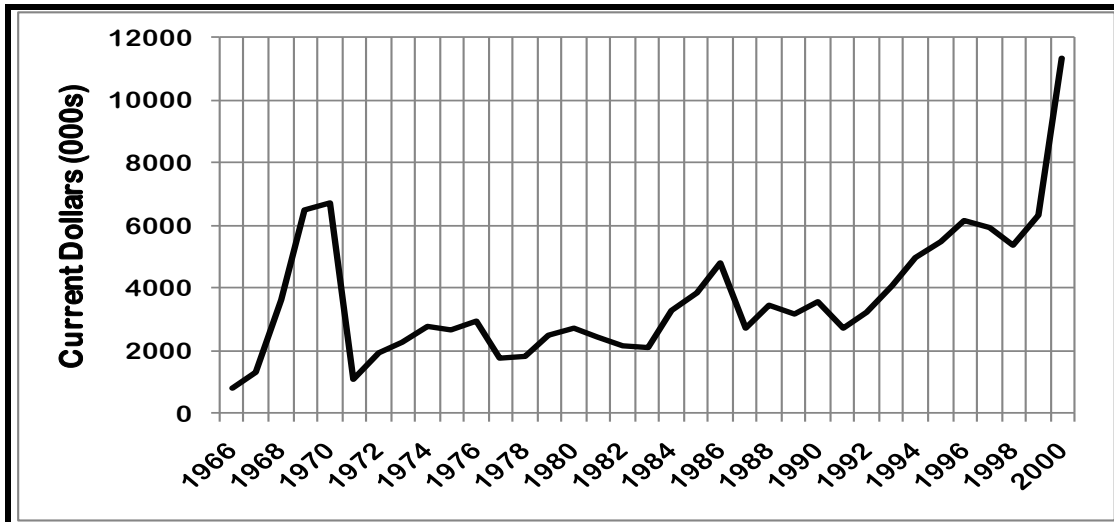


Figure 4-39. Annual payroll for the contract construction during the construction (1966-1979) and post-construction (1980-2000) periods in Henry County. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-1979.

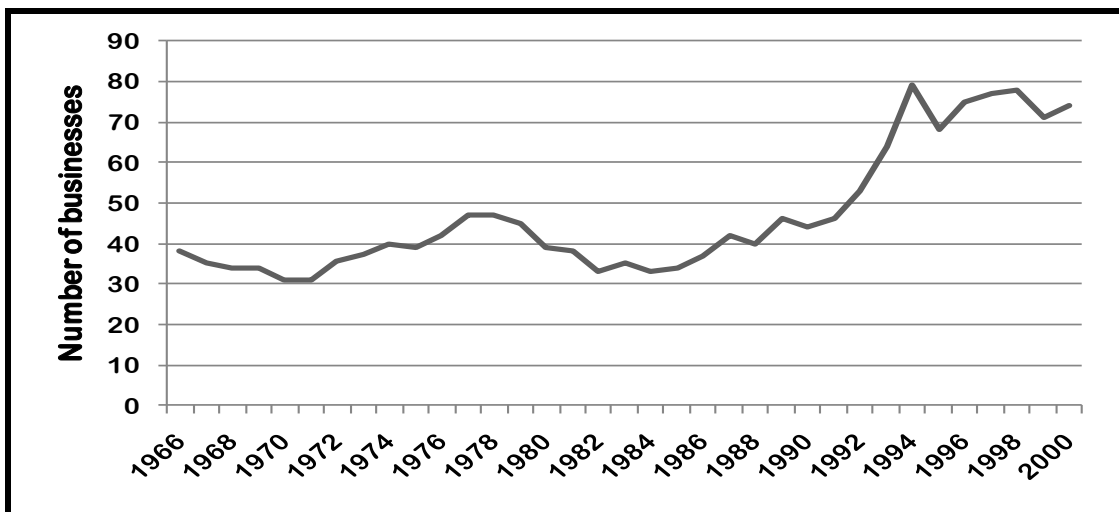


Figure 4-40. Number of contract construction firms during the construction (1966-1979) and post-construction (1980-2000) periods in Henry County. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-2000.

Below are concluding thoughts concerning the changing business structure of Henry County.

1. In Clinton, the location of many types of businesses changed significantly over time. Most of the eating and lodging facilities moved from the town center to areas along state highways 7, 13, 18 and 52.
2. The number of retail firms increased over time as did the number of employees and the annual payroll. This was consistent throughout the study period.
3. Agricultural activities adjusted to a smaller number of farms, the increased size of farms, and a reduction in the amount of acreage in production.
4. The personal income of the county has never equaled, or surpassed that of the state. The same holds true for the median household income.
5. The level of poverty was initially less than Missouri's. After the 1980s it exceeded that of the state. The changes in the poverty level appear to relate both to changes in the national economy and to the addition of low paying employment associated with tourism. When the

economy is not doing well, the number of employees in tourism decreases as the number of people traveling decreases.

6. The changes in the economic structure of the smaller communities in the county include abandonment of the business district and realignment of economic activities to the highways.
7. The communities in the western portion of the county were adversely affected by the closing of the coal mines and the purchasing of large tracts of land for the Truman project, both in fee and easement. Communities in the eastern and southern portion of the county were affected by the Truman project and the required real estate and transportation and utility relocations.
8. Communities along the major highways have adjusted to the different demands of the traveling tourist, which has resulted in changes to the visual landscape discussed later in this chapter.

Changing tax structure: 1960-2000

Understanding the changes to the primary sources of county government revenue is helpful in understanding the effects of the Truman project upon the local governments, if any. As any governmental body, Henry County collects taxes. During the 1960s and 1970s a large variety of taxes were levied on private

property, farms, and businesses throughout the county. These taxes have changed over time with some being dropped (such as the merchandizing and manufacturing (M & M) tax). Other taxes have been added or substituted, as in the case of the sales tax which basically replaced the property tax for general county revenue. A summary of the most significant aspects of the taxes is presented in Figures 4-41 to 4-44. All of the data which is included in the following tables was derived from the records of the Henry County Clerk's Office during the summer of 2009.

The property taxes are based on the assessed valuation of property. As land in the assessment pool either changed land use classification or decreased in area, the total valuation of the county would also adjust accordingly.

During the pre-construction period, the valuation for Henry County increased slightly every year (fig. 4-40). This increase was probably related to changing land use, for instance, changing from agriculture to housing, business, or mining. Beginning with the Truman construction period, the assessment valuation did steadily increase in current dollars, but when converted to the 2000 dollars, a different pattern results. The assessed valuation trends downward. This represents the period of real estate acquisition by the Corps of Engineers for the Truman project and by the State of Missouri for improvements to the transportation network in Henry County. Theoretically, then, the current

dollars, and subsequently the 2000 dollars, should both be declining. However, additional development which is changing the value of other land appears to be compensating for the removal of primarily agricultural land from the tax rolls. During the post construction period, the downward trend in 2000 dollars continued until 1985 when a reassessment took effect. The assessed valuation increased by nearly \$50,000,000, representing a 60% increase in land assessment values. Since the 1985 reassessment, the valuation trend has steadily increased until 2000. The post construction increases were probably associated with the increased number of businesses and increased housing within the county.

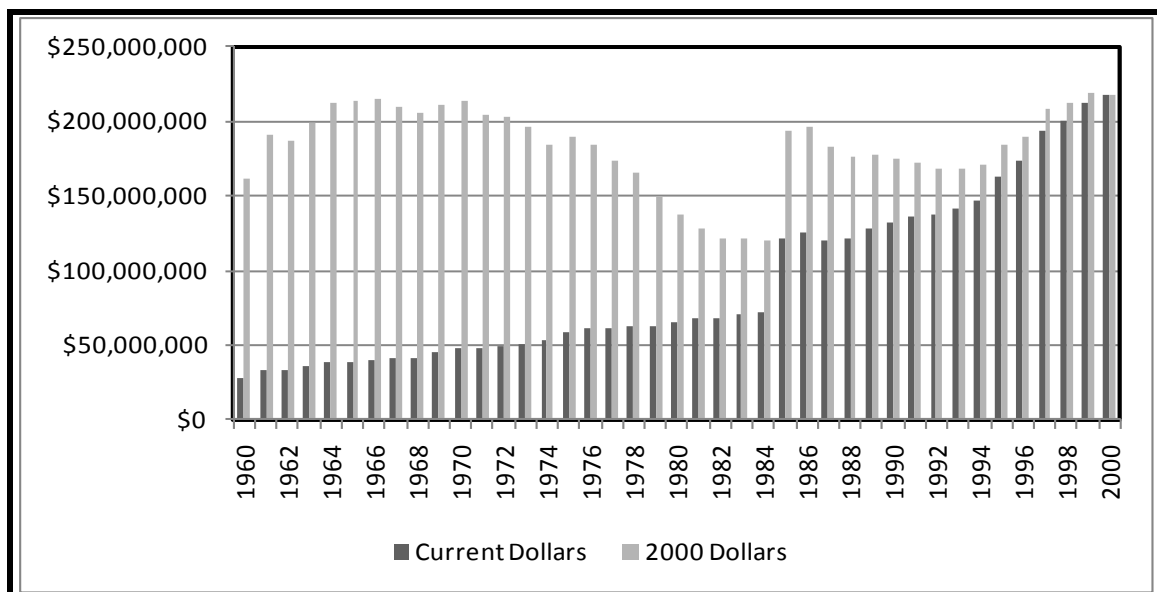


Figure 4-41. Assessment Valuation for Henry County, 1960-2000. Data from the records of the Henry County Clerk.

Property taxes were based upon the assessed valuation of property. The taxes were the primary source of revenue for the county general fund and for the school districts. These taxes are based upon the assessed value of property and adjusted accordingly with any changes to that assessment. The valuation of property changed significantly in 1985 with a reassessment of land values. Property taxes, however, were not collected for general revenues during the period 1984-2000. As can be seen in the assessed valuation figure, the collection of taxes would have increased based upon the increasing value of land.

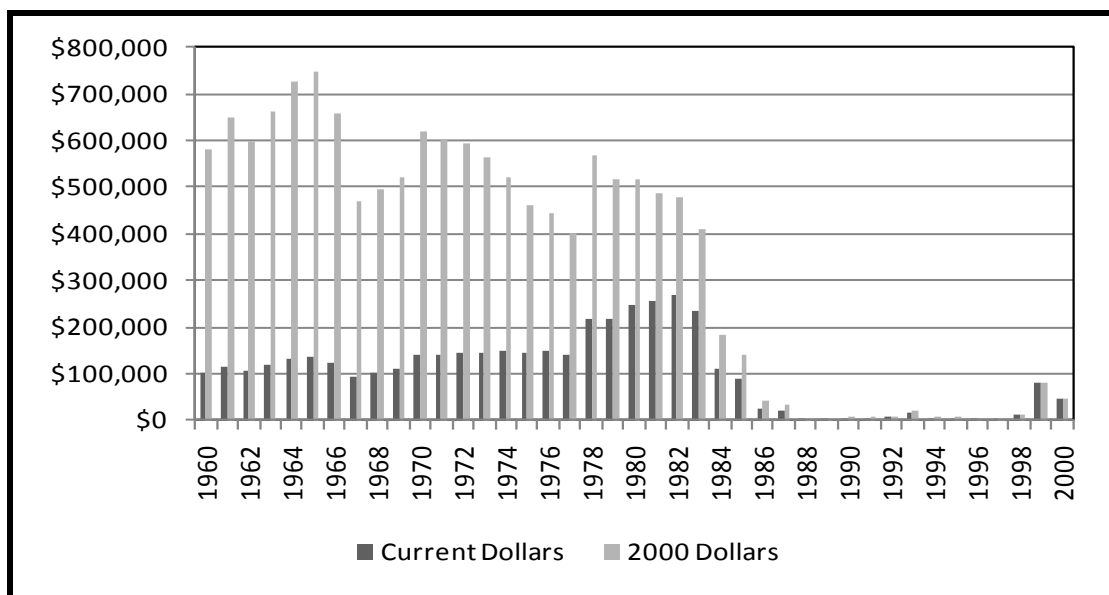


Figure 4-42. Property Tax collected by Henry County between 1960 and 2000. Data from the records of the Henry County Clerk.

In 1984, Henry County established a sales tax which replaced the property taxes as the chief source of general revenue. Between 1984 and 2000 the county witnessed a growing supply of money in general. In 2000 dollars, between 1984 and 2000 there was an increase of more than \$174,000, or approximately 20%. One positive aspect to the collection of sales taxes is that the money spent in the county by tourists helps to augment the needed funds to maintain infrastructure and provide financial resources for police, fire, and emergency medical services.

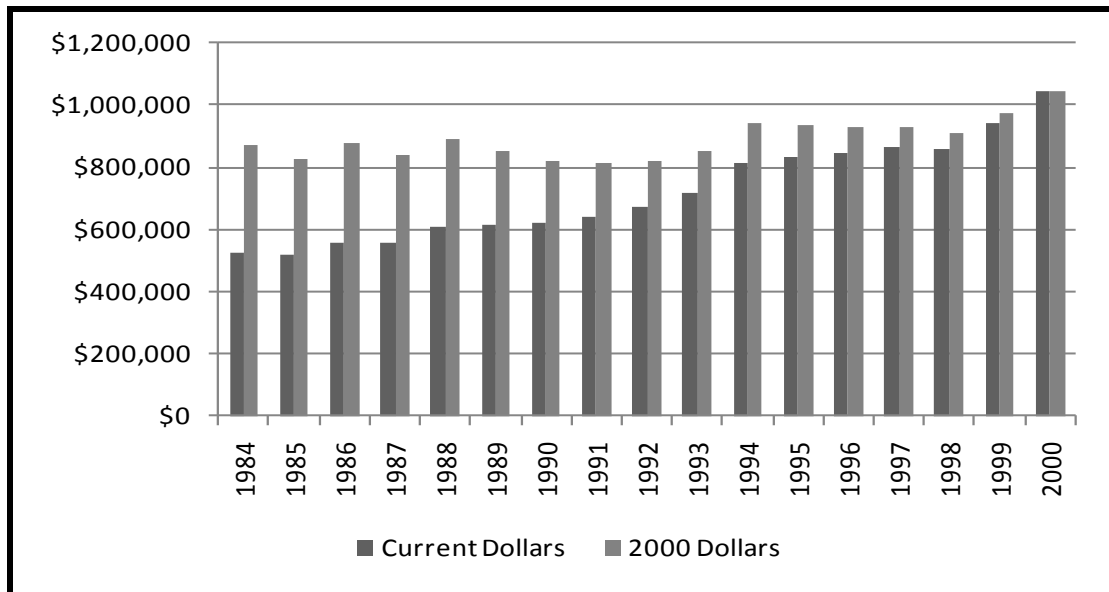


Figure 4-43. Sales Taxes collected by Henry County between 1984 and 2000. Data from the records of the Henry County Clerk.

The total general revenue receipts for the county have followed a very different pattern (fig. 4-44). In terms of 2000 dollars, there have been several significant periods of decline in financial resources for Henry County. The most significant occurred during the periods 1967-68 and 1972-74. These periods of decline coincided with the real estate actions of the Corps of Engineers during

the construction period. Acquisition of land in Henry County by the Federal government would have removed lands from the tax rolls, thus potentially causing a reduction in the collection of revenues. A change to the collection of sales taxes has provided a more reliable source of revenue and one that appears to be increasing at a relatively stable rate.

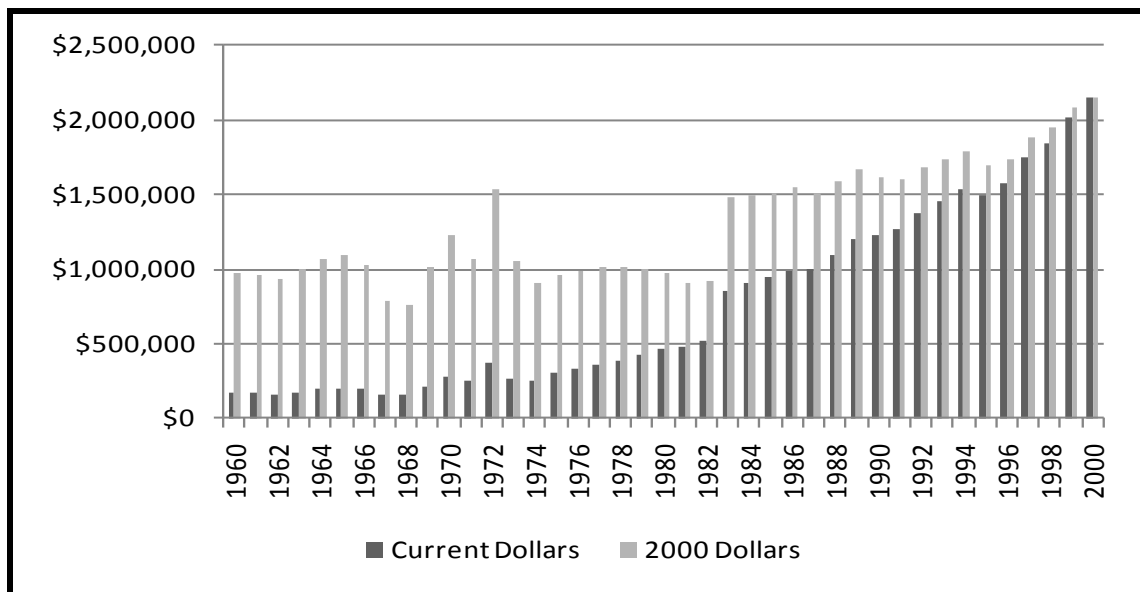


Figure 4-44. Total General Revenue Receipts for Henry County between 1960 and 2000. Data from the records of the Henry County Clerk.

Several conclusions may be made from the data presented in the above figures, especially as they relate to the construction of the Truman project.

1. The property tax collections for all practical purposes ceased after the completion of the Truman project in 1979. Post-construction collection of property taxes is essentially nil. During the pre-construction and construction periods, the collection of property taxes fluctuated with

two distinct periods of decline during the late 1960s and early 1970s.

These two periods of decline probably relate to acquisition of land by the Corps of Engineers for the Truman project.

2. The collection of sales taxes since their inception in 1984 has steadily increased, thus providing a relatively stable source of revenue for the county. The collection of these taxes coincides with the completion of the Truman project and the reassessment of property in Henry County, which occurred at the same time as Benton County. The increase in these sales taxes is partially a direct reflection of the number of tourists either passing through the county on state highways 7 and 13 or staying at the parks and recreation areas associated primarily with the Truman project.
3. The total general revenue receipts for the county have steadily increased since 1984 with the substitution of the sales taxes for the property taxes.
4. There appears to be a direct link between the taxes collected by the county and the Truman project. With increased tourism to the Truman project and to the recreation areas to the east (Lake of the Ozarks) and the southern Missouri lakes, the amount of money collected in taxes has increased. If, however, the Truman project were deemed to be

unacceptable for recreation for whatever reason, the collection of sales taxes would decrease significantly, requiring the county to reevaluate its revenue generating options.

Visual Landscape Changes

Besides the changes in the landscape caused by the presence of a very large lake and the change of land from agricultural uses to public parks and fish and wildlife management areas, there have been additional alterations to the rural landscape of a substantive nature. Most of these changes can be seen in areas along the major highways and access roads to the public use areas. These changes to the landscape are reflective of economic changes within the county. Along the major highway routes, there are numerous new businesses.

Probably the most obvious visual changes (as in Benton County), are the almost ubiquitous storage facilities for boats and RVs. These facilities are most noticeable along state highway 7. Often associated with restaurants, lodges, but more commonly with convenience/service station complexes, these storage facilities appeal to the tourist not wishing to haul their boat or trailer or drive the RV back home. These facilities may be of small size with just a few stalls or very

large offering stalls which will store even the largest of the RV units or pontoon boats (figs. 4-45 and 4-46).



Figure 4-45. Storage facilities near Tightwadalong state highway 7, which may accommodate very large RVs. Photo by author.



Figure 4-46. Storage facility near Clinton along state highway 7 which may accommodate several sizes of RVs and boats. Photo by author.

In many of the areas immediately outside of the Corps of Engineers and state public use areas one will find convenience stores, RV parks, as well as

storage facilities. In Henry County, just outside of Sparrowfoot Park area a private RV park is located with all of the abovementioned facilities.



Figure 4-47. Entrance to Sparrowfoot Park, sign on left, and private development storage facility on right abutting the park. Photo by author.

Also within the Sparrowfoot Park may be found camping and day use facilities to accommodate launching boats, swimming and picnicking. Examples of these facilities are in Figures 4-48 to 4-50.



Figure 4-48. Group picnic shelter house at Sparrowfoot Park. Photo by author.



Figure 4-49. Boat launching ramp in Sparrowfoot Park. The Truman lake at the time of the photo is approximately thirteen feet above normal pool. Photo by author.



Figure 4-50. Camping area in Sparrowfoot Park. This campground is equipped with water and electricity. Photo by author.

Near the community of Leesville, the Corps has also developed Windsor Crossing Park. Like the other areas previously mentioned, this facility has

development just outside its entrance. Included in this development is an RV park which allows year-round residence, boat and RV storage facilities, a motel, restaurant, bait shop and package store.



Figure 4-51. Entrance to Windsor Crossing Park. Photo by author.



Figure 4-52. Development located outside the entrance to Windsor Crossing Park on county road "PP." Photo by author.



Figure 4-53. Private RV park located near the entrance to Windsor Crossing Park on county road "PP." Photo by author.



Figure 4-54. Boat and RV storage facility located near the entrance to Windsor Crossing Park. Photo by author.

Within the Truman project reservation are a few facilities which are operated by a concessionaire. In Henry County there is one such facility, a marina at Bucksaw Park. The marina facility contains not only boat docks and in-water docking facilities, but also a year-round restaurant, RV park, lodge with cabins, and a service center for boats. The marina is depicted in the aerial photo in Figure 4-54. The RV park which the concessionaire operates allows parking for a day, a week, a month, or a year. Some of those who have longer leases have taken advantage of the situation and have arranged for construction of

porches/decks, storage facilities, and also canopies over the RV. This is as close to living on the Truman project as one can get.

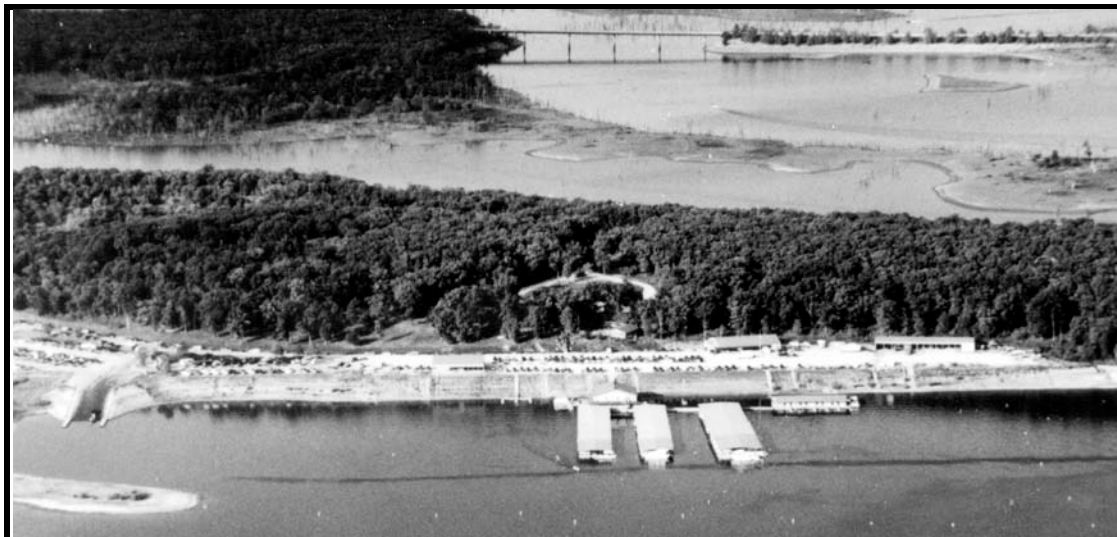


Figure 4-55. Aerial photo of Bucksaw Marina, circa 1999. The restaurant, repair facilities, and dry dock facilities are located in the central portion of the marina. The lodge/resort and cabins are located in the central forested area (notice the crescent shaped drive way in the trees). The RV park is located to the right (in the photo) of the lodge/resort. Photo courtesy of the Henry County Historical Society.



Figure 4-56. Bucksaw Park cabins located near the resort. These cabins are part of the marina concessionaire's operation. Photo by author.



Figure 4-57. Bucksaw Park Resort operated by marina concessionaire. Photo by author.



Figure 4-58. RV camping at Bucksaw Park. Area operated by the marina concessionaire. RV parking may be daily, weekly, monthly or yearly. Photo by author.



Figure 4-59. RV closed for winter on site in the RV park operated by the marina concessionaire. Obviously renting the space on a yearly basis, this is the closest one can come to having a home on federal land at the Truman project. Photo by author.



Figure 4-60. Camp site in that part of Bucksaw Park operated by marina concessionaire. Photo by author.



Figure 4-61. Bucksaw Park picnic overlook located near the entrance to the park. This area is not operated by the marina concessionaire. Photo by author.

Concluding thoughts:

Based on the previous discussion, the following demographic, economic and visual landscape changes can be related to the Truman project, even if only marginally.

1. Population continues to increase in spite of the negative rates of natural increase. Individuals migrating to the county are the only means of population increase and replacement as the rate of natural increase is negative. The majority of the increase in population has occurred since the Truman project was completed.
2. The economic character of the county is changing. Agriculture is still a significant industry, but the amount of land available for farming

activities has drastically decreased as a result of the changed use of land to a reservoir and public facilities and fish and wildlife management areas. Manufacturing, although significant to the economy of Henry County, appears to have a declining number of companies, especially in relation to the mix of other businesses within the county. Those activities showing the most growth in numbers are in the areas of construction, professional services and healthcare. The greatest expansion of these last groups of businesses occurred in the 1990s.

3. The collection of tax revenues, especially since the advent of the sales tax, has continued to increase at a rate that appears to meet the needs of the county.
4. The changes to the visual landscape are most noticeable along the major highways (both state and county). The changes are for the most part associated with tourism at the Truman project. Storage facilities, RV parks, restaurants, convenience store/service station complexes and lodging are the most obvious. In the Clinton area, the presence of national franchises along state highway 7 has increased the opportunities for the tourist to stop, spend money and pay taxes. The public use facilities have provided recreational opportunities for many

tourists. The development adjacent to the parks has also provided opportunities for the local entrepreneur.

CHAPTER 5: ST. CLAIR COUNTY 1960-2000

The power of space is great, and it is always active for creation and destruction. It is the basis of the desire of any group of human beings to have a place of their own, a place which feeds them, body and soul.

–Paul Tillich (1959, 50)

Introduction:



Figure 5-1. Rock Fence Posts of St. Clair County. Photo by author.

Originally the southern township of Rives County (later Henry County), in 1841 St. Clair County was organized around the township system of government. Located to the south of Henry County, St. Clair County is approximately half way between Warrensburg and Springfield, Missouri. Centrally located within the county is Osceola, the county seat (fig. 5-2). Osceola, located on the Osage River, was a river town with riverboats moving grain, ore, and supplies up and down the river. Its location on the river was helpful in maintaining its connection with communities and markets

downstream such as Warsaw, Jefferson City, and ultimately St. Louis. Appleton City is the largest incorporated community in the county. It is of interest that the largest incorporated communities are located in the northern half of the county in the Osage Prairie region. A list of the incorporated communities within the county is provided in Table 5-1. See also Figure 5-3 for the locations of both the incorporated and some of the unincorporated communities within St. Clair County.

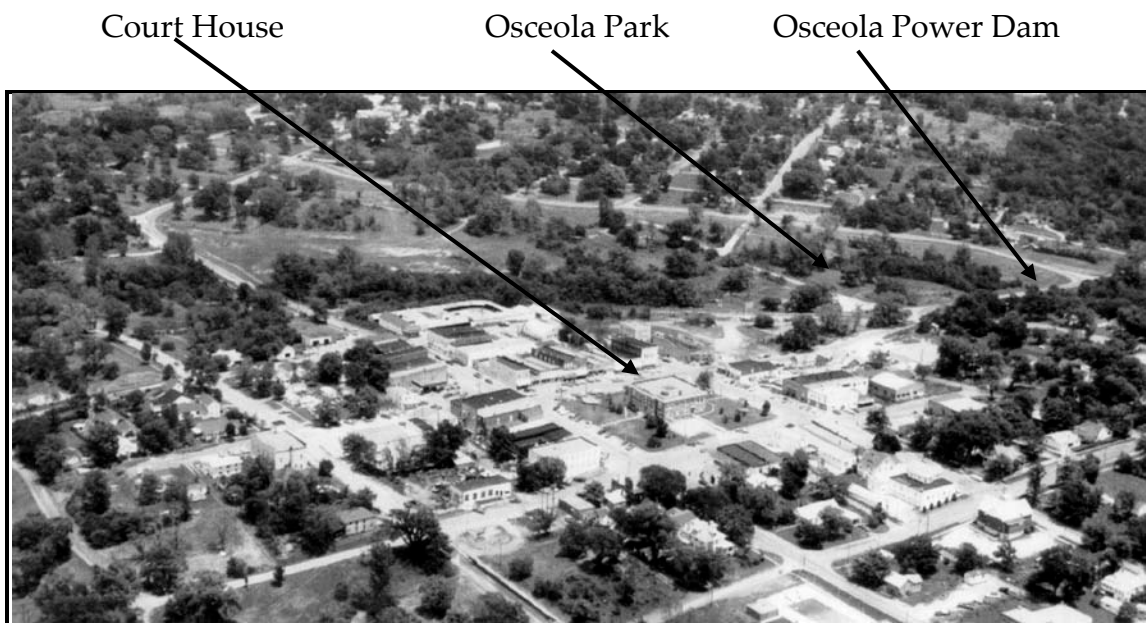


Figure 5-2. Aerial view of Osceola taken by Benton Aviation prior to the completion of the Truman project. Photo courtesy of the St. Clair County Historical Society.

Table 5-1			
Incorporated Communities in St. Clair County			
Appleton City	Collins	Gerster	Lowry City
Osceola	Roscoe	Vista	

Table 5-1. List of Incorporated Communities in St. Clair County.

▪

Figure 5-3. St. Clair County Map (Missouri Department of Transportation 2009).

Agriculture has traditionally been the main economic activity within the county. The farming is characterized by small-to-medium sized operations associated with animal production and some cash cropping. Included in agriculture is fruit and nut production and some timber farming. Generally, agricultural practices have been geared toward current market conditions and government programs and requirements (U. S. Department of the Army, Corps of Engineers 1973). The communities of Lowry City (fig. 5-4), Appleton City (fig. 5-5), and Osceola have long been centers for agribusiness within the county. Each has, or has had, an active elevator, along with fertilizer, feed, seed, and implement operations.



Figure 5-4. Post Office and MFA Elevator in Lowry City. Photo by author.



Figure 5-5. Appleton City downtown corner, elevator located to the left. Photo by author.

Although mining has played a very important role in the economy of St. Clair County, there has been limited exploitation of this resource. Coal mines to the north and west near the community of Appleton City, along with crushed stone operations in central region south of the community of Osceola, were the main mining activities. The coal mining ceased in the 1980s.

Like Henry County, St. Clair County has a long history of cheese production. At one time there were two cheese plants in the county. One of these—Osceola Cheese--remains today. Manufacturing other than cheese production has been limited in St. Clair County. Over the years several small and specialized firms have existed. For instance, across the river from Osceola a factory provided the metal hoops for barrels (History of Henry and St. Clair

Counties, Missouri. 1883). Several printing companies also have existed in Osceola.

Transportation systems include federal, state, and county roads and rail. U.S. Highway 54 is the only federal highway route that crosses the county. Connecting Jefferson City, Lake of the Ozarks and points beyond to the east with Nevada, Missouri, and other points to the west, this highway provides an artery which could allow for increased economic development. Crossing U.S. Highway 54 at Collins is state highway 13. This state highway provides a connection to both I-70 to the north and I-44 to the south. Another significant state highway is 82, which crosses the county from the northeast to the southwest, providing connection between state highway 83 and U.S. Highway 65 in Benton County in the east with U.S. Highway 54 in Eldorado Springs in Cedar County to the south. The only other state highway is 52 which connects Appleton City with Clinton and Windsor in Henry County and ultimately U.S. 65 in Pettis County to the northeast and U.S. Highway 71 at Butler in Bates County to the west. Numerous other county roads provide farm-to-market access for the remainder of the communities, both incorporated and unincorporated. Gerster and Vista are the only incorporated communities which do not have a state or federal highway either passing through, or immediately adjacent to the city limits. Appleton City is the only incorporated community in the county which has state highway

access only through another county. Appleton City is not connected by a state route to the remainder of the St. Clair County.



Figure 5-6. Abandoned MKT line south of Appleton City. Photo by author.

Railroads connected the communities of Osceola, Lowry City, and Appleton City with the other regional centers such as Clinton and Windsor to the north, and Springfield to the south. Currently there is no passenger service to the county, and rail activity is limited. There is no regional, county, or municipal airport within St. Clair County.

Changing Population: 1960-2000

The distribution of population in St. Clair County is unusual but is reflective of the historical development of communities within the county. Osceola is the county seat and historically the most reflective of the county as a whole, with its roles in the Civil War, and in the development of the county reflected in the county library and historical society collections. Osceola is connected not only by transportation routes with the remainder of the county but also by social and economic linkages. Appleton City, however, the largest community within the county, is most associated economically with communities in adjacent counties, and only marginally with the remainder of St. Clair County. Because it is most connected to the communities to the north in Henry County by transportation routes and by economic activities such as coal mining and agriculture, Appleton City has a different social and economic character from the remainder of St. Clair County.

The total population of the county has fluctuated considerably in the twentieth century. St. Clair County's peak population occurred in 1900, with 17,907 people (Missouri Secretary of State, Missouri State Library 2008). The county's population declined until 1970 when St. Clair County recorded its lowest population since 1870. The following table indicates the total population for the county during the time frame of the study. The county did lose population between 1980 and 1990, but it was regained by 2000. The populations for each township and incorporated community are indicated in Table 5-3.

Table 5-2				
Total Population for St. Clair County				
1960	1970	1980	1990	2000
8421	7667	8622	8457	9652

Table 5-2. Population totals for St. Clair County 1960-2000. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980, 1990, 2000.

The population of St. Clair County has shown little change in terms of location. Each of the townships has maintained their relative position in terms of population totals (fig. 5-7). St. Clair County does not have any urban areas, according to U.S. Census Bureau (population of 2,500 or more). Appleton City, Lowry City, and Osceola are the largest communities in that order. Appleton City has maintained populations in excess of 1,000, while Osceola has a population in the 800s, which remained relatively constant for the period 1970-

2000. Gains to the population in the county have primarily been in the two larger cities. During the 1990s the township in the northeastern corner

Table 5-3						
County Populations by Townships and Incorporated Areas						
St. Clair County		8421	7667	8622	8457	9652
Appleton Township		1443	1400	1593	1584	1602
Appleton City		1075	1058	1257		
Butler Township		1048	1043	1213	1345	1396
Lowry City city		437	520	676		
Center Township		194	186	335	203	211
Chalk Level Township		193	161	278	150	192
Collins Township		534	514	557	604	679
Collins Town		177	150	145		
Dallas Township		274	258	330	326	406
Gerster Town		48	42	45		
Doyal Township		445	415	547	496	598
Vista Village		50	44	73		
Jackson Township		225	141	184	260	553
Monegaw Township		398	365	315	285	299
Osage Township		254	194	154	204	255
Osceola Township		1632	1403	1438	1429	1614
Osceola City		1066	874	841		
Polk Township		165	149	157	179	264
Roscoe Township		584	539	551	503	561
Roscoe Town		125	137	91		
Speedwell Township		459	413	473	437	549
Taber Township		271	260	240	212	199
Washington Township		302	226	257	240	274

Table 5-3—St. Clair County populations by townships, incorporated areas, and census periods. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

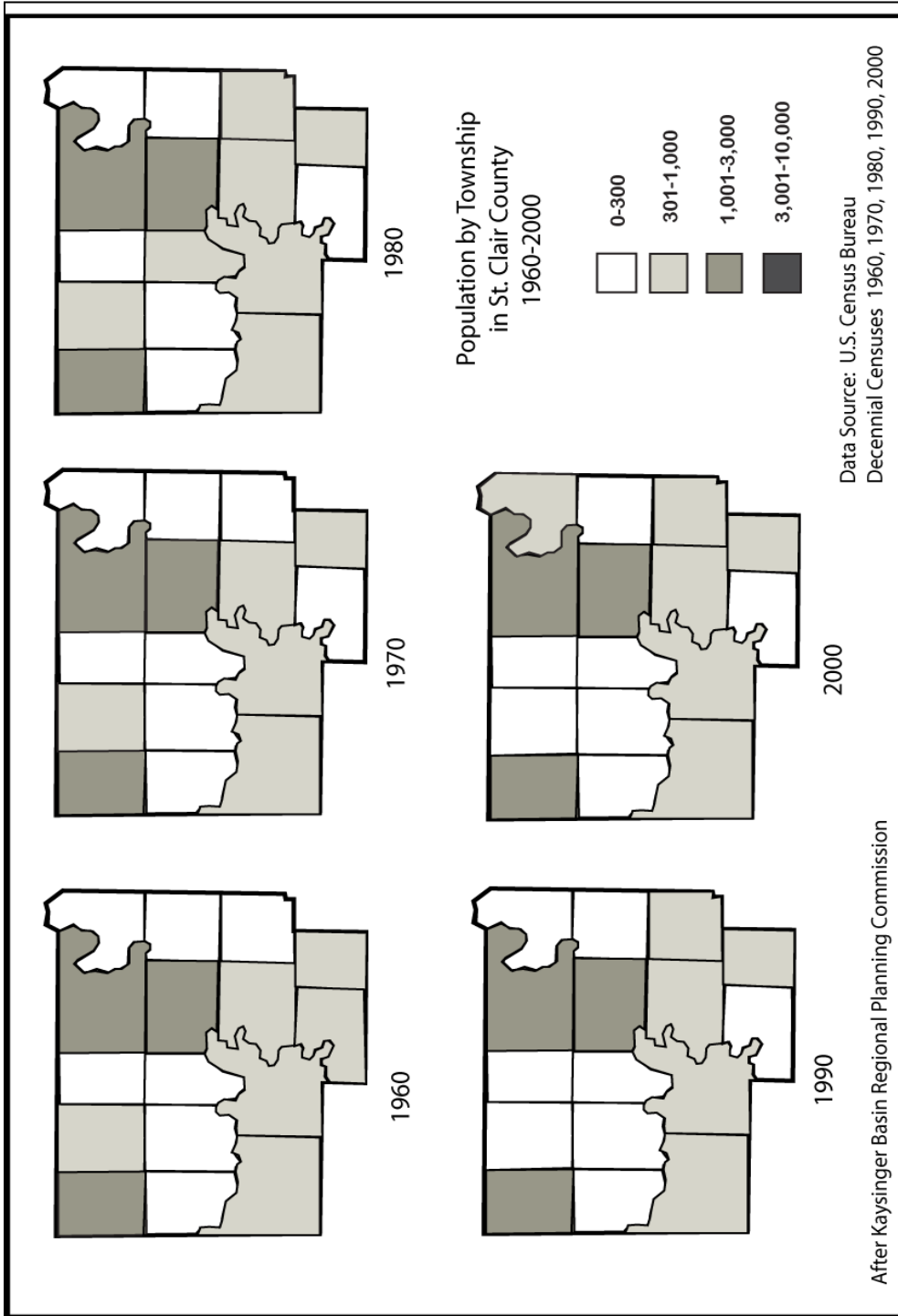


Figure 5-7. St. Clair County population by township, 1960-2000. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

of the county doubled its population. Most of the townships in the county have a population less than 1,000 people, with seven of the townships reporting less than 300 people in 2000. Most of these latter townships are located in the west and northwest, surrounding the Appleton City Township. The locations of the largest communities are obvious on Figure 5-7.

In St. Clair County the number of deaths exceeded the number of births during the period 1960-2000 (fig. 5-8). Two decades show a loss of population, 1960-1970 and 1980-1990. These losses were recouped during the subsequent decades. As the natural increase rate is always negative for St. Clair County, immigration is the only source of new population growth. With the exception of the decade 1960-1970, there have been more persons moving into the county than leaving. In the decade 1980-1990, there was a reduction of 253 persons from natural increase, but the in-migration reduced that loss to 165.

The greatest number of people moving into the county occurred in the decade 1990-2000. Based upon the population distribution township map, the largest portion of these individuals moved to rural developments in the northeast, near the Truman project. Therefore, as the figure indicates, the number of people migrating to the county exceeded the number of people leaving.

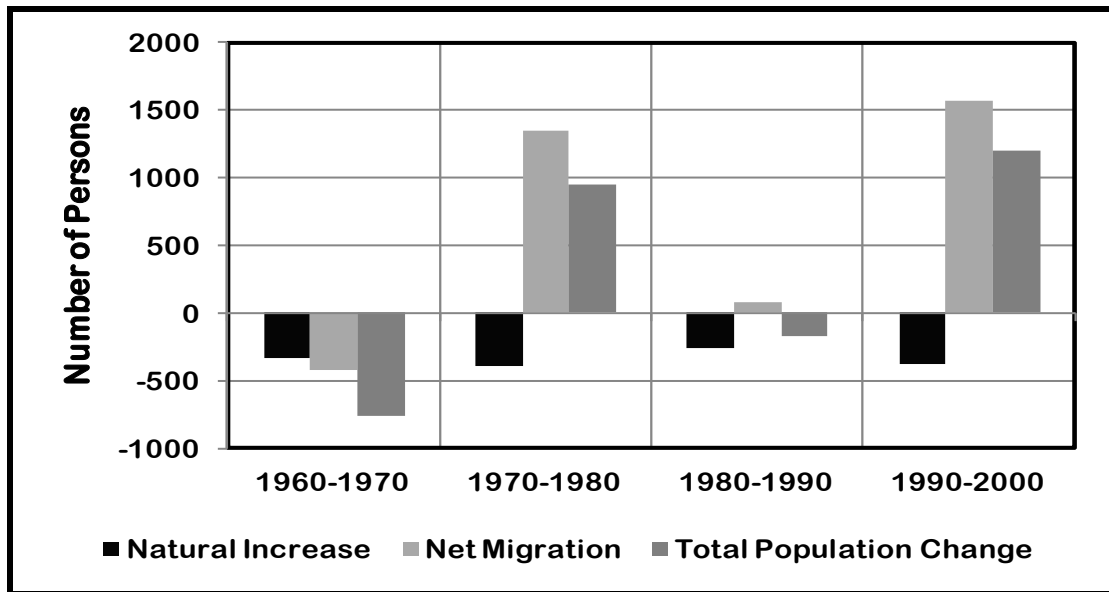


Figure 5-8. Components of population change for St. Clair County, 1960-2000. Source: Missouri Secretary of State, Missouri State Library 2008.

When examining the median age of St. Clair County's population there does not appear to be a strong relationship between age and the populations moving into the county. St. Clair County's median age reflects much fluctuation, more so than Henry and Benton Counties. The county's median age increased by 1.3 years between 1960 and 2000. This not a large change. When it is compared to the median age in Missouri we have an inconsistent pattern change as illustrated in Figure 5-9 below. The one element of consistency is that St. Clair County's median age is significantly higher than Missouri's beginning with an age difference of more than ten years and ending with an age difference of more than seven years

Table 5-4				
Median Age of Population by Census Period				
1960	1970	1980	1990	2000
42.6	44.9	42.4	42.1	43.9

Table 5-4—Median Age: 1960-2000 for St. Clair County. Source: U. S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

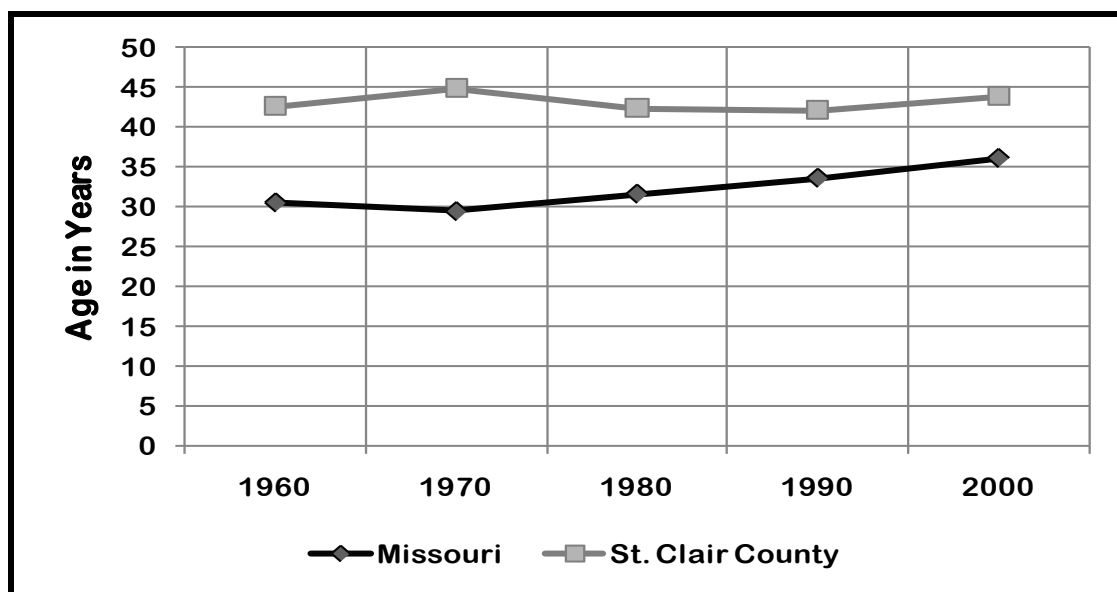


Figure 5-9. Comparison of median ages between St. Clair County and Missouri. Sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

The high median age of the county is reflected in the age structure of the county as well. In each population pyramid discussed below, there is a significant number of people over the age of 65, especially when compared to the number of individuals under the age of 15.

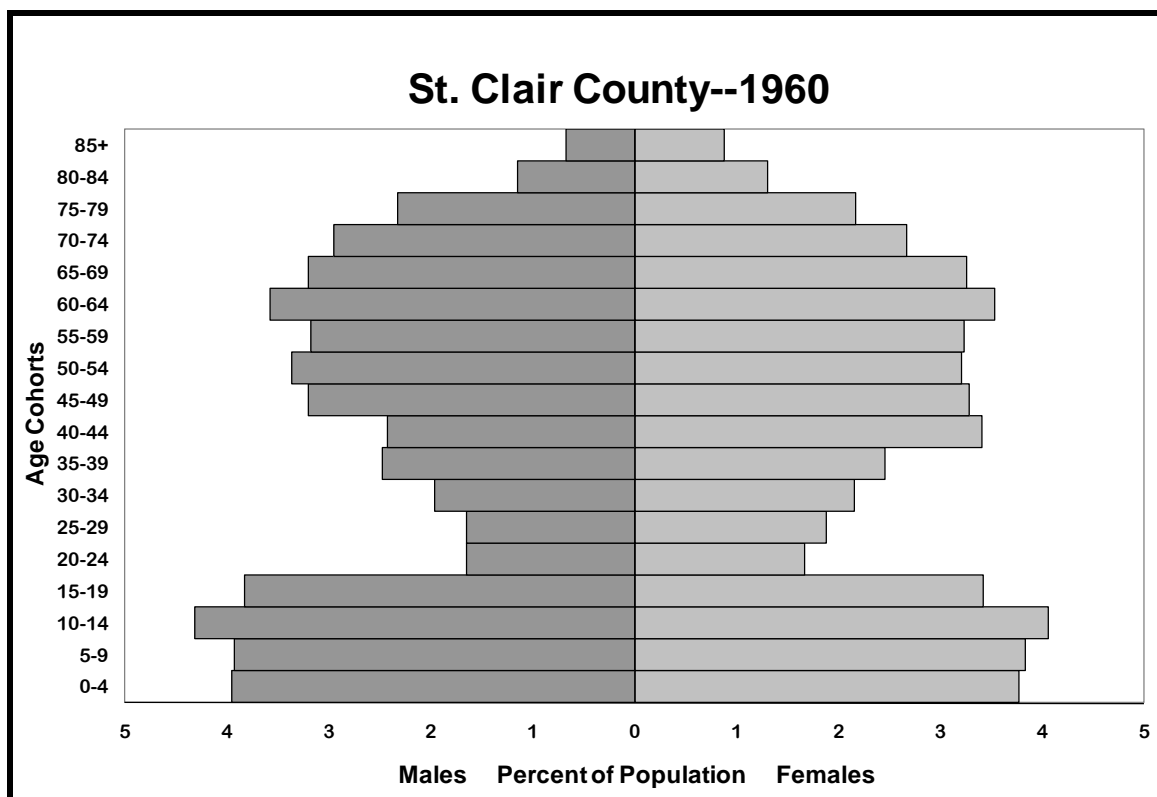


Figure 5-10. 1960 Population Pyramid for St. Clair County (U.S. Department of Commerce, Bureau of the Census 1960).

In 1960, St. Clair County's population was in decline. Despite this decline, the 1960 population pyramid indicates a potentially rapidly growing population as a result of childbirth. This large group is the "Baby Boom." There is one noticeable factor here, however, and that is the relatively small number of individuals in the 15-39 cohorts. This reduction could be a result of a number of factors, that we have seen in both Benton and Henry Counties, including the lack of tertiary education possibilities in the counties and the need for 18-year males to fulfill their military obligations through the draft. There is also another interesting aspect to the population pyramid, the number of individuals in

several cohorts above the age of 55 nearly matches the largest of the “boomer” cohorts. In other words there were a significant number of people either retiring, retired, or soon to be retired. In fact, the number of people over the age of 65 was 1,734 or approximately 20.6% of the total population, which is a greater number and percentage than Benton County had during the same period. The number of under 15 year olds was 2,009 or approximately 23.9% of the population.

St. Clair County’s population “bottomed” with the 1970 census. The population pyramid for 1970 shows a very similar pattern to that seen in 1960 ,even through the total population is lower. This is slightly surprising when considering the very large number of “Baby Boomers” that should be showing up in the 5-25 year cohorts but are not. There is a drastic reduction in the 20-24 year old “boomer” cohort and approximately the same number of people found in the 25-39 year age cohorts. The reduction is consistent with the 1960 population pyramid, but has expanded into the next generation. This can be partially explained by several factors. The purchasing of land by the Corps for the Truman project would have displaced many families, who may have taken that opportunity to move elsewhere to pursue other economic activities. The Vietnam Conflict would have involved a large number of males in the 18-25 year old populations and the opportunities for tertiary education were located outside

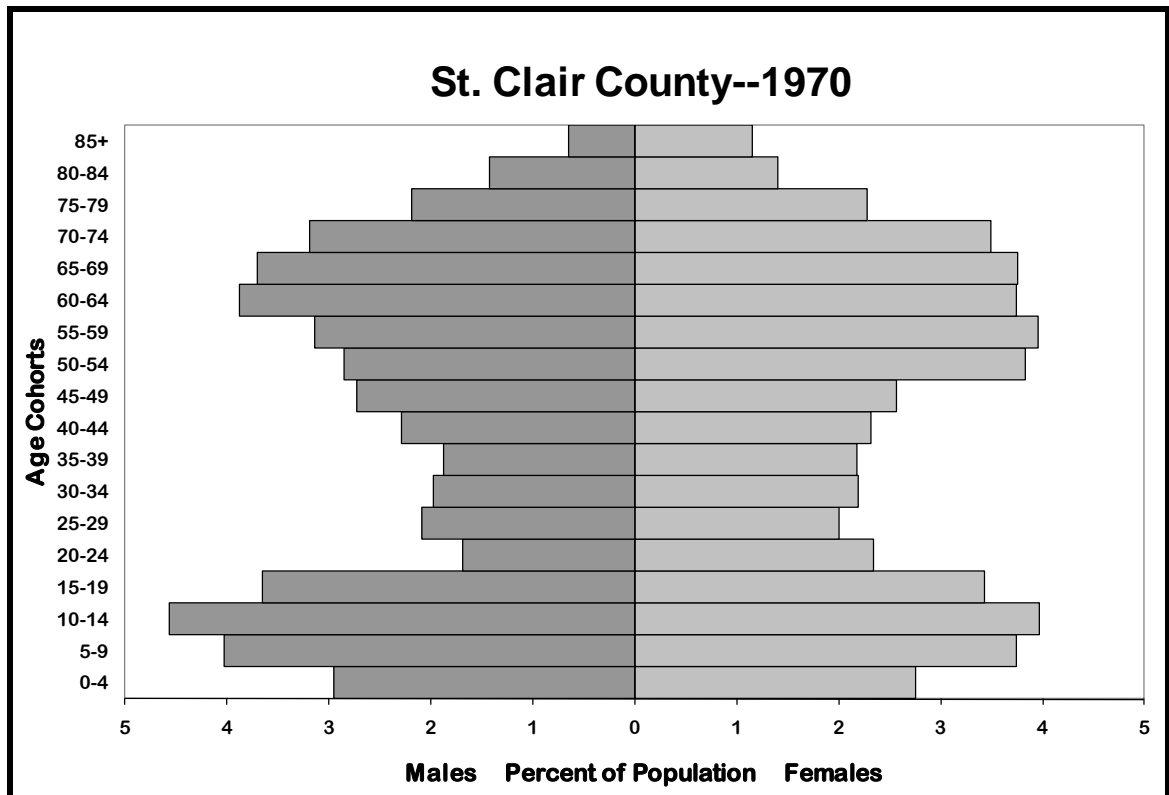


Figure 5-11. 1970 Population Pyramid for St. Clair County (U. S. Department of Commerce, Bureau of the Census 1970).

of the county. The major colleges and universities in Missouri would be particularly attractive to many males wishing to delay entry into the military and for females wanting to take advantage of enticements for women to enter college. The population pyramid appears to have a rapidly declining older generation like that shown in the pyramid for 1960. The reason for that appearance is the Bureau of the Census has added age cohorts for 75-79, 80-84, and 85+ which creates the shape now seen. The total number of individuals under the age of 15 is now 1687 or 22% of the population, a decrease of less than two percentage points from 1960. Those individuals 65 and over now number 1,782, or 23.2% of

the population. St. Clair County was becoming a county with two major age cohorts, those under 15 and those over 65. Together they represented more than 40% of the total population.

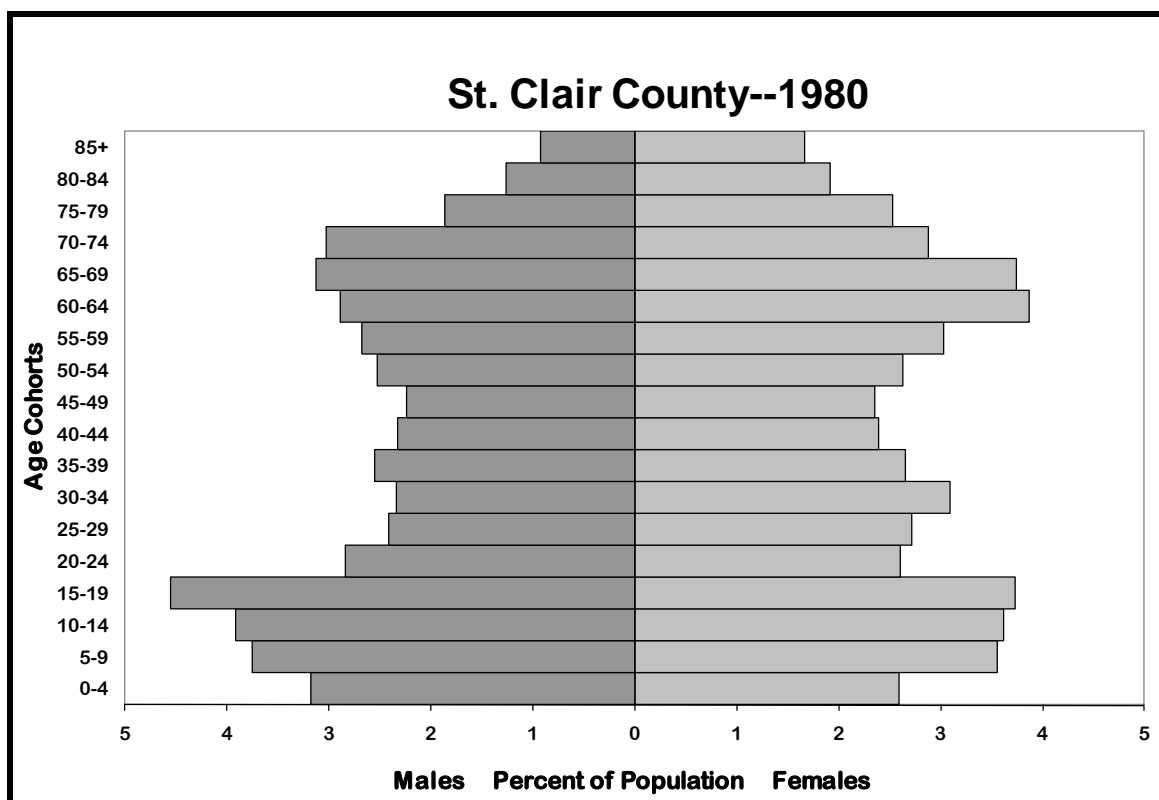


Figure 5-12. 1980 Population Pyramid for St. Clair County (U.S. Department of Commerce, Bureau of the Census 1982).

The population pyramid for 1980 shows a continuation of decreasing numbers of young people and increasing numbers of older individuals. The “Baby Boomers” are not as noticeable as a significant population group. Their ages at the time of this census were 16-36. The only remnant of that group is in the cohort 15-19, which for St. Clair County was the largest single age cohort in 1980. There is a continuation of the younger members of the population leaving

and they appear not to be returning. St. Clair County's population increased by over 900 people, or 12%. This increase is the result of the net in-migration of more than 1,300 individuals. At this time, the number of those under the age of 15 comprise approximately 20.6% of the population, with 1,777 individuals, and those over the age of 64 are almost 23% of the population, with 1,979 individuals. As in the previous decade more than 40% of the population is considered dependent, that is not actively engaged in working and thus are not contributing significantly to the tax base through earnings. In conclusion, we see an increasing number of retirement age individuals coming into the county. We also see a decreasing proportion of the population providing the tax base upon which the county and communities within the county can draw.

By 1990, the population of the county had again declined, this time by 165 persons. But the pattern of increasing proportion of the population being of retirement age and a decreasing percentage of the population found in the younger age cohorts continues. The largest single cohort is for the age group 60-64. For 1990, the number of children under the age of 15 is smaller both in absolute numbers and in percentage, 1,608 and 19%. The population 65 and older totaled 1953 or approximately 23%. By now the "Baby Boomers," age 26-46 are no longer visible. The population in the 20-24 year age cohort in 1990 is smaller than their numbers were in the previous census, 404 versus 370.

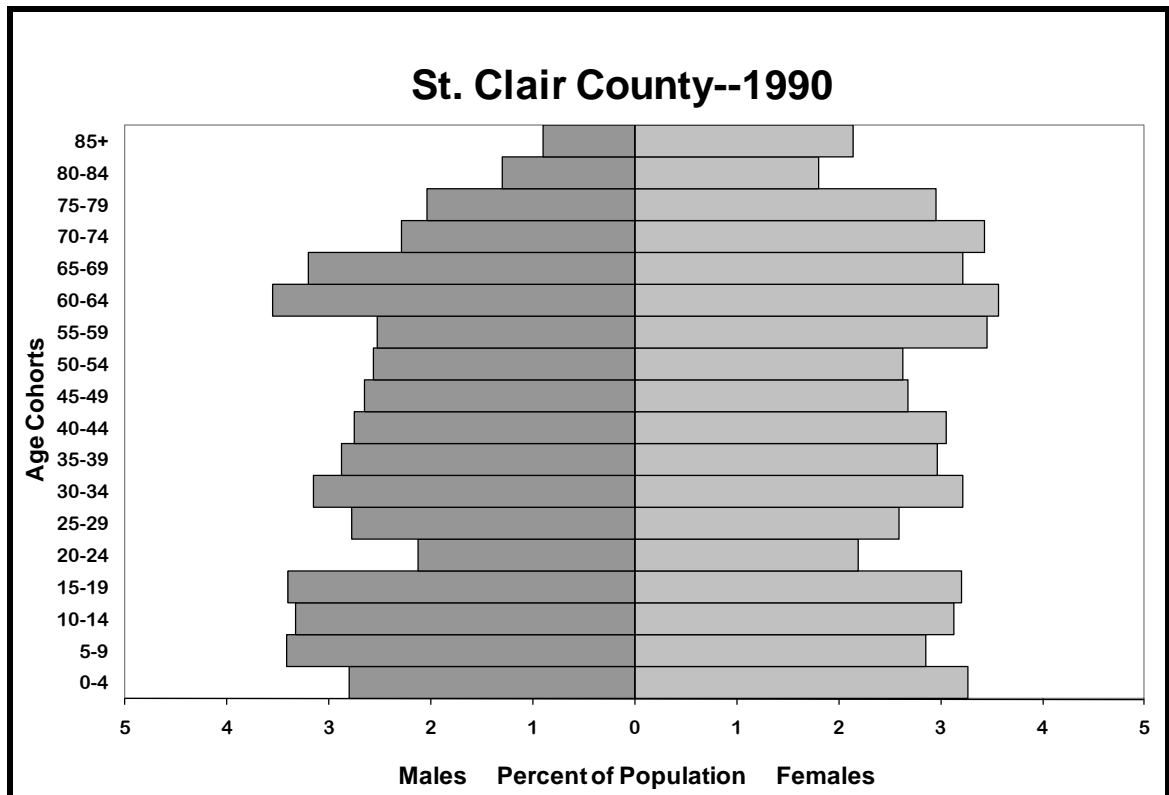


Figure 5-13. 1990 Population Pyramid for St. Clair County (U.S. Department of Commerce, Bureau of the Census 1992).

By 2000, the population of St. Clair County had reached its highest point since 1950. The demography reflects an ongoing change to an older population with those over 65 comprising a substantial proportion of the total, 21.3%, or 2,056 individuals. Those under the age of 15 increased in number from 1990, with 1,798 individuals, or 18% of the total population. The base of the pyramid is becoming narrower which would indicate a declining potential for growth or negative growth. Again the population exhibits a significant decrease in the numbers between the ages 20-29. The “Baby Boomers,” now aged 36-56, are

becoming a definable group within the population, but are not nearly as significant as those who have retired.

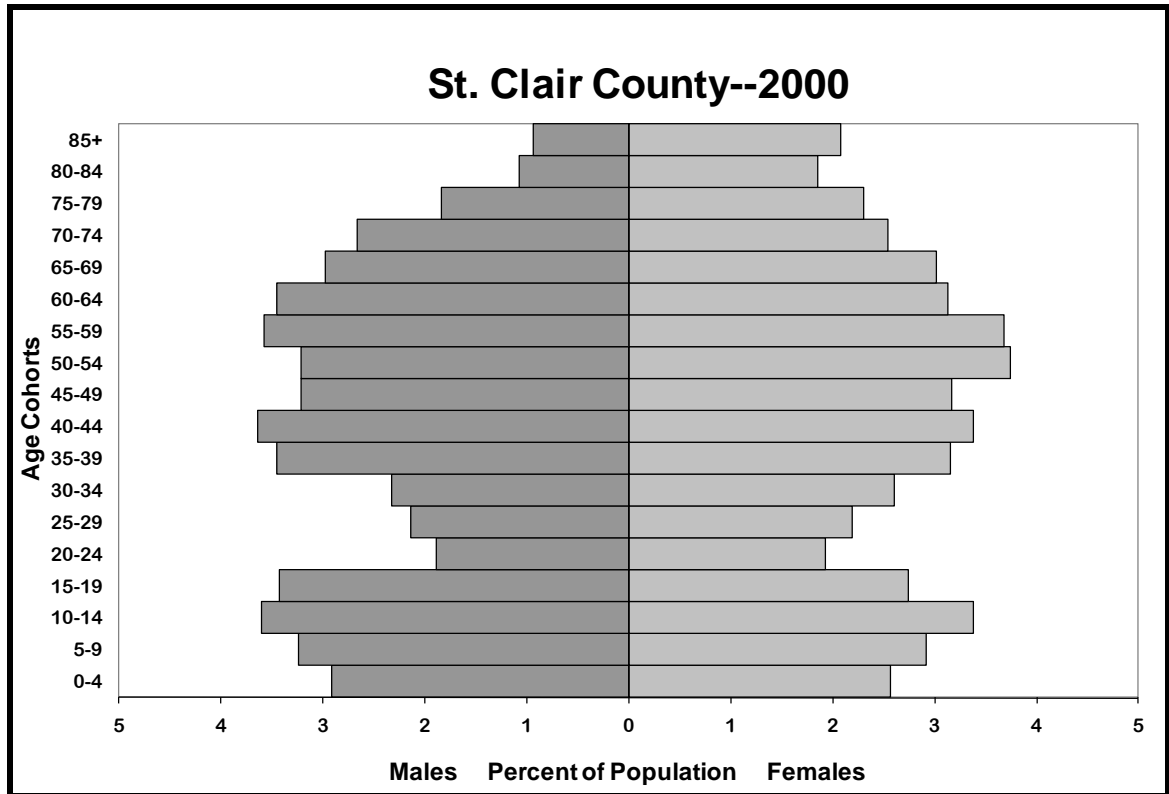


Figure 5-14. 2000 Population Pyramid for St. Clair County (U.S. Department of Commerce, Bureau of the Census 2002).

The population pyramids for St. Clair County show a loss of individuals in the 20-29 year age cohorts, especially for 1960 and 1970. The lack of a defined “Baby Boomer” population within the later pyramids may be the result of one or more of the following factors.

1. The lack of job opportunities within the county for young adults.

Recent high school graduates may be leaving to do one or more of the

following; attend tertiary education institutions, seek employment in larger communities, or enlist in the military.

2. The limited possibilities for advancement in a potential career or place of employment. These possibilities may relate to obtaining additional skills and training to advance in one's career. They may also relate to jobs which may have been obtained within the region. But companies along with jobs may have left the area. In order to keep employment people may have been obliged to move.
3. Very limited employment opportunities associated with the Truman project. Although there are individuals working for the government, many of the maintenance and ranger positions are seasonal in nature. The actual number of full-time positions is limited. Tourism reacts to changes in economic conditions; consequently ranger and maintenance positions are reduced during periods of recession and, once eliminated, are often difficult to replace.

The growing number of those over 65 is most obvious in the 2000 census. The median age for the county in 2000 was 43.9 (U.S. Department of Commerce, Bureau of the Census 2002). Another feature that is noticeably lacking, especially beginning with the 1980 census, is the bulge associated with the "Baby Boom"

generation. The largest “bulge” appears to be associated with the retired population beginning at age 65.

The inflow of retired individuals relates to a series of factors. Like most states, Missouri does not tax retirement income. Coupled with relatively low property taxes and a life style that allows for relative comfort, and the area becomes ripe for retirees. The lower taxes allow those individuals who have done well during their career years to spread their savings and retirement incomes farther. In addition, those with family ties in the area may find the area to be appealing with a chance to return to ones roots.

Changing business conditions: 1960-2000

St. Clair County has traditionally been associated with the primary activities such as farming and mining. Manufacturing has occurred but on a limited basis. The construction of the Lake of the Ozarks and later the Truman project did not change this situation. Tourism, however, has been a significant source of outside income for St. Clair County especially in the area of sport fishing.

As described in Chapter 2, the paddlefish (spoonbill) and the blue catfish are prized sport fish in Missouri. The Osage River was especially popular as a fishing area because of the large numbers of these two fish. The Lake of the

Ozarks created a downstream barrier for movement of these fish out of the Osage basin. The other barrier was the Missouri Public Service power dam (fig. 5-15), located in Osceola. The habitat needed for these two fish to flourish was confined to the area between. The construction of the Truman project changed this situation. Now these fish are stocked from fish hatcheries operated by the Missouri Department of Conservation.

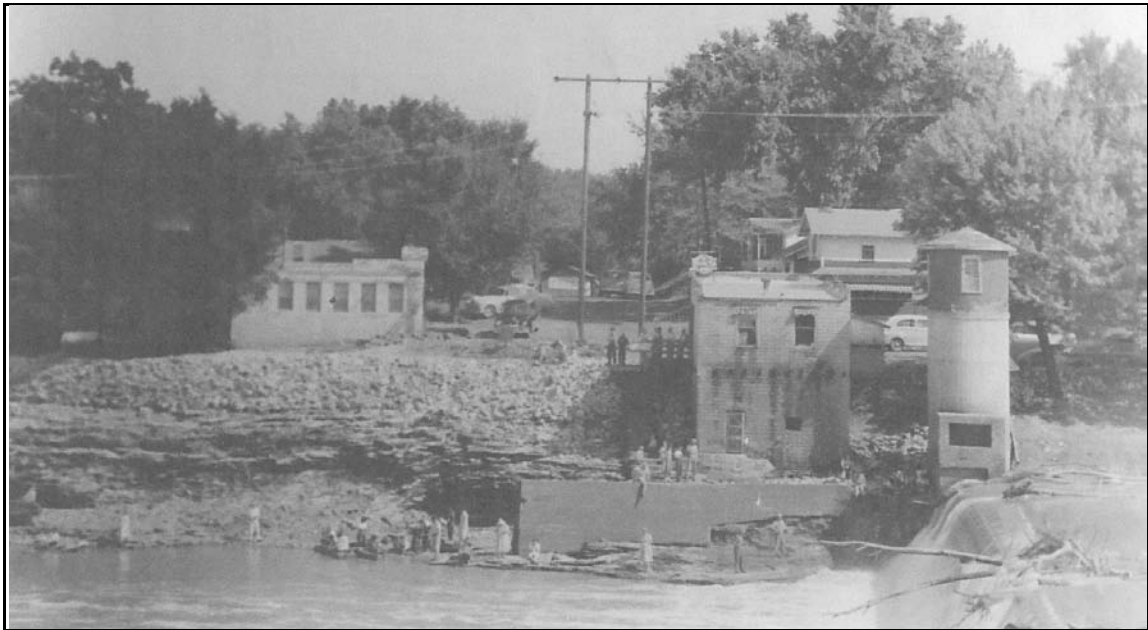


Figure 5-15. Osceola Dam looking south towards town. Photo courtesy of the St. Clair County Historical Society, no date associated with picture.

The catching of sizeable fish in the Osage River was enhanced with the Lake of the Ozarks. The stretch of river between Bagnell Dam and the Missouri Power Service Dam in Osceola limited the movement of fish, specifically the larger sport fish such as the paddlefish (spoonbill) and the blue catfish. These

fish grow to very large proportions and are still considered by many to be the ultimate fresh water sport fishing experience in Missouri. The popularity of sport fishing is indicated by the following picture of the fishermen sitting on the Osceola Dam ready to “snag a big one” taken during the 1950s (fig. 5-16). This activity continues today in the area near Osceola but with fewer participants.

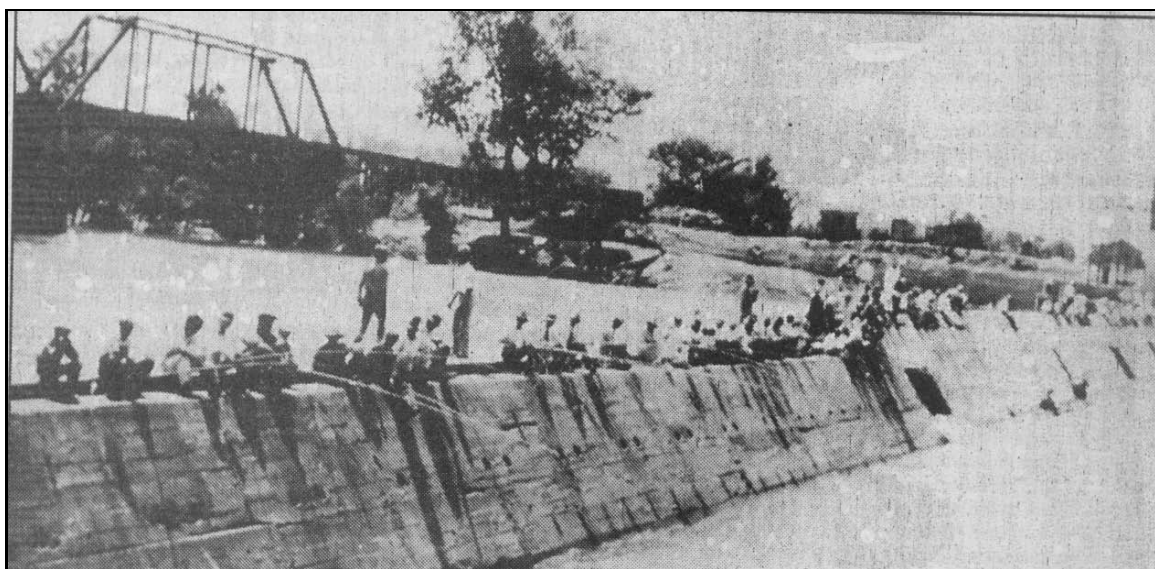


Figure 5-16. Paddlefish (spoonbill) snaggers waiting on the Osceola power dam to snag "a big one." Published sometime in the 1950s in the *St Clair County Courier*. Photo courtesy of the St. Clair County Historical Society.

Even though the number of fisher-folk decreased after the completion of the Truman project and the removal of the Osceola Dam, the experience is still valued by individuals. The following photo taken in 1980 and the accompanying caption serve as a comparison (fig. 5-17). The article describes the scene in this way:

This is only one small group of spoonbill fishermen who filled up the banks of the overflowing Osage River...at Osceola. Approaches to the riverbanks were either flooded with water or flooded with mud but determined fishermen managed to get close enough to throw in the lines or launch their boats. Fishermen weren't the only ones out for the weekend. Entire families joined in the weekend fishing with trailers and campers parked in every conceivable location. Although the spoonbill take this season has been slow so far, the thrill of the sport is as strong as ever.



Figure 5-17. Snagging Season Draws a Crowd Picture originally published in the *St. Clair County Courier* in April 1980. Photo courtesy of the St. Clair County Historical Society.

Shortly after the Truman project was completed, Osceola had a marina located in its park area on the eastern side of the central business district. However, the permanent pool level of the Truman project was not adequate to support this feature. The marina became silted-in and was a often filled with debris that came down the Osage Arm during periods of highflows. In an article for the *Benton County Enterprise*, a former mayor, Glen Toalson is quoted, saying:

Our people have said time and again that we need more water....We have no lake—only a river half full! There is no way our community can recover with the present situation. We have no tourism because there is nothing to see except mud flats, debris, piles of driftwood, horse weeds and just plain unsightly landscape. (White 1986)

In the 1980s, the Corps of Engineers studied the feasibility of adjusting the pool levels to enhance power production. The city of Osceola supported a 6-9 foot rise in the permanent pool, which was not adopted by the Corps. The photos below show the general area near the marina site when the lake was thirteen feet above the permanent pool level.



Figure 5-18. View of Osceola park area to the east, looking north, with Truman lake thirteen feet above permanent pool. Photo by author.



Figure 5-19. Area for the Osceola Marina, with Truman lake thirteen feet above normal pool. Osceola's RV park is on the opposite bank in the trees. Photo by author.

Like Benton and Henry Counties, St. Clair County has exhibited lower income levels over the study period. As illustrated in Figure 5-20, the median household income in comparison to that of Missouri is significantly lower. In 1960 the median income for St. Clair County was approximately 50% of Missouri's. By 2000, the median income for St. Clair County was approximately 65% of Missouri's median income.

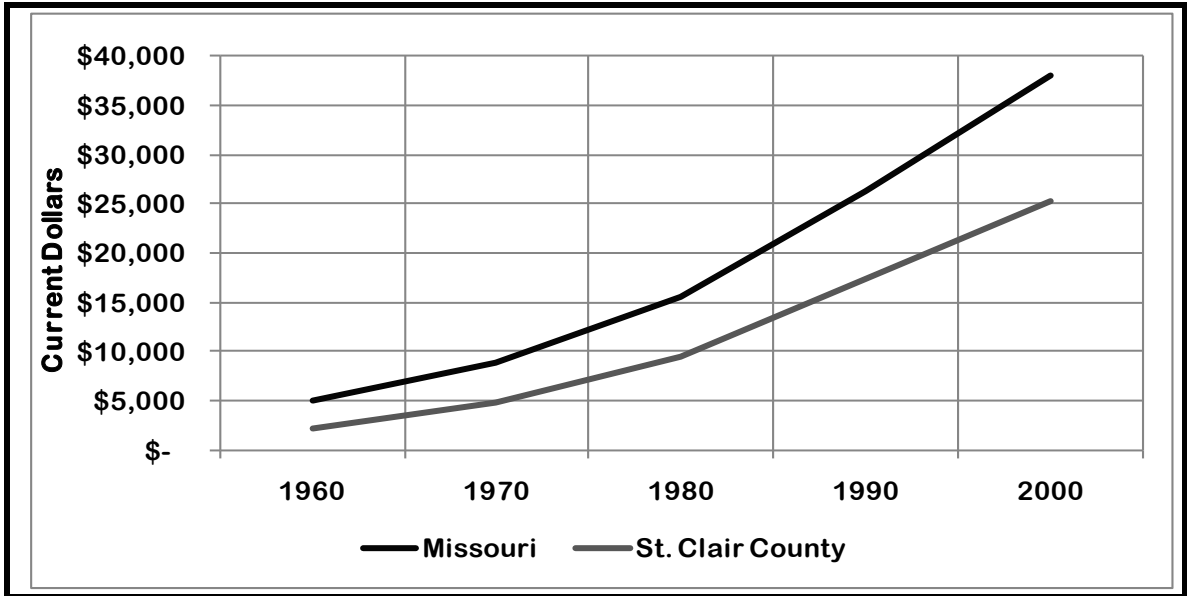


Figure 5-20. Median household income for St. Clair County and Missouri. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1960, 1970, 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

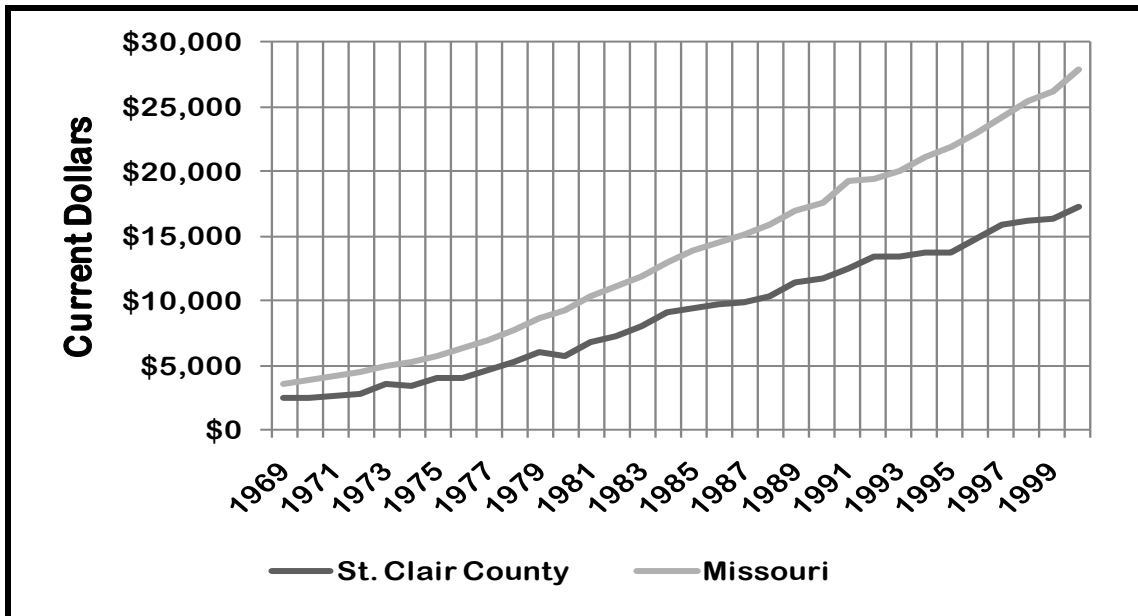


Figure 5-21. Per capita personal income comparison between St. Clair County and Missouri, 1969-2000. (U. S. Department of Commerce, U.S. Bureau of Economic Analysis 2009).

St. Clair County's per capita personal income was on average 66% of Missouri's during the period from 1969 to 2000. The difference between the two has generally increased since 1969, starting at approximately 70% and dropping to approximately 62% in 2000. When a comparison is made between St. Clair County, Missouri, and the United States, St. Clair County in general averages approximately 62% of the national per capita income level or 4% less than its comparison with just Missouri (fig. 5-22).

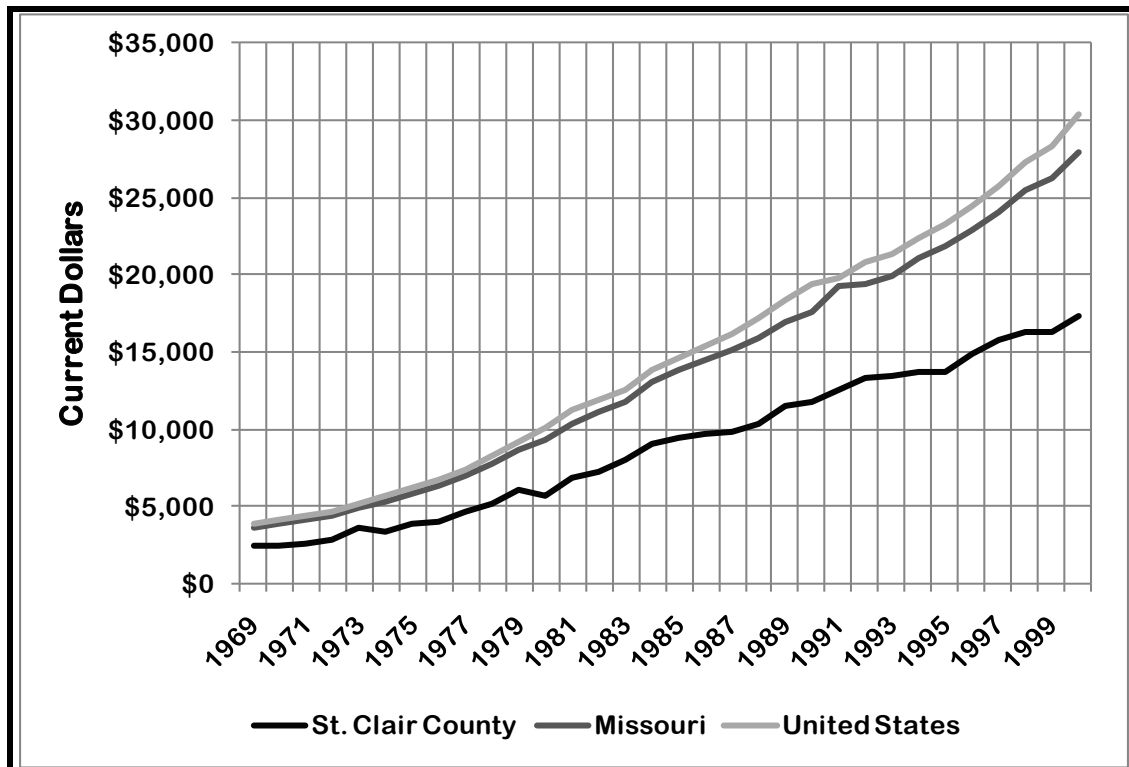


Figure 5-22. Per capita personal income comparison between St. Clair County, Missouri and the United States for the period 1969-2000. (U. S. Department of Commerce, U.S. Bureau of Economic Analysis 2009).

As indicated in the previous figure, the difference between St. Clair County and Missouri and the United States has increased, especially beginning

in the mid 1980s. The economy of St. Clair County has not grown in the same direction as the rest of the state, or the country as a whole. One possible explanation would be the influx of low paying service related jobs replacing higher paying employment which may be leaving the county. This would be in agreement with the MERIC 2002 report on income inequality within the state of Missouri and consistent with the Popst, et al. report of 1996 on recreation employment values.

As indicated in the MERIC report, St. Clair County is considered to be a poverty center with more than 50% of the households in the southern half of the county having household income levels less than \$25,000 per year. As can be seen in Table 5-5 and Figure 5-23, St. Clair County has a very high poverty rate when compared to Missouri's. It should also be noted that in their report, Wood and Bischak identified St. Clair County as a distressed county in 1960. A distressed county in 1960 had at least 150% of the U.S. average unemployment rate of 5.14%, at least 150% of the U.S. poverty rate of 22.1%, and 67% or less of the U.S. per capita market income of \$1,639; or 200% poverty rate plus one of the other two distressed indicators. By 1990, St. Clair County was no longer considered to be in the distressed category. The following table and figure indicate the relative poverty levels for the state and St. Clair County between 1970 and 2000.

Table 5-5				
Poverty Levels in Missouri and St. Clair County				
	1970	1980	1990	2000
Missouri	11.5	12.2	13.3	11.7
St. Clair County	25.6	19.1	22.6	19.4

Table 5-5. Poverty Levels in Missouri and St. Clair County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

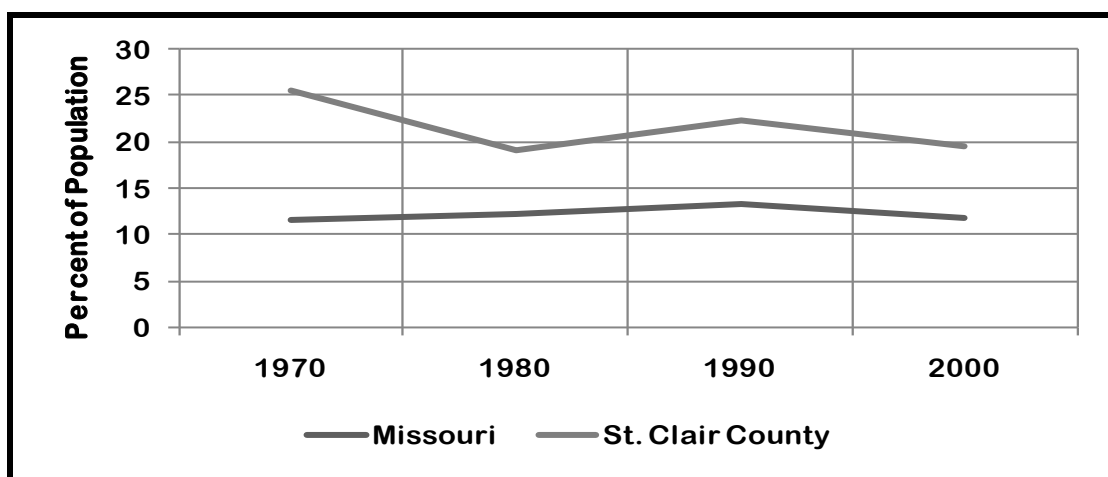


Figure 5-23. Poverty Levels in Missouri and St. Clair County. Source: U.S. Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

Agriculture

The importance of agriculture in the economy of St. Clair County has diminished. Between 1960 and 2000, the number of acres farmed in the county has been reduced (fig. 5.24). Much of the land removed from production can be

directly related to the real estate acquisition by the Corps of Engineers. The greatest amount of land removal occurred during two distinct periods. First, between 1969 and 1974 land was purchased in fee for the lake area. In addition, lands were also purchased for the public use facilities and fish and wildlife management areas. In St. Clair County, most of this activity occurred in the eastern and north central portions of the county. The second occurred between 1978 and 1982, when some additional lands were purchased in fee in the central areas of the county. The majority of the land requirements were purchased with

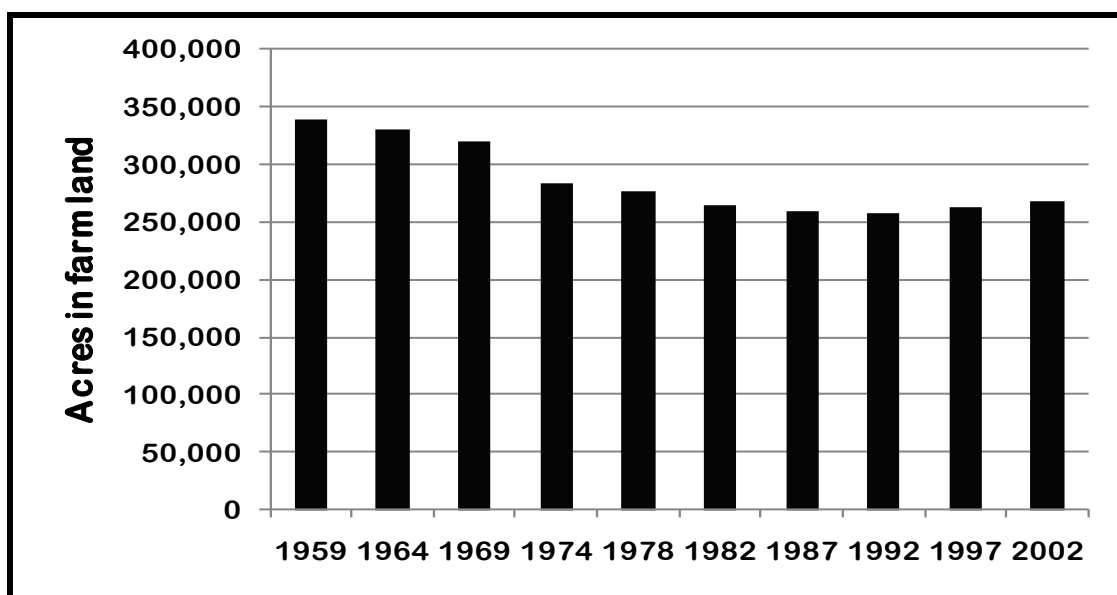


Figure 5.24. Number of acres in farms in St. Clair County. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

a flowage easement for the Truman flood control pool. Additional lands were also purchased for fish and wildlife management areas.

The number and average size of farms has also changed in St. Clair County. There are fewer farms and the average farm size has increased. These are similar to what is happening in Benton and Henry Counties, Missouri and nationally. In St. Clair County, between 1969 and 1974, the number of farms was reduced by approximately 250 and between 1978 and 1982 the number of farms was reduced by nearly 50. Between 1959 and 2002, the total number of farms has been reduced by more than 600.

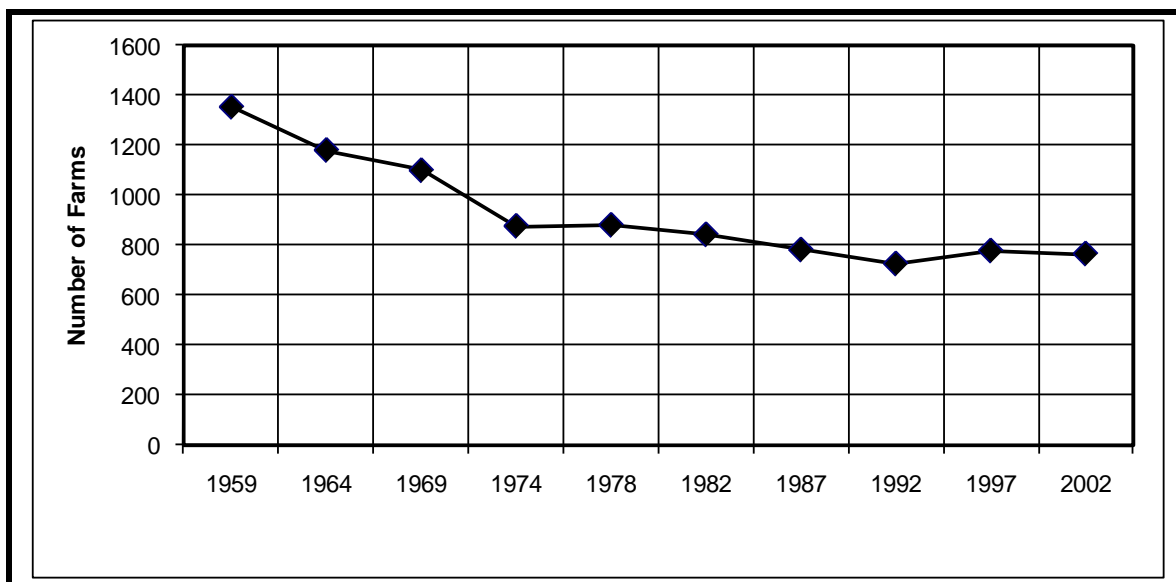


Figure 5-25. Number of farms in St. Clair County during the period 1959 and 2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

The average size of the St. Clair County farm has increased by more than 110 acres between 1959 and 2002. Missouri's average farm size has increased by more than 80 acres during the same period of time. Henry County's average farm size is larger than Missouri by more than 50 acres. This difference has been relatively consistent throughout the study period. Larger animal and cash cropping operations are characteristic of the western farms.

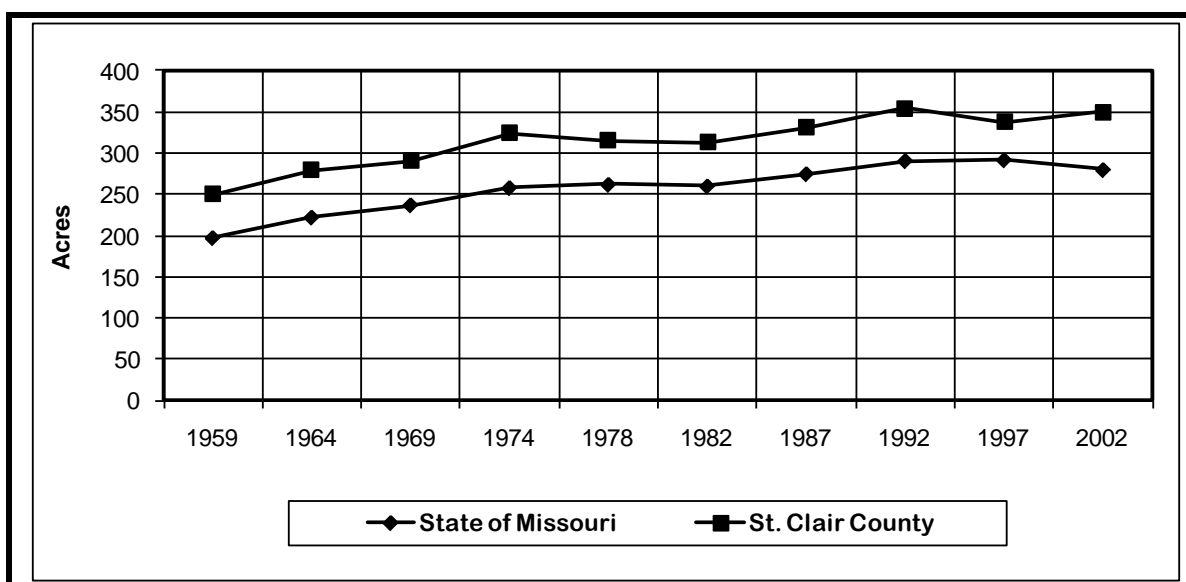


Figure 5-26. Missouri and St. Clair County average farm sizes during the period 1959-2002. Source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

Non-Farm Businesses

Besides sport fishing, recreation facilities, and agriculture, non-farm business changes have occurred in St. Clair County as well. The following

discussion is divided into the three time frames of pre-construction (1960-1965), construction (1966-1979), and post-construction (1980-2000). The discussion will attempt to look at any changes in businesses during those periods that relate to the Truman project specifically.

Prior to the construction of the Truman project, St. Clair County had an agriculturally oriented economy. Coal mining occurred in the western portion of the county near the community of Appleton City. Small-to-medium size farming occurred in the Osage River valley and in the flatter areas. Some lumbering occurred in the forested eastern regions. Cheese production, along with a few other industries, was located in and around the community of Osceola. In terms of advertizing and news in the *St. Clair County Courier*, the most numerous form of business was retailing, followed by agriculturally oriented support businesses (farm implements, elevators, feed and seed stores, tractor dealerships, and fertilizer companies) and professional services (attorneys, realtors, accountants, title and insurance companies). During this period there were a few health related professionals, a few construction businesses and one or two manufacturing firms mentioned.

Agribusiness support services and mining activities show a general decline from 1960-1965 in the numbers of employees, annual payroll and number of businesses operating according the Bureau of the Census *County*

Business Patterns. There was also a decreased presence in the local newspaper during this pre-construction period. According to the *County Business Patterns*, however, retail trade not only had the largest number of employees, but also the highest annual payroll. The number of businesses is stable with a slight upward trend.

The total number of businesses in the county remained relatively stable. Many new businesses advertised and requested labor for various positions. The variety of retailers was considerable, and advertising was primarily confined to businesses in all communities except those associated with Appleton City. Appleton City at this time is linked with the communities in Henry County by a state highway and railway. There did not appear to be any anticipated changes because of the pending construction of the Truman project.

During the construction period the number of financial services increased considerably: 100 % within a 15 year period. The nature of the new businesses falls into two general categories: real estate and investment. During the late 1960s a large portion of the land needed for the Truman project was purchased, and many individuals were looking elsewhere for suitable housing. In addition, many areas within the county experienced development growth in the 1970s, probably in anticipation of the completion of the Truman project.

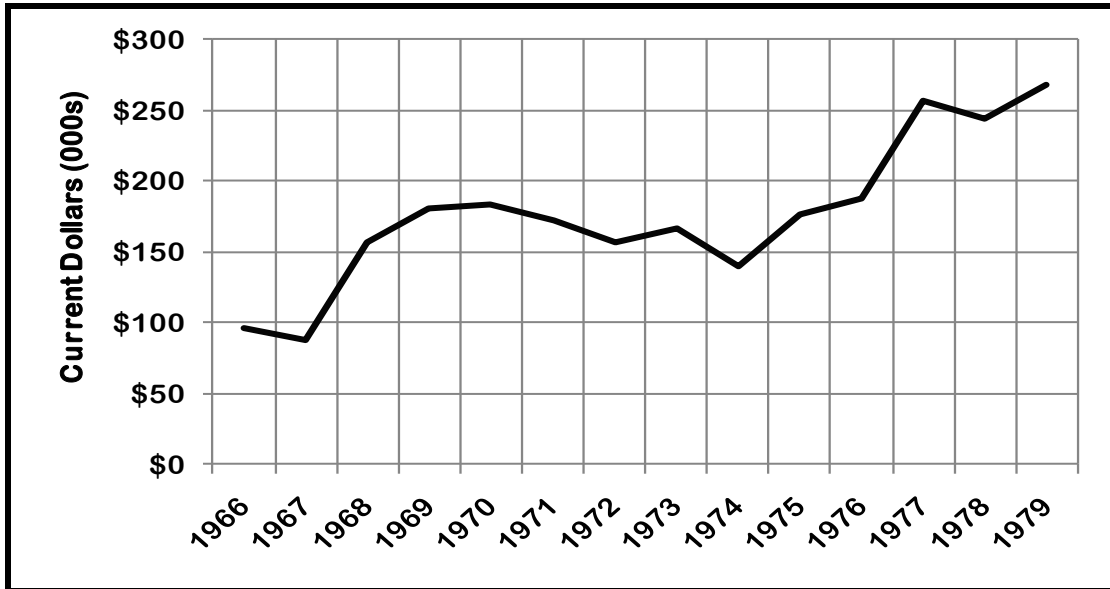


Figure 5-27. Total annual payroll for finance sector in St. Clair County during the construction period 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-1979.

The total number of employees tripled during the construction period, as shown in Figure 5-28. The total annual payroll also increased dramatically during this period.

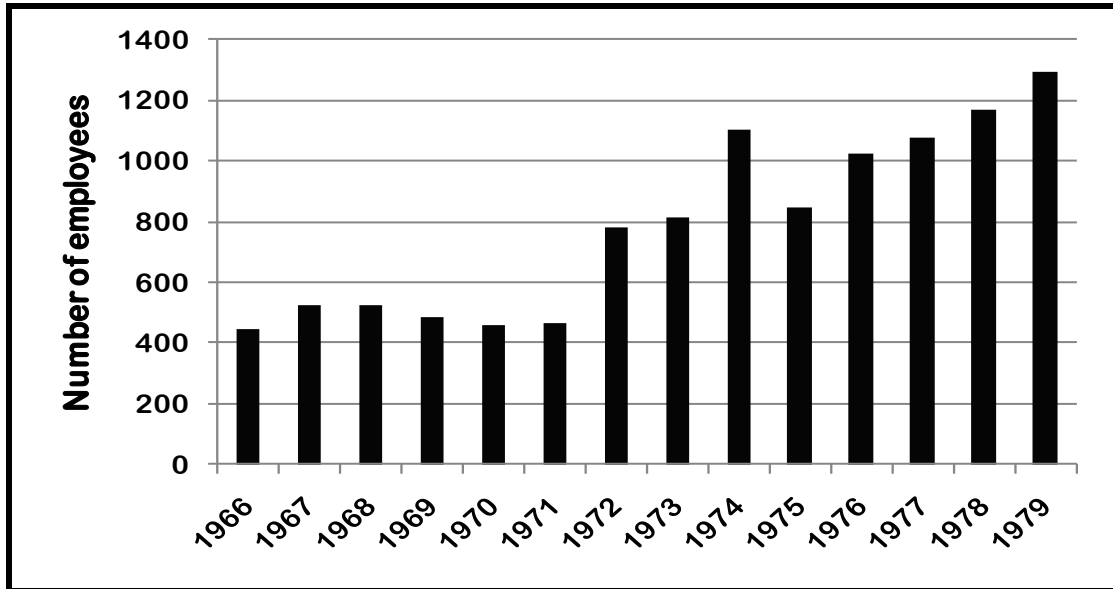


Figure 5-28. Total Number of employees in St. Clair County during the construction period 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-1979.

During this same period, the number of retail businesses decreased at least based upon the number advertized in the newspaper. The number of grocery stores decreased, and the number of clothing and sundry retailers also reduced. However, the population of Osceola decreased by almost 20% between 1960 and 1970, and the county itself also decreased in population. It is interesting that the number of retailing businesses significantly dropped in the late 1970s, as this decade was a period of population growth.

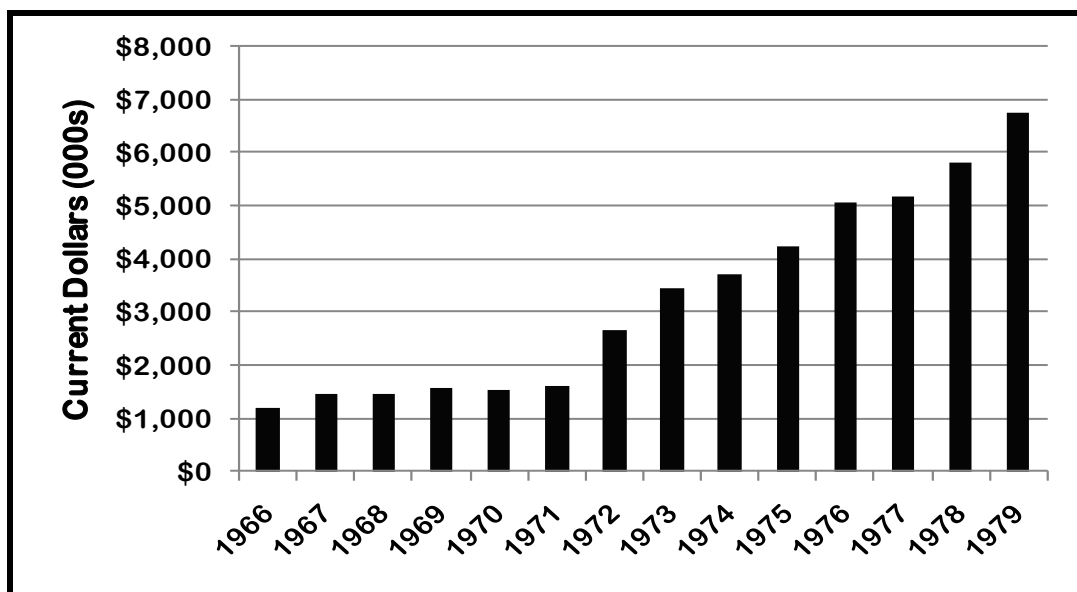


Figure 5-29. Total annual payroll for all sectors in St. Clair County during the construction period 1966-1979. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1966-1979.

An additional business segment that showed growth during this period of time was contract construction. There were numerous advertisements for general contractors, plus specialists in roofing, siding, excavation, plumbing and electrical work. Not only was the Truman project under construction, but so were numerous developments suitable for retirement homes, second homes, or homes for year-round occupation.

In general, there appears to have been some growth in the total number of business. New businesses were especially noticeable in the communities of Roscoe, Vista, Collins, and Lowry City. Osceola lost approximately 150 homes to the Truman project, but several replacement homes were built to the south of town. The need for construction businesses is obvious. It is interesting to note

that the number of retailers during this period decreased while those engaged in professional activities increased. Real estate, title clearance and appraisal firms expanded, as did the number of businesses dealing with those needs. In spite of the decreasing number of retail trade firms, they still contributed at least 25% of the annual payroll for the county, and accounted for approximately 25% of the number of employees.

Since the completion of the Truman project, St. Clair County's population has changed in number and character. The number of retired individuals has increased significantly. Consequently, the businesses of the county have also changed. For instance, the number of health related businesses has increased, doubling from the beginning of the period.

The presence of agribusinesses has also changed. The increase is directly related to the support given by the county to the Future Farmers of America (FFA). The *St. Clair County Courier* had an insert each February dedicated to the high school students in the county's three high schools who were members of the local FFA chapters. The insert had numerous businesses listed as sponsors, many of which were agriculturally related. During the 1990s the businesses in Appleton City were more prevalent in the *St. Clair County Courier*, as the Appleton City newspaper ceased to exist during the 1990s.

The total number of employees in the county fluctuated during the post construction period (fig. 5-30). Between 1987 and 1993 there were fewer employees in the county than during any other part of this post-construction period. The reduction in employees is also reflected in the annual payroll as seen in Figure 5-31.

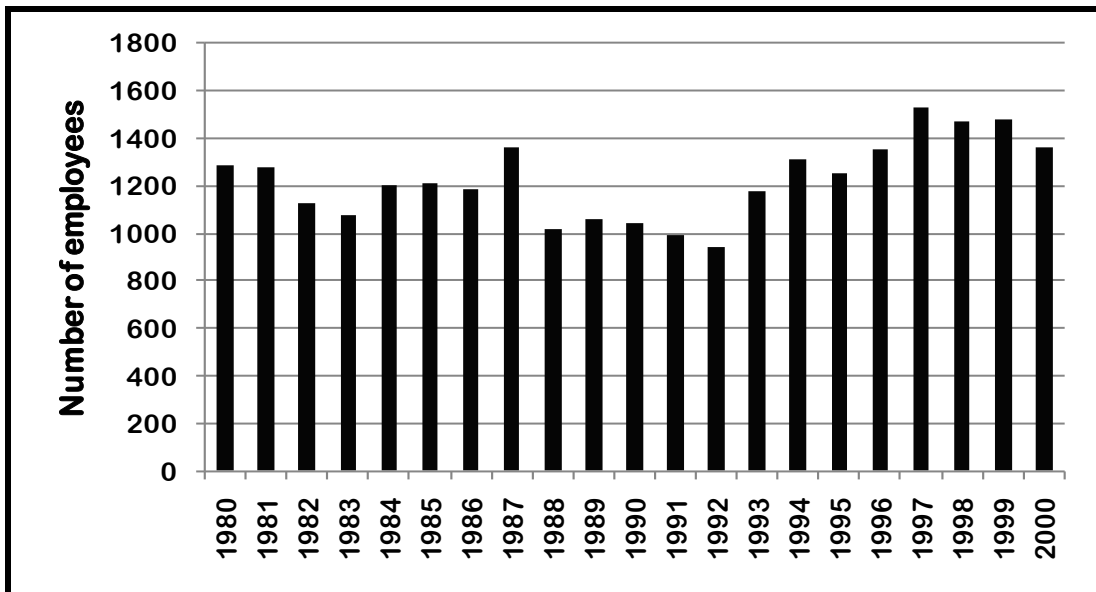


Figure 5-30. Total Number of employees in St. Clair County during the post-construction period 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1980-2000.

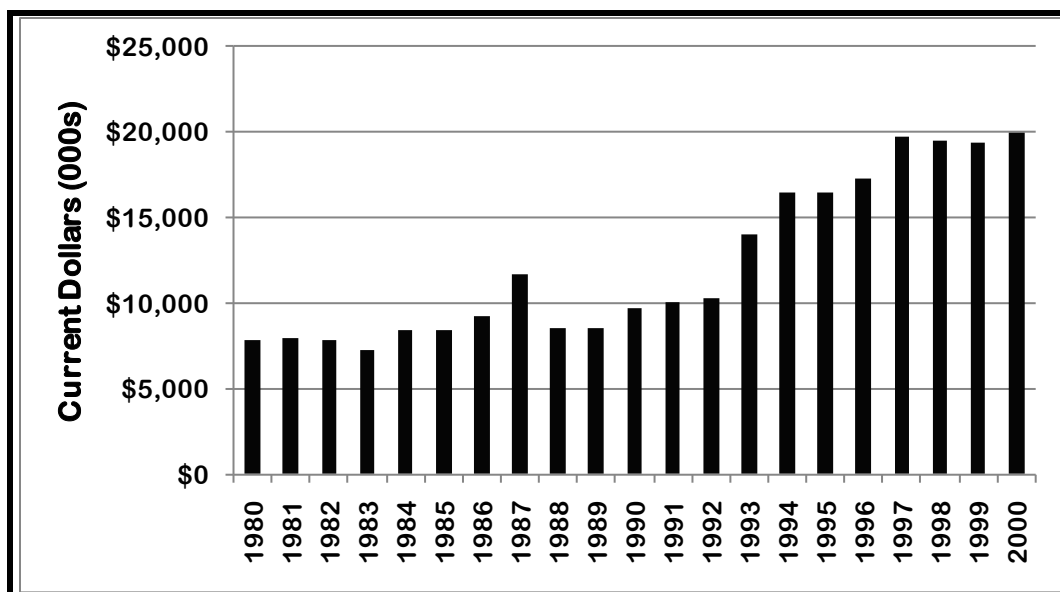


Figure 5-31. Annual payroll for St. Clair County during the post-construction period 1980-2000. Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, 1959-1990. U.S. Department of Commerce, U.S. Census Bureau, *County Business Patterns*, 1991-1997. U.S. Department of Commerce, U.S. Census Bureau, *Censtats Database*, 1998-2000.

Professional services increased slightly during the post-construction period. There were an increasing number of individuals engaged in consulting, insurance, and investing areas. A notable change to the business arena was the consolidation of the Osceola, Lowry City, and Appleton City Banks into one business, the St. Clair County State Bank.

Two areas where there were noticeable decreases are construction and retailing. Although a reduction in retailing was a continuation of an earlier pattern, it is not uncommon for small communities to lose their retail shops to the larger businesses elsewhere. Certainly this was the case for Vista and Gerster. The larger communities of Osceola, Lowry City, and Clinton to the

north and Bolivar and Springfield to the south have provided a consolidation of services. The presence of the shopping malls in Clinton and Springfield, made shopping a much more efficient experience and also provided opportunities for the populations of these smaller communities which they would not have otherwise. In addition, many of the very small communities, both incorporated and unincorporated, had populations that were employed in larger communities. Utilizing the shopping facilities in the larger communities was also more time and fuel efficient.

Changing tax structure: 1960-2000

Revenues to support the general operation of St. Clair County involved the collection of property taxes primarily through 1970s and well into the 1980s. However, in 1985 there was a valuation reassessment of the property. This reassessment increased property values for the county more than \$21,000,000 or 82%. The reassessment of the property values was necessary as the property was severely undervalued because of inflation (fig. 5-32).

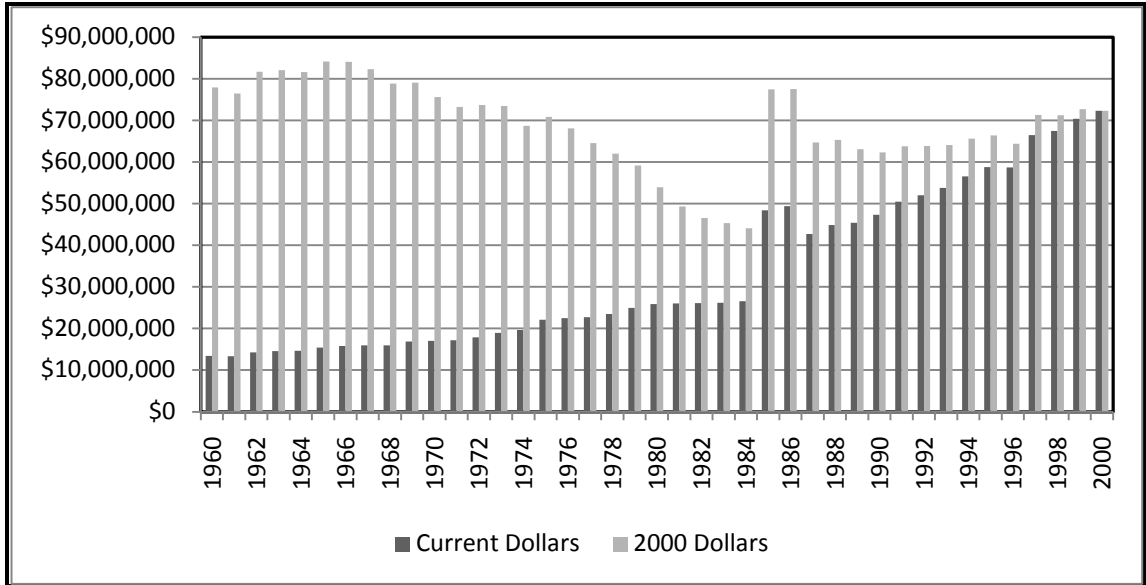


Figure 5-32. Assessment Valuation of property in St. Clair County. Data source: Records of the St. Clair County Clerk.

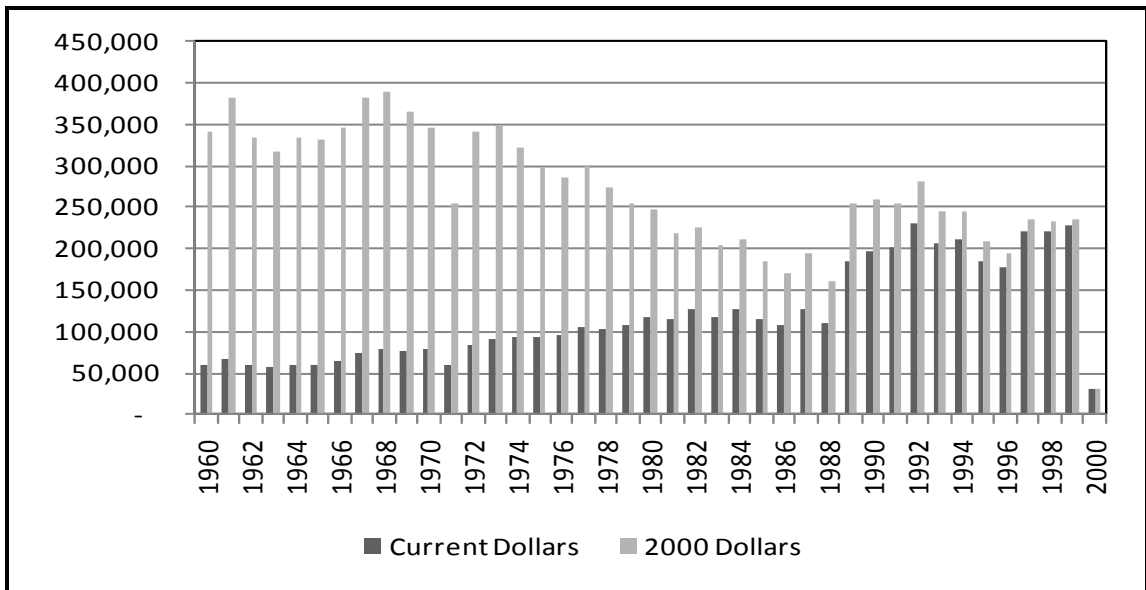


Figure 5-33. Collection of property taxes between 1960 and 2000. Data source: Annual Financial Statements of the Clerk of St. Clair County, published in the spring of the subsequent year in the *St. Clair County Courier*.

The taxes collected subsequent to the reassessment did not increase for some time. The property tax increase occurred in 1989. The increase was approximately \$75,000 or 70%. The increase in property tax collection and the presence of the Truman project is purely circumstantial. The reassessment occurred in 1985, the increase in tax assessments in 1989, and the Truman project was completed in 1980. The county initiated a sales tax in the same year that the reassessment took effect.

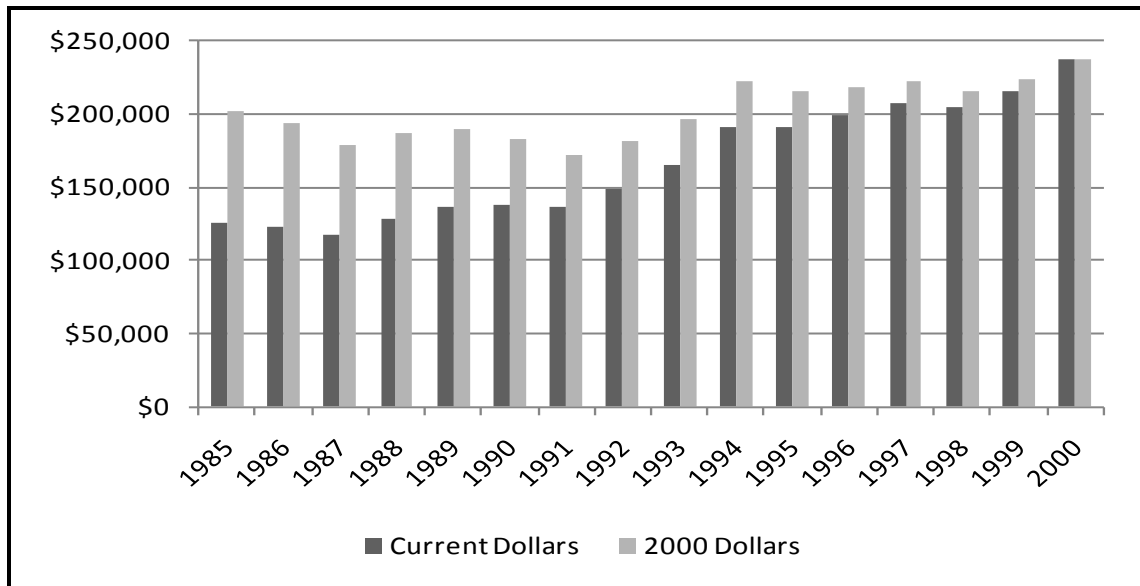


Figure 5-34. Collection of sales taxes between 1985 and 2000. Data source: Annual Financial Statements of the Clerk of St. Clair County, published in the spring of the subsequent year in the *St. Clair County Courier*.

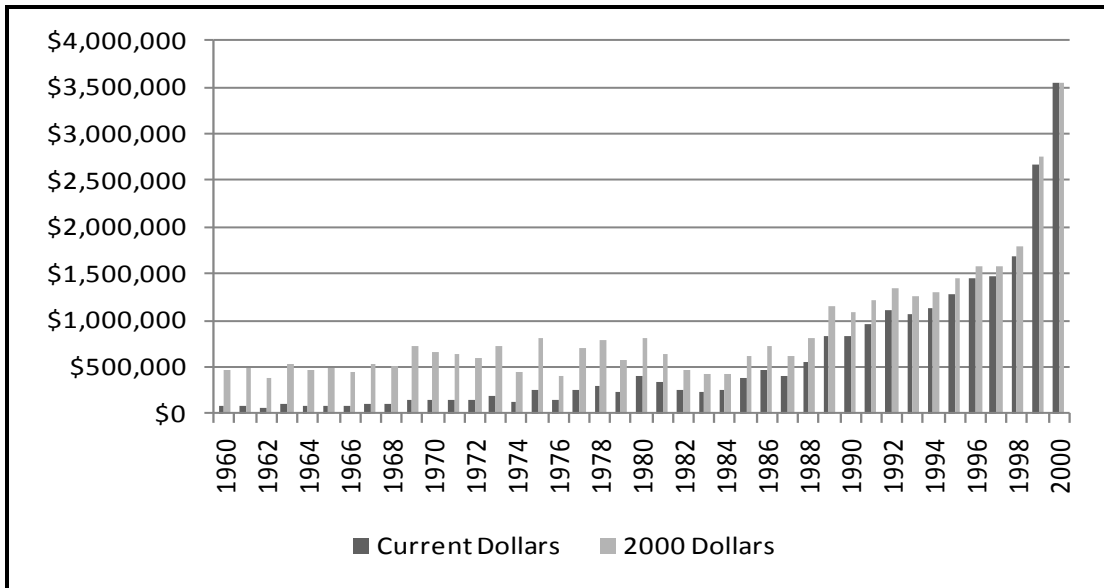


Figure 5-35. Total tax receipts collected for the St. Clair County general fund between 1960 and 2000. Data source: Annual Financial Statements of the Clerk of St. Clair County, published in the spring of the subsequent year in the *St. Clair County Courier*.

One additional source of income for the county is the county jail. Now increased in size, the jail offers housing for prisoners from other jurisdictions. Other counties, states, and the federal government often transfer funds to counties such as St. Clair to pay for the incarceration of their prisoners. The jail, which is located on the edge of the business district, has also enhanced employment (fig. 5-36).



Figure 5-36. St. Clair County Jail. Photo by author.

Based upon the information presented in the figures, several observations can be made.

1. The property taxes collected for general revenues for the county did not increase significantly in 1985, or in the subsequent years. In fact, by 1999 and 2000 the collection of property taxes for the county's general fund had decreased substantially.
2. The sales taxes collected have steadily increased since implementation. The sales taxes allow collection of revenues from more than the county residents. It allows for collection of revenues from outsiders, or tourists, who utilize the services and infrastructure of the county.
3. The total receipts of the county remained essentially the same until 1999, when the receipts increased considerably. This increase is approximately equal to inflation rate. Therefore, the county was able

to maintain a steady stream of income which met the needs of the county as inflation caused prices to rise.

4. The sudden increase in revenues in 1999 and 2000 was caused by fund transfers from other government entities. These specifically relate to the construction and expansion of a detention facility located just on the edge of the central business district in Osceola.
5. There does not appear to be a relationship between the Truman project and the sudden increase in property assessments and the collection of tax revenues.

Changes to the Visual Landscape

The presence of the Truman lake has not only removed land from the valley, but in St. Clair County it has also created vastly different landscapes in the east and west. The eastern portion of the lake has well-developed public parks. As one moves to the west, the broad expanse of the river valley has created a shallow body of water that eventually takes the form of the rivers. The major highways through the county, with the exception of highway 13, do not intersect with the lake in the west portion of the county. Development in Benton and Henry Counties does not occur to the same extent in St. Clair County. The

wildlife management areas are large. The public parks in the west are basically fishing access sites with very few amenities.

In the eastern portion of the county there are well developed public parks on Federal land: Berry Bend and Talley Bend. Berry Bend is located both in Benton and St. Clair County and only accessible by land from the Benton County side. However, it is discussed in this chapter. Talley Bend is located along the eastern bank of the Truman project where county road "C" crosses the Osage Arm. Divided into two parts by the highway, the park offers camping facilities on the southern side, and day use and fishing access on the northern side.



Figure 5-37. Fee station at the entrance to the southern portion of Talley Bend Park. Photo by author.



Figure 5-38. Convenience/gasoline complex located on county road "C" at the entrance to Talley Bend Park, across from fee station pictured above. Photo by author.



Figure 5-39. Comfort station including showers and laundry facilities in the southern portion of Talley Bend Park. Photo by author.



Figure 5-40. Camping area adjacent to lake in the southern portion of Talley Bend Park. Photo by author.



Figure 5-41. Fishing and boating access in the northern portion of Talley Bend Park. Photo by author.

Berry Bend is divided into two park areas, one in each of the two counties. As stated earlier, this park is only accessible from the Benton County side. The unusual aspect of this park is located in the Benton County portion: the camping area is designated an equestrian camp, with corral areas at each camp site.



Figure 5-42. Equestrian versus “normal” campground direction sign at Berry Bend Park. Photo by author.



Figure 5-43. Corral at Berry Bend camp site. Photo by author.



Figure 5-44. Group camp site at the Berry Bend Equestrian campground. Photo by author.



Figure 5-45. Going from St. Clair County to Benton County in Berry Bend Park. Photo by author.

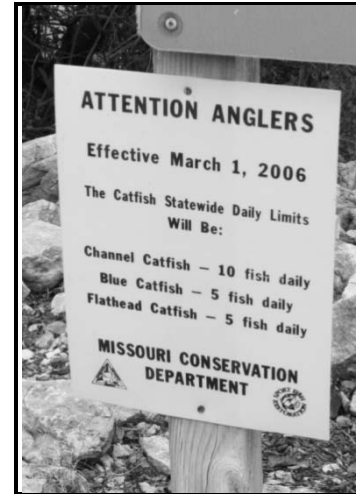
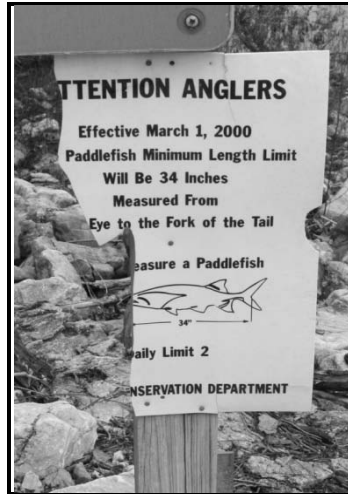


Figure 5-46. Berry Bend campground “normal” camp site. Photo by author.

Other recreation development has occurred further downstream, beginning with areas near Osceola. Located on the north bank of the lake across from Osceola is Crowe’s Crossing Access Area. This area allows for vehicle parking and boat launching. Considering the signage (figures 5-48a and 48b) at this site, one would gather that the site is used almost exclusively by fishermen. Maintenance is minimal and access from highway 13 is easiest when traveling north.



Figure 5-47. Looking southwest from Crowe’s Crossing Access. Truman lake is thirteen feet above normal pool. Photo by author.



Figures 5-48a and 5-48b. Angler information regarding the size limitations on paddlefish and creel limits for catfish. Photos by author.

At Osceola, there is a large park area along the southern bank of the lake.

This area is not highly developed. An RV park is located along the eastern edge, with fishing access at several points. The higher levels of the park have picnic and day use facilities. The park is most obvious near the point of the former power dam location. The park area can be seen from the court house square, and its main access points for vehicular traffic are from the west side of the square and one block to the east of the square near the city hall. Photos shown earlier, (figs. 5-18 and 5-19) depict the eastern portion of the park at the site of the former marina and current RV park. These park areas are managed by the city of Osceola.



Figure 5-49. Day use facilities at the Osceola Park. Photo by author.

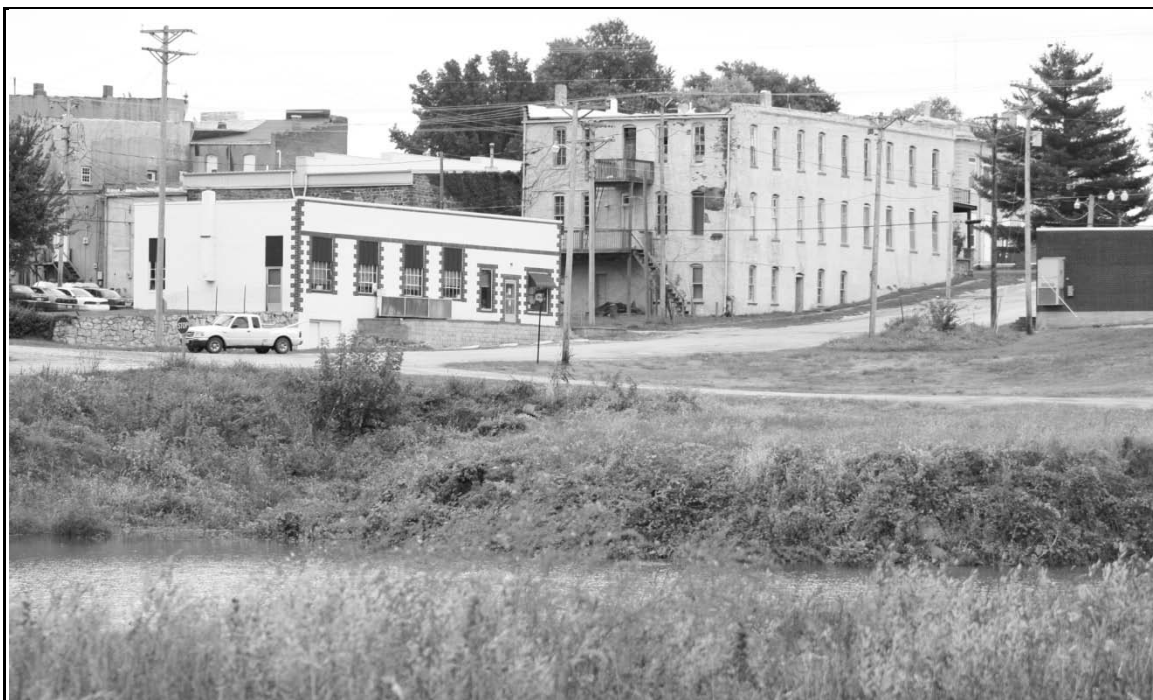


Figure 5-50. View of Osceola from the park along Truman lake. The back of the historic Commercial Hotel is seen along with the St. Clair County Senior Center (white building to the left) and the wetlands area in the foreground. Photo by author.

There are two other areas downstream of Osceola which the Corps has designated as parks. One is located on the Osage Arm at Roscoe and is managed by that community. The other on the Sac River Arm is managed by the Corps. The community of Roscoe, like Osceola, had a significant portion of its land taken for the project. The lake penetrates the community on the western side, and for all practical purposes divides it into two, a north and a south. The photo below (fig. 5-51) shows the red sandstone building which formed a significant portion of the business district. This building was documented by the Historic American Buildings Survey prior to its demolition in 1978 as its back was located within the Truman lake flood control pool.



Figure 5-51. Commercial block in Roscoe. Photograph from the archives of the Historic American Buildings Survey, Library of Congress, HABS Record. Photo taken in 1977 by photographer Paul Pinget.



Figure 5-52. What is left of the commercial block in Roscoe. This small building is shown at the far right of the above photograph. Photo by author.



Figure 5-53. Roscoe Park lake access. Lake is thirteen feet above normal pool. Photo by author.



Figure 5-54. Restaurant, bar, convenience store adjacent to Roscoe Park lake access. Photo by author.



Figure 5-55. Motel at Roscoe Park lake access. Photo by author.

The Sac River Access area contains a parking facility along with a boat ramp leading to the Sac River Arm of the Truman project. Located where state highway 82 crosses the lake, the facility is for day use only.



Figure 5-56. Sac River Access sign on state highway 82. Photo by author.



Figure 5-57. Sac River Access boat ramp. Lake is thirteen feet above normal pool levels. Photo by author.

Concluding thoughts:

Based on the discussion within this chapter, the following demographic, economic and visual landscape changes can be related to the Truman project, even if only marginally.

1. St. Clair County's population has fluctuated the most during the 40-year study period. The population increases have been the result of immigration. The population is getting older, and those individuals migrating to St. Clair County are primarily older adults. These individuals are primarily locating in areas close to the Truman project.
2. St. Clair County is the most impoverished of the three. Described as distressed in 1960, St. Clair County has had the highest poverty rate of the three counties studied. St. Clair County was identified as a poverty center by MERIC in 2000.
3. Agriculturally, St. Clair County has fewer farms than it did in 1960. The majority of the reduction of farms is the result of land acquisition by the Corps of Engineers for the Truman project.
4. St. Clair County has received the least amount of economic development of the three studied counties as a result of the Truman project. There are no large retailers of boating equipment, RV

equipment, storage facilities to line the major highways as we have seen in Benton and Henry Counties.

5. The only developed park facility that is completely in St. Clair County is Talley Bend. Berry Bend is divided between two counties, but access is only from the Benton County side.
6. The remaining federally managed areas have minimal facilities. The park areas developed by Osceola and Roscoe have day use and limited overnight facilities. Because of the position of these two communities on stretches of the Osage River which have siltation and depth issues, the number of users is limited to fishermen.

CHAPTER 6: CONCLUSION

[P]lanning, whether of structures or regions, of national policies or personal relationships, cannot insure even the continuation, much less the enrichment, of human life when the planners and the planned-for function only with a survival philosophy. ----S.P.R. Charter (1972, 8)

The Truman project was, and is, one of immense size. Many thousands of tons of raw materials were required to complete the construction of the dam and the road and railroad relocations. Millions of dollars were spent to acquire land, compensate those who were displaced, and pay those who were employed to complete the planning, purchasing, coordinating, defending, and managing of the myriad of contractors, contracts, and legal challenges. In all of this, it is somewhat amazing that opposition to the project was short lived but not forgotten. During the early 1960s, only Osceola and St. Clair County expressed reservations about the size of the project and its desirability. However, when the Corps of Engineers was faced with a lawsuit from the Environmental Defense Fund, Osceola and St. Clair County sided with the Corps of Engineers. Since that time, the opposition to the project has been expressed in coffee shops and card rooms by those who were displaced. Those who have moved into the area and are actively utilizing the project for either recreation or for business are more positive about the presence of the Truman project.

Discussion of the research questions.

What are the changes to the landscape that have occurred before, during and since the construction of the Truman project? More specifically:

What new economic developments have occurred since 1960?

Each of the counties has witnessed several changes to their agriculture and non-farm businesses since 1960. Each of the counties has lost farms and farm land (figs. 6-1 and 6-2). However, each county has increased the average size of the farms. The reduction in the number of farms and farm lands is primarily a direct result of the Truman project and the need to acquire lands for the project. In the non-farm business sectors, there have been many changes, some related to the Truman project and some not. During the construction period, each of the counties saw an increase in the number of employees, annual payroll and businesses in several sectors. For instance, contract construction and finance. This would directly relate to the Truman project, as the number of housing developments, new businesses and appurtenant facilities increased. Since construction, however, the adjustments in the business structure have more reflected changes from increased population and changes to the structure of that population. The presence of Truman

could be seen as a contributing factor but not the main reason for these changes.

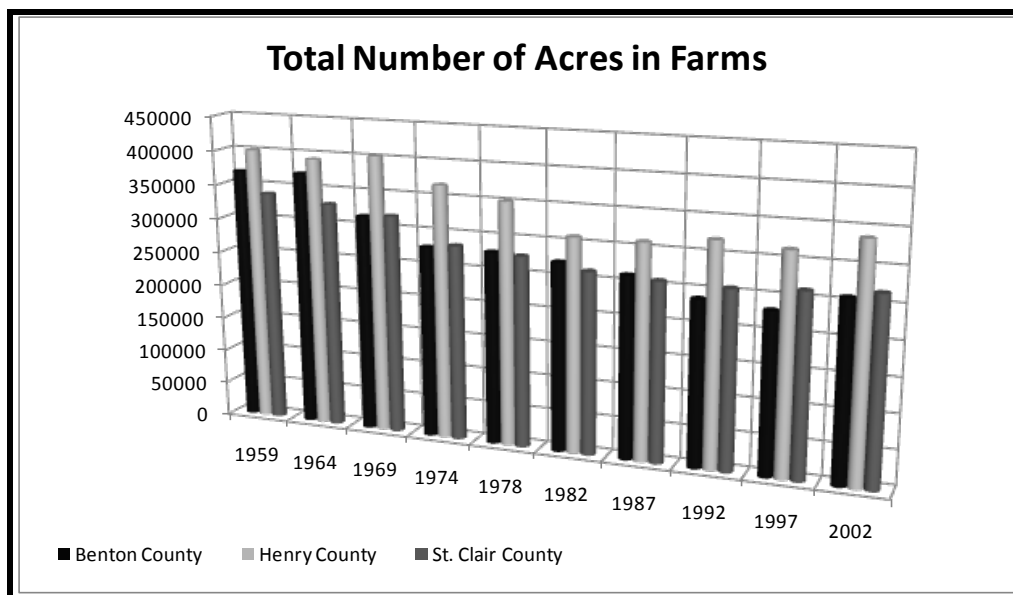


Figure 6-1. Total acres in farm land for the three counties during the period 1959-2002. Data source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

One area of change relates to the level of poverty experienced in the three county study area. Benton and St. Clair counties have remained the most impoverished but less so than prior to the construction of the Truman project. However, significant portions of the populations have household incomes less than \$25,000 per year. Consequently, MERIC has listed these two counties as poverty centers. Henry County has increased its poverty rate since the completion of the Truman project as indicated in Figure 6-3. This continued higher level of poverty may related specifically

to the factors associated with lower paying recreation oriented employment rather than lack of employment in the study area.

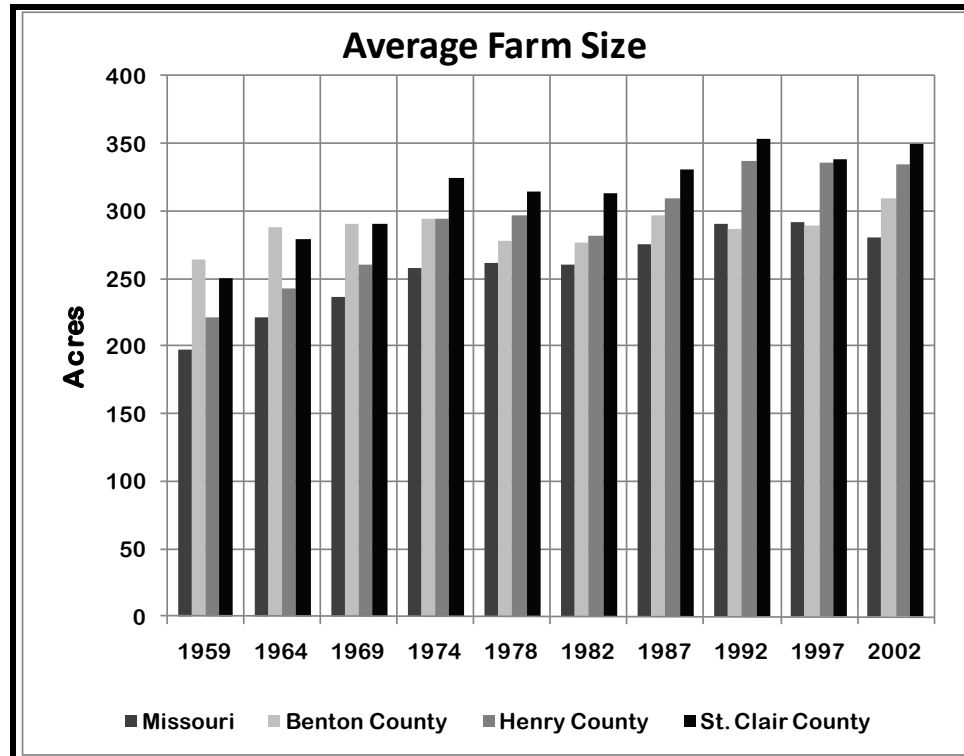


Figure 6-2. Average farm size for Missouri, Benton County, Henry County and St. Clair County during the period 1959-2002. Data source: U.S. Department of Commerce, Bureau of the Census, United States Census of Agriculture: 1959, 1964, 1969, 1974, 1978, 1982, 1987, 1992, and U.S. Department of Agriculture, National Agricultural Statistics Service, United States Census of Agriculture: 1997, 2002.

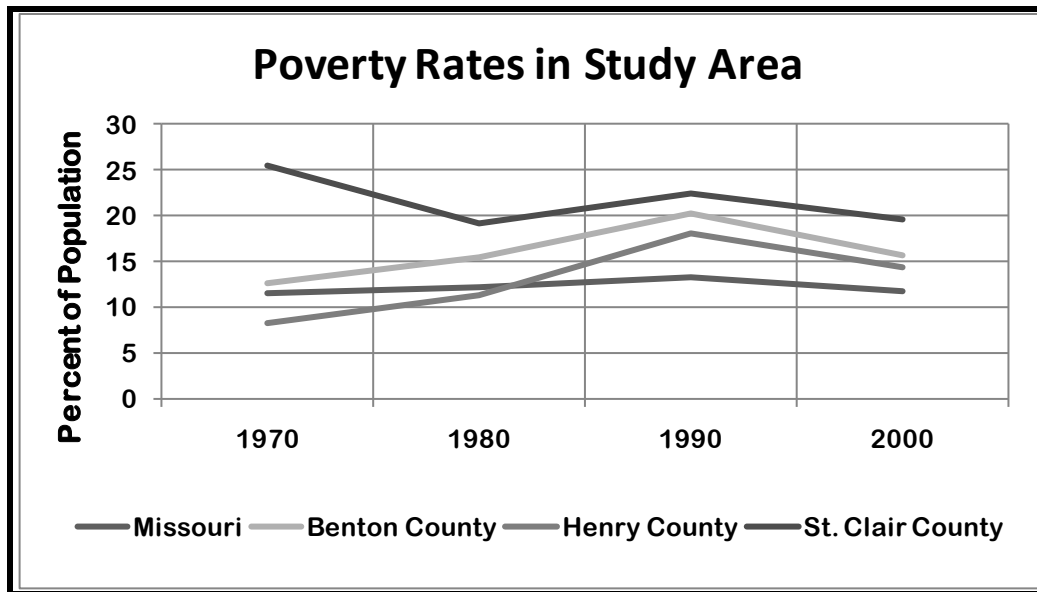


Figure 6-3. Poverty rates for Missouri, Benton County, Henry County, and St. Clair County during the period 1970-2000. Data source: Department of Commerce, Bureau of the Census, Decennial Censuses *Economic and Social Characteristics* 1970 and 1980 and U.S. Department of Commerce, U.S. Census Bureau, Decennial Censuses *Economic and Social Characteristics* 1990 and 2000.

What population changes have occurred since 1960?

All three counties have seen population increases, although Henry and St. Clair Counties had declining populations until 1970. The median age in all three counties has remained higher than Missouri's. Benton County has the oldest population followed by St. Clair County and then Henry County (fig. 6-4). In all three counties, the presence of the "Baby Boomer" generation nearly ceases to be an identifiable group on the population pyramids by 1980. All three counties have more than 20% of their populations over the age of 65 by 2000. Other changes in the

population relate to location, moving from rural to urban (similar to Missouri). Those areas adjacent to the Truman project have experienced some growth in recent years, as new housing has developed in close proximity to the Truman project.

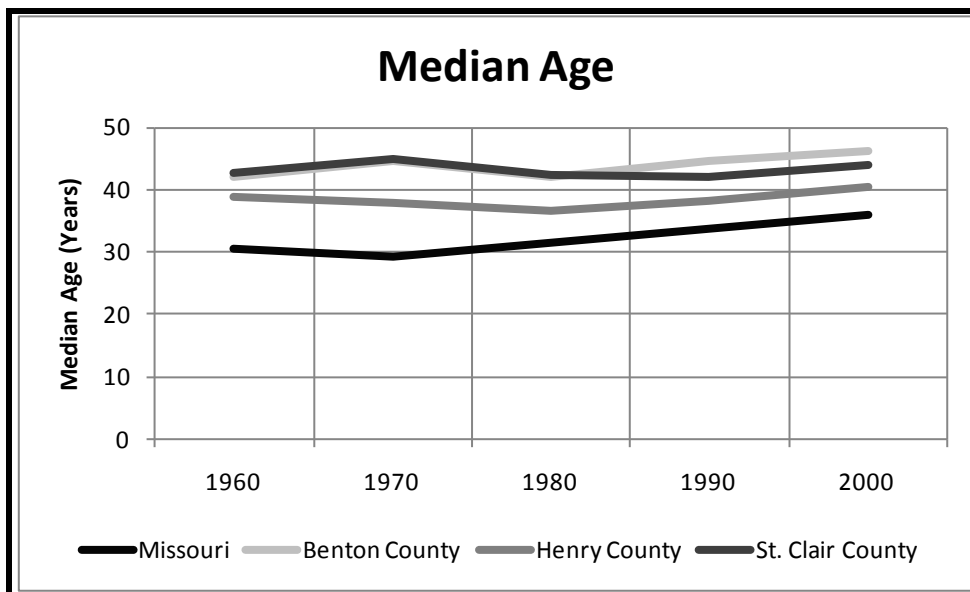


Figure 6-4. Median age for Missouri, Benton County, Henry County, and St. Clair County during the period 1960-2000. Data sources: U.S. Department of Commerce, Bureau of the Census, Decennial Census, Missouri, Population Characteristics: 1960, 1970, 1980. U.S. Department of Commerce, U.S. Census Bureau, Decennial Census, Missouri, Population Characteristics: 1990, 2000.

What local economic activities have remained throughout the study period (1960-2000), such as agribusiness, recreation and tourism, and manufacturing (dairying and cheese manufacture)?

The most constant economic activity for the three counties studied has been agriculture. Although reduced in significance, it is still a very

important part of the local economy. Other activities which were constant throughout the study period include manufacturing of gunstocks in Benton County and cheese production in Henry and St. Clair Counties. Recreation association with sport fishing still remains but is not as significant as prior to the Truman project. Lake associated activities in Benton County remain, as do the hunting and fishing experiences sought by tourists.

What were the benefits to the three counties accessed, as a result of construction and operation of the Truman project? More specifically:

Did the outflow of population stop?

In all three counties populations increased not by rates of natural increase, but instead as a result of in-migration of a large number of people. The composition of those migrating to this area appears to be largely of a retirement age, as evidence by the increasing median age for all three counties (fig. 6-4). St. Clair County's population did see a decrease of just over 60 people between 1980 and 1990. Benton County's population grew the most, almost doubling during the 40-year study period.

Did the diversity of economic activity expand or contract or remain the same?

The diversity of economic activity remained fairly constant. While there was fluctuation of the number of firms within each business sector, the variety of firms remained. In Benton County, the most noticeable change resulted from an increase in the visual and physical presence of water based recreation services along the highways leading to the Truman project facilities. Henry County remains the most diversified economically, and the most industrial with several large manufacturing firms located in the two industrial parks. St. Clair County is the least diversified, but maintains significant manufacturing, retail trade and service sectors.

Did the area experience an increase in employment opportunities?

The number of jobs and the number of firms did increase during the study period. The primary fluctuation within each business sector was more related to national economic events such as recessions rather than adjustments locally, with the exception of those firms dependent upon the tourist. Other local adjustments were related specifically to the

presence of the Truman project, especially in the area of contract construction.

Of note for all three counties is the tremendous increase in employment and payroll in the healthcare sector. As the populations increase and the number of older adults increases, the demand for medical personnel and facilities also increases. All three counties have healthcare facilities which offer specialized programs for the older adult such as diabetes units, hypertension units, and physical therapy and exercise units.

Did the local governments collect additional revenue and in what forms?

All three counties implemented a sales tax after the property reassessment of 1985. Benton County was the first to implement with St. Clair County adopting a sales tax last. All three counties have used the sales tax revenue to replace a majority of the property tax revenue needs for the county general funds. In addition, each of the counties has experienced an increase in assessment value as a result of changing land use to a higher taxation level, such as agricultural land to housing or commercial development.

What visible changes have occurred in the landscape as a result of the Truman project? More specifically:

What patterns of development appear in all counties studied?

All counties exhibited development which is consistent with the Truman project facilities, that is, outside every developed park area there are businesses which either compete with or complement the facilities within the park. More specifically, each park had a convenience store complex, often including gasoline and storage facilities. Some areas included RV parking (even year-round), lodging, and eating and drinking establishments.

What patterns of development are not universal to all counties?

Not all counties exhibited the same highway development. Benton County had the greatest amount of roadside development. U.S. Highway 65 and state highways 7 and 83 exhibited the greatest number of businesses. For the most part Henry County's tourist development is confined to state highway 7 going into Benton County. State highway 13 development south of Clinton is minimal. St. Clair County has very little highway development except for a few businesses along state highway 13

at Lowry City and the interchange between state highway 13 and U.S. Highway 54 at Collins.

What changes to the landscape are the direct result of the Truman project?

The public parks associated with the Truman project are specifically related. In addition, those commercial complexes just adjacent to the parks are also directly related to the Truman project. Without the project those particular developments would not exist. In addition, those commercial enterprises associated with the sale and maintenance of boats and RVs along access routes to the Truman project are also directly related. The most ubiquitous form of development, especially along state highway 7 that relates specifically to the Truman project is the RV and boat storage facility. If they had been related to the Lake of the Ozarks, their existence would probably pre-date Truman.

County Scenarios.

The complexity of the situation at Truman presents three distinct scenarios, one for each county, which might be helpful to the future planner when considering large scale economic development. These scenarios may also

be of assistance to the decision maker and the general public. A brief discussion of each county's scenario is followed with a summary of major points in Tables 6-1, 6-2, and 6-3.

Benton County, the home of the dam and project operations, received the greatest amount of economic development as a result of the project. The county's experience with the Lake of the Ozarks had to a certain degree prepared it for tourists and recreation. What was probably not expected was the change in the population structure from a relatively young family population to one that is dominated by those of retirement age. The reaction of businesses to this change was quick and apparent, especially during the post construction period. Benton County has the premier location on the reservoir with impressive scenic views, as well as well developed park and recreation facilities. The diversity of the economic base throughout the study period was evidenced by the continued presence of agriculturally related businesses and manufacturing as well as those tertiary businesses that supported the adjusting age structure of the population, plus the changing economic dynamic within the business structure.

Henry County, the most populous and diverse of the counties economically, reacted in a similar fashion but in ways specific to their situation. A stronger industrial base provided Henry County with greater wealth and diversity than Benton or St. Clair Counties. The favorable location of the county

seat, Clinton, and the second largest incorporated community, Windsor, provided economic opportunities that were independent of the Truman project. Adjustments to any changes of their local economies often were not reflective of the physical presence of the lake. Although the Truman project does have a significant permanent pool area in Henry County, the greatest real estate impact is the result of the sizeable flood control pool area which required flowage easements. This resulted in the removal of many rural and community buildings and the relocation of many families, who may have remained within the region but not necessarily in the counties of the study area. Population changes were different from Benton County, as the decline in population did not stop until 1970 during the construction period of the Truman project. The visual impact of the Truman project to the county is not as noticeable as in Benton County, but it is obvious nonetheless. Recreation development is concentrated in the eastern portion of the county, while in the remainder of the county the presence of a large lake project is less obvious. Recreation development on federal land is limited to just five areas, including one marina development.

St. Clair County has received the least amount of economic development as a result of the Truman project. There are no large retailers of boating equipment, RV equipment and storage facilities lining the major highways as seen in Benton and Henry Counties. The only developed park facility directly

accessible in St. Clair County is Talley Bend. The remaining local federally managed areas have minimal facilities. The park areas developed by Osceola and Roscoe have day use facilities only with limited adjacent overnight facilities. Because of the position of these two communities on stretches of the Osage River which have siltation and depth issues the number of users is limited.

Table 6-1. Population Changes			
Benton	Henry	St. Clair	Missouri
Population increase by nearly 100 percent between 1960-2000	Population increased by nearly 15% between 1960-2000	Population increased by 10% between 1960-2000	Increased by 26% between 1960-2000
Median Age increased by almost 5 years	Median Age increased by 1.5 years	Median Age increased by less than 1.5 years	Median Age increased by 5 plus years
During all decades the net migration compensated for the negative natural increase rates	During the decades of 1970-2000, net migration compensated for negative natural increase rates	During the decades of 1970-80 and 1990-2000, net migration compensated for negative natural increase rates	In all decades the natural increase rate was positive. During the 1980-1990 decade, more than 65,000 people left the state
Population pyramids exhibited a contraction in the young adult age cohorts for 1960, 1970, and 1980.	Population pyramids exhibited a contraction in the young adult age cohorts for 1960, 1970, and 1980.	Population pyramids exhibited a contraction in the young adult age cohorts for 1960, 1970, and 1980.	Population pyramids do not exhibit a contraction in the young adult age cohorts for 1960, 1970, and 1980.
Population pyramid indicates the growing number of adults 65 and over	Population pyramid indicates the growing number of adults 65 and over	Population pyramid indicates the growing number of adults 65 and over	Population pyramid indicates the growing number of adults 55 and over
Populations in townships increased, except growth in those areas where the Corps purchased significant amounts of land.	Populations in western townships decreased, many have not recovered lost population	Populations in western townships decreased, many have not recovered lost population	Not applicable as not all counties use the township system. In general, rural areas lost population and urban areas gained.

Table 6-2. Economic/Business/Tax Changes			
Benton	Henry	St. Clair	Missouri
Number of farms decreased, size increased, total acres farmed decreased between 1960-2000	Number of farms decreased, size increased, total acres farmed decreased between 1960-2000	Number of farms decreased, size increased, total acres farmed decreased between 1960-2000	Number of farms decreased, size increased, total acres farmed decreased between 1960-2000
Personal income increased, but less than Missouri and United States	Personal income increased, but less than Missouri and United States	Personal income increased, but less than Missouri and United States	Personal income increased, but less than United States
Median household income increased but less than Missouri	Median household income increased but less than Missouri	Median household income increased but less than Missouri	Median household income increased
Poverty rates in general are higher than Missouri. Southeast portion of the county is a Poverty Center as designated by MERIC	Poverty rates lower for 1970 & 80 but higher for 90 and 2000 than Missouri	Poverty rates are considerably higher than Missouri. Southern half of the county is a Poverty Center as designated by MERIC and ARC	State poverty rate increased by 0.2% between 1960-2000 (11.5 to 11.7%). 1980 rate was highest during the study period at 13.3%.
General growth in the number of employees. Payroll increased. Major employer in 2000 is service, primarily healthcare.	General growth in the number of employees. Payroll increased. Major employer in 2000 is service, primarily manufacturing.	General growth in the number of employees. Payroll increased. Major employer in 2000 is service, primarily healthcare.	General growth in the number of employees. Payroll increased. Major employer in 2000 is service, primarily healthcare.
Implement sales tax in 1980, valuation reassessed in 1985	Implement sales tax in 1984, valuation reassessed in 1985	Implement sales tax in 1985, valuation reassessed in 1985	Sales taxes implemented well before the Truman project began.

Table 6-3. Visual Landscape Changes			
Benton	Henry	St. Clair	Missouri
Recreation/tourism development along major state and federal highways	Recreation/tourism development along major state highways	Little recreation/tourism development along major state and federal highways	Not applicable
Extensive commercial development adjacent to public use areas	Moderate commercial development adjacent to public use areas	Little commercial development adjacent to public use areas	Not applicable
Greatest visual impact from the Truman project	Moderate visual impact from Truman project, can be ignored in some areas	In many areas, negative visual impact from Truman project, cannot be ignored	Not applicable
Public use area development very diversified	Public use area development is diversified	Public use areas for the most part lack development	Not applicable
Commercial area development outside of city core augments downtowns	Commercial area development outside of city core augments downtowns	Little commercial area development outside of the city/community core	Not applicable
Visitor Center, Powerhouse, Dam, State Park, Golf Course, and four marinas	Department of Conservation areas, Golf Course, one marina	Department of Conservation areas, two city public use areas, no marinas	Not applicable

Concluding thoughts.

Expectations at the beginning of this study did not coincide with reality. Each of the counties studied was different with respect to the sources of data, the types of data collected and the expected results of the study. These expectations were reminiscent of the period when the author was employed by the Kansas City District office of the Corps of Engineers and conducted environmental research and cultural resources contract oversight. Seeing the diversity of landscape, the variety of people, and the complexity of the project first hand, allowed one to appreciate the reasons why different people from different areas that were in close proximity could have such divergent views on the events underway.

Did the Truman project succeed or fail? That question is often asked of the author. The answer is unfortunately; yes and no! In terms of national interests and goals, the project has definitely succeeded and continues to provide for flood protection, now more hydroelectric power, and recreation along with fish and wildlife management. In terms of the local interests, the answer lies in understanding what the locals wanted. If it was a way to stop the outflow of population, or at least assist in attracting people, then the answer is yes. If however, the question is did the project attract a wide variety of people with the

potential for families, then the answer is a qualified yes in some areas: in Benton County, no; in Henry County, yes; and in St. Clair County, maybe. Did the project enhance the economic diversity of the area? Again, the answer differs based upon which county you are discussing and in what manner. Did it reduce poverty, the answer is no. Did it bring jobs to the area, the answer is probably. Did it bring high paying jobs to the area, the answer is no.

There are so many ways in which to frame the questions that a simple answer to a complex situation and problem is impossible. The sheer enormity of the project and the complexity of the environment in which the Truman project is located preclude simple answers.

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