



Midwest National Air Center



Agriculture



Rural Residential



County Roads



Rural Subdivision



County Management



Smithville Lake



Suburban Subdivision

Clay County, Missouri

Comprehensive Plan 2008

“If we cannot imagine a healthy, bountiful, and sustaining environment today, it will elude us tomorrow.”
Mark Dowie, Losing Ground



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ACKNOWLEDGEMENTS
COMPREHENSIVE PLAN 2008
Clay County, Missouri

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Clay County, Missouri

Comprehensive Plan 2008

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Chapter 1. Comprehensive Plan Overview

INTRODUCTION

The Clay County Comprehensive Plan is an official public document adopted by the County's Planning and Zoning Commission for the physical development of the unincorporated area of Clay County, Missouri. The Comprehensive Plan (also referred to as "the Plan") indicates, in general, how citizens want the County to improve and grow in both the near-term as well as a longer-term up to the next 10 years. The Plan is a rational and comprehensive guide for physical development that fosters quality growth, conservation and preservation of natural resources, and development throughout the County and its unincorporated planning area.

Clay County is a first class, non-charter county regulating land use under authority granted second and third class counties in the Missouri Revised Statutes, Chapter 64, *et. seq.*: "The county planning commission shall have power to make, adopt and publish an official master plan of the County . . ." These statutes provide the authority for Clay County to prepare and adopt a "Master Plan" (or comprehensive plan) through the same basic process as it has in the past.

Since adoption of the 1997 Comprehensive Plan, Clay County has long maintained an active, professional planning and zoning program and the Plan has been routinely updated, most recently in November, 2001. In June, 2003 the County adopted the **Land Development Code** which sets forth the County's Zoning and Subdivision regulations as an implementation tool of the Comprehensive Plan. Amendments include through 2007.

In addition, the County has completed studies and adopted other plans in recent years that have been instrumental in shaping recent development efforts, including:

- Clay County Airport Land Use Study 1994,
- Highway 69 Corridor 1999,
- Northland Trails Vision Plan 2001, and
- Parks System Master Plan 2003.

The 2008 update of the 1997 Comprehensive Plan comes at a critical juncture in Clay County's history. The Plan continues a process whereby Clay County—as a rapidly urbanizing area—is poised for continued growth and development, and renewed partnerships with residents, businesses, and the various incorporated communities located throughout the County. The Plan's underlying purpose is to preserve and enhance investment by all citizens while providing the foundation for quality economic growth and stability. Such actions will result in a safe and healthful environment for future generations.

CHAPTER 1 COMPREHENSIVE PLAN OVERVIEW

The Participation Process

In order to engage the public in the planning process, a participation structure of stakeholder groups, landowners, community leaders, developers, appointed and elected officials, municipal representatives, and members of the public at-large was established to provide input and build agreement on principles and specific recommendations for the plan.

Appendix A and Appendix B contain a summary of the public workshops held as part of the process for preparing this Plan. The public participation process included the following:

- An interactive public Focus Session workshop was conducted on December 19, 2006 for community stakeholders to identify and prioritize critical planning issues facing Clay County both now and in the future. The meeting allowed participants to begin building consensus on the key community planning issues.
- An interactive public Charrette workshop was conducted on February 20, 2007 in which small groups discussed the key planning issues identified at the Focus Session and provided planning policy recommendations to address those issues.
- Individual stakeholder meetings were conducted with key community individuals to provide the project consultants and County staff with additional input and supporting documentation about how to best plan for the County's future.
- Work sessions open to the public were conducted with the County Planning and Zoning Commission during the spring and summer 2007 to discuss and refine recommendations for the Comprehensive Plan.



A community opinion survey was conducted with residents of Clay County to address public opinions related to both the plan update and countywide levels of satisfaction with county services (**Ref. Appendix B**). The survey results will provide an invaluable comparison of countywide opinions with the facilitated workshop results during the 2007 plan update.

Plan Contents

The Missouri Revised Statutes are permissive, not prescriptive when indicating the contents of the Plan, saying that it “may include” a variety of elements, among them “studies and recommendations relative to the locations, character and extent of highways . . . and other transportation routes, . . . parks and, . . . and projects affecting conservation of natural resources.” (Ref. the Missouri Revised Statutes, Section 64.550).

The Comprehensive Plan for Clay County includes multiple sections, all of which must be considered to interpret the Plan intent:

- Planning Purpose and Land Use Issues;
- Demographics and Existing Conditions, including Economic Trends;

- Major Roadway Plan;
- Future Land Use;
- Goals, Objectives, and Policies;
- Economic Development—focusing on the County airport; and
- Implementation Recommendations.

HOW THE COMPREHENSIVE PLAN IS USED

Clay County is a large, diverse community. In the future, successful growth and open space preservation in Clay County will be achieved by community leaders and citizens who use the Comprehensive Plan as a guide. As the official policy guide for growth and development in unincorporated Clay County, the Comprehensive Plan includes goals, objectives, and policies reflecting the County’s overall direction when planning for growth. The Plan also presents recommendations for how to implement the policies.

The Comprehensive Plan is the legal framework on which the County’s zoning and subdivision regulations in the **Land Development Code** are enacted and amended by the County Commission upon recommendation from the County Planning and Zoning Commission. These regulatory ordinances shape the location, type, quality, and range of the County’s physical development.

Public Benefits of the Plan

Local governments have a broad ability to mitigate the public impact of private development and promote the public welfare. The legitimate right of government to legislate land use for the protection and promotion of the public welfare must be balanced with a property owner’s rights to promote the reasonable economic use of his property. The Plan will balance the interests of all parties: considering the needs of individual property owners while promoting the good of the community-at-large.

Jurisdictional Responsibility

The Clay County Planning and Zoning Commission and the County Commission are responsible for managing the growth and development of the County’s unincorporated area. This role includes a multi-jurisdictional responsibility to coordinate the plans and aspirations of all the districts and cities in the County and require unincorporated development that is responsive to the plans of adjacent municipalities. Growth management must allow the jurisdictions now providing or ultimately providing water, sanitary sewer, public safety, and education services the ability to do so in a cost effective manner. Development must occur in a manner that results in a logical urban pattern with long-term value rather than short-term gains. Without the long-term vision and coordination between municipalities, development decisions will result in haphazard suburbanization of the County that consumes prime agricultural lands, impacts natural resources and environmentally sensitive areas, and increases traffic congestion.

Role of the Planning and Zoning Commission

The Planning and Zoning Commission is primarily an advisory body for the unincorporated area of Clay County. Under the **Land Development Code**, a primary duty of the Planning and Zoning Commission is to hold public hearings where public opinion can be expressed. In this sense, the Planning and Zoning Commission is a sounding board for community attitudes toward development. The Commission is required to adopt a recommendation to the County

CHAPTER 1 COMPREHENSIVE PLAN OVERVIEW

Commission regarding rezoning and subdivision of land, conditional use permits, and text amendments to the **Land Development Code**. Similarly, by Missouri statutes, in order to implement land use regulations, the Planning and Zoning Commission must adopt a Comprehensive Plan for the physical development of the County following a public hearing.

Role of the County Commission in Planning and Zoning

The County Commission is responsible for enacting and amending the **Land Development Code** after consideration of the recommendations of the Planning and Zoning Commission. This responsibility includes amendments to the zoning map for unincorporated Clay County. The County Commission does not have a direct role in regard to the Comprehensive Plan. By statute, the preparation, adoption, and implementation of the Comprehensive Plan is the role of the Planning and Zoning Commission.

Role of the Board of Zoning Adjustment

The Clay County Board of Zoning Adjustment (BZA) was created pursuant to the Missouri Revised Statutes 64.660 and consists of five residents of the County, including no more than two residents of the incorporated area of the County and no more than one member of the Planning and Zoning Commission. The role of the BZA is primarily a quasi-judicial body rather than an advisory or legislative one.

BASIS OF DECISION MAKING

In administering the plan, zoning, and subdivision regulations, the Clay County Planning and Zoning Commission follows rules and procedures, as set forth in their commission bylaws. It is crucial that the decisions of the commission are made fairly and that they have the appearance of fairness. The credibility of the Planning and Zoning Commission, its subcommittees, and public support for zoning and subdivision regulations in general, will erode if there is an appearance of unfairness or impropriety in members of these public bodies. For this reason, it is important that its code of conduct be followed as closely as possible.

1. Serve the Public Interest. The primary obligation of Planning and Zoning Commission members and planning staff is to serve the public interest.
2. Support Citizen Participation in Planning. Because the definition of the public interest is modified continuously, Planning and Zoning Commission members and planning



staff must recognize the right of citizens to seek to influence planning decisions that affect their well being. Members should encourage a forum for meaningful citizen participation and expression in the planning process and assist in clarifying community goals, objectives, and policies.

3. Recognize the Comprehensive and Long Range Nature of Planning Decisions. Planning and Zoning

Commission members and planning staff should recognize and give special consideration to the comprehensive and long-range nature of planning decisions. Planning and Zoning Commission members and planning staff must seek to balance and integrate physical (including historical, cultural, and natural), economic, and social characteristics of the community or area affected by those decisions. Planning and Zoning Commission members and the planning staff must gather all relevant facts, consider responsible alternative approaches, and evaluate the means of accomplishing them. Planning and Zoning Commission members and planning staff should expressly evaluate foreseeable consequences before making a recommendation or decision.

4. Expand Choice and Opportunity for All Persons. Planning and Zoning Commission members and planning staff should strive to make decisions which increase choice and opportunity for all persons; recognize a special responsibility to plan for the needs of disadvantaged people; and urge that policies, institutions, and decisions which restrict choices and opportunities be changed.
5. Facilities Coordination Through the Planning Process. Planning and Zoning Commission members and planning staff must encourage coordination of the planning process. The planning process should enable those concerned with an issue to learn what other participants are doing, thus permitting coordination of activities and efforts and accommodation of interests. Planning and Zoning Commission members and planning staff should strive to ensure that individuals receive adequate information far enough in advance of the decision to allow their meaningful participation. Citizens as well as public and private agencies likely to be affected by a prospective planning decision should have access to this information.
6. Avoid Conflict of Interest. To avoid conflict of interest and even the appearance of impropriety, Planning and Zoning Commission members who may receive some private benefit from a public planning decision must not participate in that decision. The private benefit may be direct or indirect, create a material personal gain, or provide an advantage to an immediate relation. A member with a conflict of interest must make that interest public, abstain from voting on the matter, not participate in any deliberations on the matter, and step down from the Planning and Zoning Commission and not participate as a member of the public when such deliberations are to take place. The member must not discuss the matter privately with any other member voting on the matter.
7. Render Thorough and Diligent Planning Service. Planning and Zoning Commission members and planning staff must render thorough and diligent planning service. Should a Planning and Zoning Commission member or members of staff believe they can no longer render such service in a thorough and diligent manner, they should resign from the position. If a member has not sufficiently reviewed relevant facts and advice affecting a public planning decision, the member must not participate in that decision.
8. Not Seek or Offer Favors. Planning and Zoning Commission members and members of staff must seek no favor. Planning and Zoning Commission members and planning staff must not directly or indirectly solicit any gift or accept or receive any gift (whether

CHAPTER 1 COMPREHENSIVE PLAN OVERVIEW

- in money, services, loans, travel, entertainment, hospitality, promises, or in some other form) under circumstances in which it could be reasonably inferred that the gift was intended or could reasonably be expected to be intended to influence them in the performance of their duties; or that it was intended or could reasonably be construed to be intended as a reward for any recommendation or decision on their part. Individuals must not offer any gifts or favors intended to influence the recommendation or decision of Planning and Zoning Commission members or planning staff.
9. Not Disclose or Improperly Use Confidential Information for Financial Gain. Planning and Zoning Commission members and planning staff must not disclose or use confidential information obtained in the course of their planning duties for financial or other gain. A Planning and Zoning Commission member or staff must not disclose to others confidential information acquired in the course of their duties or use it to further a personal interest. Exceptions to this requirement of non-disclosure may be made only when (a) required by process of law, (b) required to prevent a clear violation of law, or (c) required to prevent substantial injury to the public. Disclosure pursuant to (b) and (c) must not be made until after the Planning and Zoning Commission member or member of staff has made reasonable efforts to verify the facts and issues involved, obtain reconsideration of the matter, and obtain separate opinions on the issue from other planners or officials.
 10. Ensure Access to Public Planning Reports and Studies on an Equal Basis. Planning and Zoning Commission members and planning staff must ensure that reports and records of the public planning body are open equally to all members of the public. All non-confidential information available to a member or planning staff must be made available in the same form to the public in a timely manner at reasonable or no cost.
 11. Ensure Full Disclosure at Public Hearings. Planning and Zoning Commission members and staff members must ensure that the presentation of information on behalf of any party to a planning question occurs only at the scheduled public hearing on the question, not in private, unofficially, or with other interested parties absent. The official must make partisan information regarding the question (received in the mail, by telephone or other communication) part of the public record. The Planning and Zoning Commission Chairman, at the commencement of each public hearing, should ask if any member has received any ex-parte communication. If any member has received ex-parte communication concerning the application at hand, that member must describe the nature of the information received.
 12. Maintain Public Confidence. A Planning and Zoning Commission member or member of staff must conduct himself/herself publicly so as to maintain public confidence in the public planning body, and the official's performance of the public trust.

CHAPTER 2. EXISTING CONDITIONS

INTRODUCTION

Environmental characteristics in Clay County play a significant role in the location and cost of new development. Significant barriers to development in some portions of the County include floodplains and severe slopes. The metropolitan regional planning council for the bi-state Kansas City area, Mid-America Regional Council (MARC) has developed an inventory of digital map data showing valuable natural resource assets and ecological features in the Kansas City region, including Clay County. This data is intended to provide a framework for environmental planning at local and regional levels.

Codes, Plans and Studies in Clay County

- 1997 Clay County Comprehensive Plan (last amended 2001)
- Park System Master Plan
- Northland Trails Plan
- Land Development Code

The Clay County Land Development Code applies to all development, public and private, within unincorporated County. All structures and land uses constructed or commenced and all enlargements of, additions to, changes in and relocations of existing structures and uses after adoption of the code, and amendments, must comply with the Land Development Code. The code is an implementation tool for the Comprehensive Plan. To help implement the Comprehensive Plan the County has adopted a series of overlay districts into the Land Development Code as listed below:

	District Name	Type
CD	Conservation District	Overlay District
PUD	Planned Unit Development	Overlay District
A-O	Clay County Regional Airport Area	Overlay
OP	Open Space/Trails/Parks/Public Uses	District

The Purpose of the Conservation District is to encourage state-of-the-art alternatives (e.g. cluster-style development in conjunction with conserving open space) to conventional subdivision design in order to preserve and maintain the natural features and rural amenities in the County through better site selection and better site design. The concept of Conservation Districts was adopted in November 2001 by the Clay County Planning and Zoning Commission as an amendment to the 1997 Clay County Comprehensive Plan.

The Planned Unit Development (PUD) district is an overlay zoning district that permits greater flexibility of land planning and site design than conventional zoning districts. Its intended use is for design-oriented developments, commercial, industrial and mixed-use developments.

The Airport Area Overlay District (A-O) regulations serve to implement the goals, policies and strategies of the Airport Land Use Study and the U.S. 69 Highway Corridor Study in the 1997 Comprehensive Plan, and are summarized in Chapter 6.

CHAPTER 2 EXISTING CONDITIONS

The purpose of the Open Space, Trails, and Parks Master Plan District is to provide intentional and organized development of park and recreational facilities for the residents of Clay County. The overall goal is to provide connections between historical sites, connections between neighborhoods, and provide ample open space for recreation. The location of trails within Clay County is planned for in the Northland Trails Master Plan adopted jointly by Clay County and Platte County; and location of parks in Clay County is planned for in the Parks Master Plan adopted by Clay County. The Significant Parks Map and the Northland Trails Plan Map both follow **Chapter 4**.

Soils

Clay County is located in the general soil area of Missouri labeled "deep Loess Drift". The **Soil Survey of Clay and Ray Counties** published in 1986 by the US Department of Agriculture lists 34 soil series in Clay and Ray Counties. Clay County is further defined into eight (8) general soil associations, with the most widespread being the Sharpsburg-Macksburg association, the Knox-Sibley association, and the Armster-Lagonda-Sharpsburg association.

Of the 34 soil series present in the County, 27 are considered prime farmland soils. Urban or built-up areas of the soils are not considered prime farmland. Some of the 27 soils are considered prime farmland only under certain conditions. The majority of prime farmland in the County lies in the upland ridgetops (that have a slope of 2 to 5 percent), and on the alluvial soils in the floodplains along the Missouri River and its tributaries.

Mineral Resources

The geologic formations in Clay County are the Lansing Group and the Kansas City Group. These two groups are generally described as having the potential for production of quarried limestone materials such as riprap, road surface material, and products for the manufacture of cement. In addition, the Kansas City Group contains irregular or thin beds of high sulfur content coal. Neither fossil nor non-fossil mineral resources are actively being extracted in Clay County.

Slopes

Slopes greater than 15 percent are generally considered a severe limitation for residential development. In the eastern portion of the County steep slopes occur along the edges of the floodplains and north of Excelsior Springs. (**Ref. Natural Features Map**)

Bedrock

The presence of bedrock near the surface can significantly increase development costs and may make new development prohibitive due to excavation costs. The shallow bedrock in Clay County that may interfere with excavation is mostly soft and rippable with the aid of commonly used construction equipment such as a backhoe.

Woodlands

The identified deciduous forest and woodlands of the County are shown in an inventory published by MARC, which the County may reference for consideration when evaluating site plans and plats to help conserve the natural resources of the County.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in providing the nation's short and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, state, and federal levels, as well as individuals, must encourage and facilitate the wise use of our nation's prime farmland.

According to the American Farmland Trust, farmlands should be preserved for the following reasons:

- **National Economy and World Food Security.** The U.S. food and farming system contributes nearly \$1 trillion to our national economy—more than 13 percent of the gross domestic product—and employs 17 percent of the labor force. World consumers of U.S. agricultural exports are expected to increase their purchases in the future. With a rapidly increasing world population and expanding global markets, saving American farmland is a prudent investment in the world food supply and an economic opportunity.
- **Protection of the Environment.** Well-managed agricultural land supplies important non-market goods and services. Farm and ranch lands provide food and cover for wildlife, help control flooding, protect wetlands and watersheds and maintain air quality. They can absorb and filter wastewater and provide groundwater recharge. New energy crops even have the potential to replace fossil fuels.
- **Fresh, Healthy Food and Strong Communities.** Farms closest to our cities, and directly in the path of development, produce much of our fresh food—63 percent of our dairy products and 86 percent of fruits and vegetables. And for many Americans, compelling reasons for saving farmland have to do with protecting the quality of life in their communities—scenic and cultural landscapes, farmers' markets, recreational opportunities, local jobs and community businesses.
- **Fiscal Stability for Local Governments.** New development requires services such as schools, roads and fire/police protection, whereas privately owned and managed agricultural land requires very few services. Cost of Community Services (COCS) studies show that, nationwide, farm, forest and open lands more than pay for the municipal services they require, while taxes on residential uses, on average, fail to cover costs.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to producing food, feed, forage, fiber, and oilseed crops. Such soils have properties that are favorable for the economic production of sustained high yields of crops. Prime farmland soils produce the highest yields with minimal inputs of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, or woodland, or they may be in other uses. Urban or built-up land and water areas cannot be considered prime farmland. Prime farmland soils usually get an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The acidity or

CHAPTER 2 EXISTING CONDITIONS

alkalinity level of the soils is acceptable. The soils have few or no rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods and are not frequently flooded during the growing season. The slope ranges mainly from 0 to 6 percent.

About 37,000 acres, or nearly 20 percent of unincorporated Clay County, meets the soil requirements for prime farmland. An additional 46,000 acres in Clay County meet the requirements only in areas where the soil is drained. Areas are scattered throughout the County, but the largest acreages are in soils associations 2, 3 and 8 on the general soil map published by the USDA Soil Conservation Service for Clay County. Crops grown on this land, mainly corn and soybeans, account for about two-thirds of the total agricultural income of the County each year.

The urbanizing areas of Clay County have experienced conversion of prime farmland to residential and other urban uses. The loss of prime farmland places greater pressure on marginal lands, which generally are more erodible, droughty, difficult to cultivate and are generally less productive.

Soils map units that make up prime farmland in Clay County are listed in **Table 2.1**. This list does not constitute a recommendation for a particular land use.

Table 2.1: Prime Farmland in Clay County			
Map * Symbol	Soil Name	Map Symbol	Soil Name
1B	Sibley Silt Loam, 2 to 5 percent slopes	56B	Grundy silt loam, 2 to 5 percent slopes
1C	Sibley Silt Loam, 5 to 9 percent slopes	71	Aholt clay (where drained)
6B	Sharpsburg Silt Loam, 2 to 5 percent slopes	72	Dockery silt loam
13B	Sampsel silt loam, 2 to 5 percent slopes	73	Leta silty clay
24B	Lagonda silt loam, 2 to 5 percent slopes	74	Levasy silty clay (where drained)
26B	Lagoda silt loam, 2 to 5 percent slopes	75	Norbone very fine sandy loam
31	Colo silty clay loam (where drained)	80	Landes fine sandy loam
33	Zook silty clay loam (where drained)	81	Waldron silty clay (where drained)
35	Booker silty clay loam (where drained)	82	Parkville silty clay
36	Bremer silt loam (where drained)	83	Haynie silt loam
37	Moniteau silt loam (where drained)	87	Modale silt loam
38	Wiota silt loam	88	Gilliam silt loam
39	Nodaway silt loam	90	Wabash silty clay (where drained)
		92	Cotter silt loam

Source: Soil Conservation Service

* Symbols published by the SCS for each soil association

Floodplains

Significant flood prone areas in unincorporated Clay County exist in the Smithville Lake planning area and along the Missouri and Fishing Rivers and their tributaries. In the Smithville Lake planning area the floodplain boundaries run along the Little Platte River, First and Second Creeks, Wilkerson Creek, and the Rocky, Owens, and Camp Branches. The balance of the flood hazards are included within the floodplain of the Smithville Reservoir.

FEMA Regulation of Levee-Protected Floodplains

Levees, usually earthen embankments, are designed and constructed to contain, control, or divert the flow of water so as to provide protection from temporary flooding. Levees are designed to provide a specific level of protection, such as the 100-year flood event, not necessary full protection:

- They can be overtopped or fail in larger flood events.
- Levees also decay over time.
- They require regular maintenance and periodic upgrades to retain their level of protection.

When levees fail in larger flood events, they fail catastrophically. The damage may be more significant than if the levee had not been there. For all these reasons, the flood risk of development behind levees must be evaluated. Before a levee can be shown as providing a level of protection for the one-percent-annual-chance flood, it must meet the Department of Homeland Security's Federal Emergency Management Agency (FEMA) accreditation criteria. It is important to note that accrediting a levee does not guarantee protection.

FEMA establishes criteria for levee accreditation and identifies risk levels through flood analysis and mapping projects. FEMA manages the National Flood Insurance Program (NFIP), the cornerstone of the Nation's strategy for preparing communities for flood disasters. FEMA

Special Flood Hazard Areas—FEMA Definitions

- A FEMA-identified high-risk flood area where flood insurance is mandatory.
- An area of special flood hazard where the land is in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year.
- An area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map (FIRM) as Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE, or V.

Flood Insurance Rate Maps (FIRMs) cannot reflect every variation in the physical geography of an area. Therefore, a FIRM occasionally will show a property as being in a Special Flood Hazard Area (SFHA), even though the building may be above the Base Flood Elevation (BFE).

also produces Flood Insurance Rate Maps (FIRMs) that delineate the floodplain and regulatory floodway boundaries, base flood elevations, and insurance risk zones. FIRMs are an essential tool by which States and communities evaluate their flood risks to manage development in the floodplain, insurance agents properly rate flood insurance policies, and lending institutions and Federal agencies determine flood insurance requirements. Identifying the risks behind levees is an important element of FIRMs.

The U.S. Army Corps of Engineers ("the Corps") is responsible for building and maintaining Corp-owned levees, and for inspecting

those structures in the programs to determine their level of maintenance.

The County Airport and Floodplain Regulation

Clay County has long participated in federal flood insurance programs and as such, has adopted the floodplain management ordinances required of all participants. These ordinances are designed to minimize damage to homes and businesses located in Special Flood Hazard Areas. In areas behind levees that are mapped as Special Flood Hazard Areas, the NFIP requires all new or substantially improved buildings to be constructed to or above the elevation of the one percent annual-chance-flood.

The area around the County’s Midwest National Air Center (formerly the “Clay County Regional Airport”) is such an area: it is protected by a levee. Even with levee protection, however, the land is still considered to be in the floodplain. The levee-protected areas around the County airport—depending on the condition of the levees, their maintenance record etc.—may be classified as “low-to-moderate risk” in the future (as distinct from areas without levee protection which will remain high-risk zones). **(Ref. Chapter 6 for more detail about Midwest National Air Center).**

Sustainability and Floodplains

Sustainability should be incorporated into floodplain management by communities. Sustainability is development that maintains or enhances economic opportunity and community well-being while respecting, protecting, and restoring the natural environment on which people and economies depend (Ref. Appendix C). For a community to make wise land use decisions, flood risk must be accurately identified and considered in floodplain development; and the best way to do that is in context with sustainability principles and policies.

The reason the Midwest National Air Center(MNAC) floodplain may be classified as “low-to-moderate risk” is that FEMA is remapping flood hazard areas across the Nation. In areas behind levees that are mapped as low-to-moderate risk areas, no NFIP floodplain management requirements would be mandatory;

however, appropriate precautions would still be recommended, as the risks remain for overtopping or failure of the levee **(Ref. Figure 2-1: Midwest National Air Center)**. See Chapters 4 and 6 for future air center plans.

In summation, economic development opportunities at the County airport should take into account the floodplain regulations, up to and including levee maintenance. Regardless of any future remapping or re-designation of risk, certain measures are strongly recommended for the airport floodplain:

- Construction to meet floodplain guidelines, including improved buildings above the elevation of the one percent annual-chance-flood,
- Purchase of flood insurance, and
- Adherence to evacuation procedures.

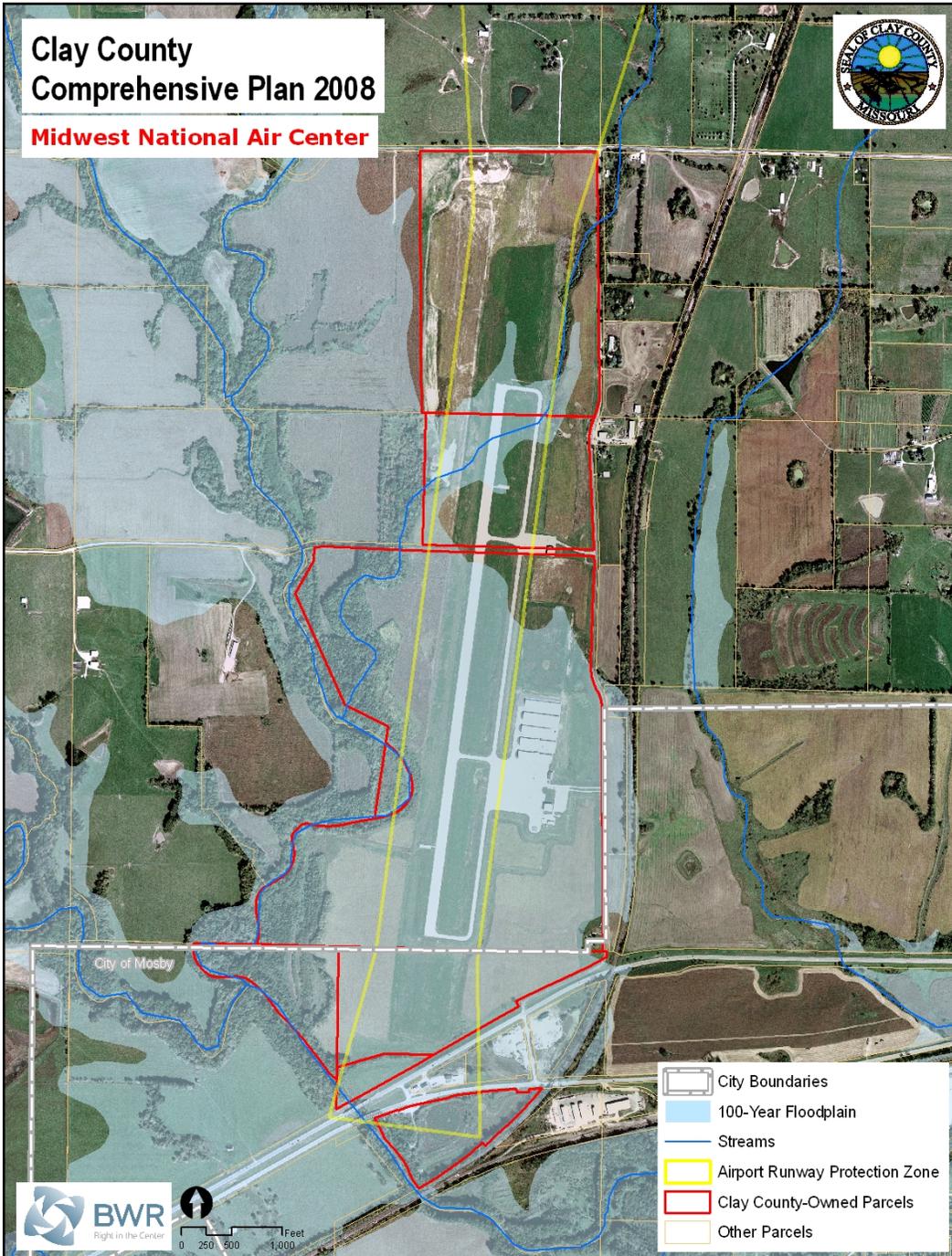
FEMA offers federally backed flood insurance through the National Flood Insurance Program (NFIP). In many low-to-moderate risk areas, businesses are eligible for reduced-cost Preferred Risk Policies (PRP). Areas behind levees that are credited as protecting against the one-percent-annual-chance flood will be mapped as areas of “moderate risk” and will not be required to have insurance coverage. However, while not requiring it, FEMA recommends flood insurance for all properties behind levees; and, Clay County should follow those recommendations.

Groundwater

Water is within six feet of the ground surface in predominantly the southeast portion of the County. The water table is considered close to the surface when at least a six-inch water saturated zone is present for at least a two week period. Both perched and apparent water are prevalent in lowlands and are actually underground drainageways emptying into local streams, creeks, and rivers. Perched water tables are actually stagnant pools, sometimes called meteoric waters, and generally occur in upland areas. For the most part, Clay County has an inadequate ground water supply for most development and therefore new development

must depend on rural or municipal water systems. Groundwater quality must be protected for food production and food security in the future.

Figure 2-1
Existing Midwest National Air Center



PUBLIC UTILITIES

Residents and businesses in Clay County are served by municipal utility services, as well as county public water and sewer districts.

County Common Sewer District

At the recommendation of the County Health Department and the 1997 Comprehensive Plan, the Clay County Commission appointed a task force in 1997 to study the issue of sewers for the unincorporated area and to make recommendations for wastewater treatment. The task force reviewed significant amount of detail, interviewed various parties, and took testimony at numerous public forums concerning the formation of a sewer district. In 1999 the Task Force issued a report recommending establishment of a Common Sewer District.

The County Commission appointed a second task force in 2002 to study the type of district to be formed, its boundaries, and its mission. After a series of public meetings and work sessions the task force issued its recommendations in a July 2003 final report concluding there is a need to develop treatment systems in the County, rather than continue the use of septic tanks and absorption field systems. After a review of relevant Missouri Revised Statutes, funding sources, and public opinion, the Common Sewer District was recommended (with sub-districts) as the best way to facilitate development of centralized systems. The report also recommended:

- serving the unincorporated area, as well as portions of the Cities of Smithville, Holt, Lawson, Excelsior Springs, Prathersville, Mosby, Missouri City, and Kearney; and
- forming sub-districts in the future to serve existing or future developments, and limit the sub-districts in areas to include only those properties to be served by a collection / treatment system.

The 2003 task force recommended the cost of developing central collection and treatment be borne by the individuals served rather than by all residents of the County. It was further recommended each of the sub-districts select the collection and treatment methods best suited to the individual sub-district and to allow the sub-districts to arrange for their own construction, operation, and maintenance, using the authority of the common district to finance and administer the sub-districts. The following mission was recommended for the common sewer district:

- Provide an umbrella organization for the sub-districts, to provide for orderly development of central collection and treatment of wastewater where appropriate;
- Allow sub-districts to fund capital improvements and operation and maintenance activities individually; and
- Provide contract operation and maintenance for sub-districts if necessary.

The following steps outline the process to form a common sewer district:

1. The County Commission petitions the Circuit Court to place a question on a forthcoming election to determine if the voters desire formation of a District.
2. The Circuit Court appoints a Commission to recommend the boundaries of the district and administers an oath.
3. The Commission holds a public hearing to allow property owners within the proposed boundaries to comment on the boundaries after publishing the Notice of Hearing five times.

4. The Commission prepares a report with a map for the Circuit Court recommending District Boundaries.
5. The Court accepts the report, discharges the commission, and orders the County Commission to place a question on the ballot for a forthcoming election to obtain voter approval of the district.
6. After the voters approve, the Circuit Court issues a decree incorporating the area as a Common Sewer District. The County Commission appoints a five-member board of trustees.

Small City Municipal Service Capacity Analysis

The small cities of Clay County were asked about their respective municipal service capacities. As water storage capacity can be a measure of service limitation, responses were noted and only Kearney, Smithville and Excelsior Springs provide municipal water service and have capacity for large fire fighting. These three cities also reported that a significant percentage of their water main distribution systems are less than 6" in diameter. The City of Excelsior Springs reports that 57% of the main distribution system is less than 6" which leaves it disadvantaged for fire fighting. Of these three cities, only Smithville indicates that expansion is planned in the next 5 years.

Regarding sewer service, only Mosby and Prathersville do not have a primary wastewater treatment facility. Mosby reports that 100% of the city is served by private septic systems. Prathersville and Excelsior Springs both report that 15% of their respective cities are on septic systems, with all other cities reporting that septic systems are rare. All cities with wastewater treatment facilities have the capacity to extend service, and the two cities that do not currently have a facility indicate plans to provide the service in the next five years.

The City of Kearney has recently had an annexation plan of intent approved by Clay County for 50 acres near the Midwest National Air Center. A new lift station will be constructed on the annexed land, in addition to expanding the existing treatment plant near the River Meadows subdivision. These improvements will expand the capacity of the existing plant to 2 million gallons per day, more than double the current capacity.

In 2003, the City of Kearney negotiated with the City of Kansas City Missouri to extend an 18-inch waterline to the north along Jesse James Farm Road to Route M-92 to provide a guaranteed maximum of 2.9 million gallons per day (MGD). These improvements to the existing water supply network and providing new supply connections from the City of Kansas City will provide the necessary water supply for the City of Kearney as growth occurs over the next 40 years. Following is a summary of the responses returned by the small cities in Clay County (**Ref. Table 2.2**).

CHAPTER 2
EXISTING CONDITIONS

Table 2.2: Small City Capacity to Serve Growth

QUESTIONS ASKED IN THE CITIES PLANNING SURVEY	Lawson	Holt	Kearney	Smithville	Mosby	Prathersville	Excelsior Springs
CAPITAL IMPROVEMENTS PLANNING							
Does your city have a list of planned Improvements?	Yes	Yes	Yes	Yes	No	No	Yes
Does the list cover improvements beyond the next year?	No	No	Yes	Yes	No	No	Yes
WATER PROVISION							
Does your city provide municipal water?	No	No	Yes	Yes	No	No	Yes
What is the general service capacity of your water system?	N/A	N/A	3 mgd	2.5 mgd	N/A	N/A	5 mgd
What is the storage capacity of your water system?	N/A	N/A	3 mgd	1.1 mgd	N/A	N/A	7 mgd
What percentage of the water main distribution system is less than 6" in diameter?	N/A	N/A	10%	20%	N/A	N/A	57%
Are there plans to expand capacity in the next 5 years?			No	Yes	No	No	No
SANITARY SEWER PROVISION							
What percentage of your city is served by private septic systems?	None	1 Church	<5%	<2%	100%	15%	15%
Does your city have primary wastewater treatment?	Yes	Yes	Yes	Yes	No	No	Yes
Does your city have secondary or tertiary wastewater treatment?	Yes	Yes	Yes		No	No	Yes
What is the treatment capacity?	0.4 mgd	79,000 gpd	1.25 mgd	.75 mgd	N/A	N/A	2.7 mgd
What is the average daily flow?	0.25 mgd	70,000 gpd	0.6 mgd	0.5 mgd	N/A	N/A	1.7 mgd
What is the peak flow?	0.36 mgd	70,000 gpd	10 mgd	0.66 mgd	N/A	N/A	9 mgd
Are there plans to increase capacity in the next 5 years?	No	No	Yes	Yes	Yes	Yes	Yes
In your estimation, does your city have the capacity to serve or extend sanitary sewer services to new development in the next 5 years?	Yes	Yes	Yes	Yes	No	No	Yes

Sanitary sewer is the defining utility that most closely dictates where urban development occurs. However sanitary sewer services to unincorporated areas of Clay County are not extensively available, including the *Urban Services Tier* areas. Past county plans, including the 1997 Clay County Comprehensive Plan, recommended forming a common sewer district for proper sewage treatment and disposal in urbanizing areas.

Currently residential development in the unincorporated areas utilize private, on-site systems or sewage package plants with only a small percentage of land in the unincorporated area located within a watershed served by a sanitary sewer system.

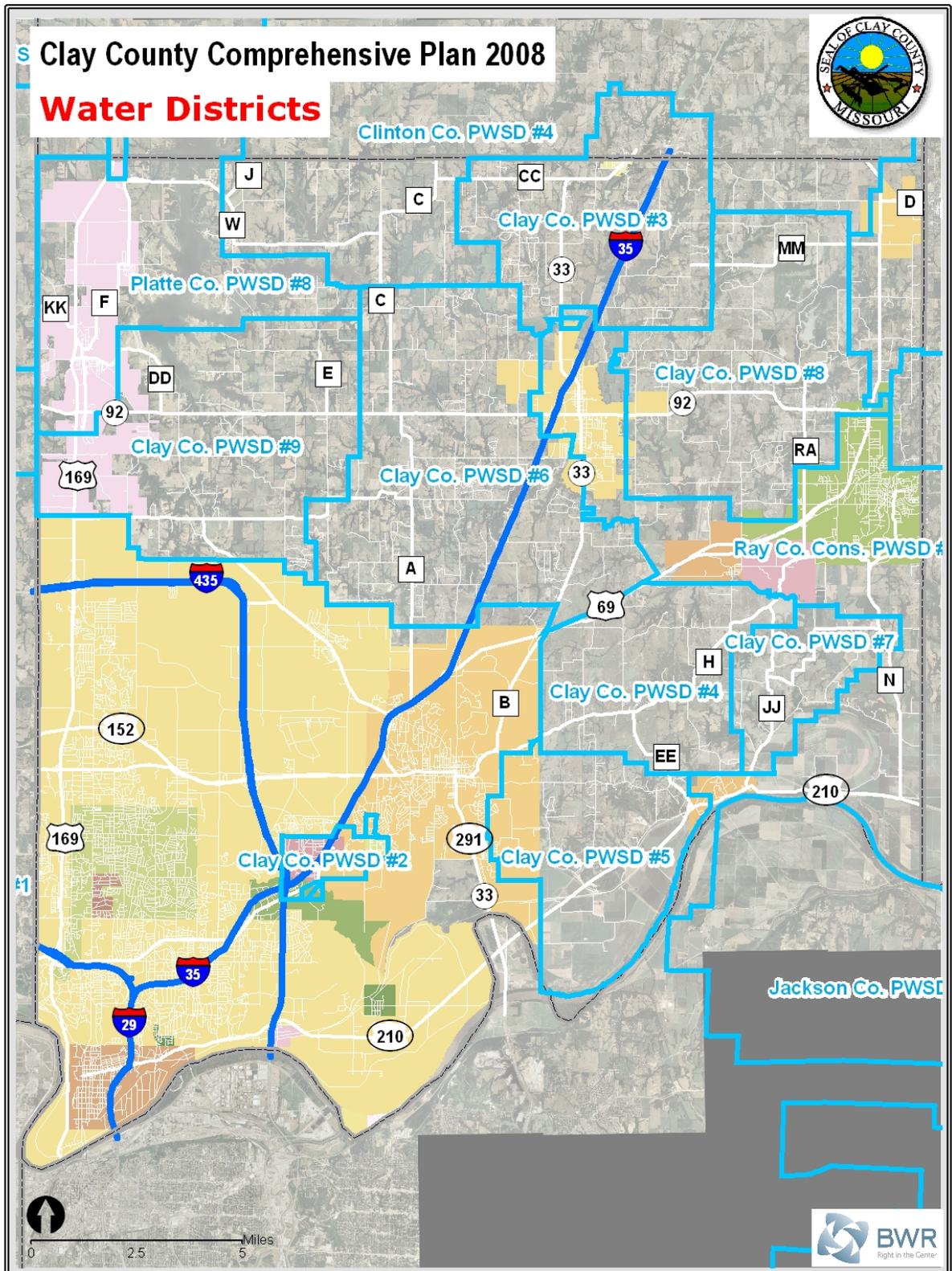
Kansas City, Missouri Services

The Fishing River Treatment Plant serves development along the M-291 corridor in the southwest portion of Clay County. The plant is designed to serve 6,500 acres of development, 4,400 acres of which is within the city limits of Kansas City. Currently, two main interceptors serve the basins of the Fishing River, and pump approximately 50,000 gallons per day of effluent. The plant has a capacity of 1,000,000 gallons per day, and a third main interceptor is being proposed to serve the M-Route-E corridor into unincorporated Clay County to better utilize the capacity of the plant.

Public Water District Services

Clay County is served by a total of 15 water districts, most of which are Clay County public water districts. Public water districts from Clinton, Platte, and Ray Counties also serve parts of Clay County. The shown water district boundaries are for reference only, and are subject to verification and amendment as territory is annexed and served by municipal services (**Ref. Figure 2-2: Water Districts map**).

Figure 2-2: Water Districts Map



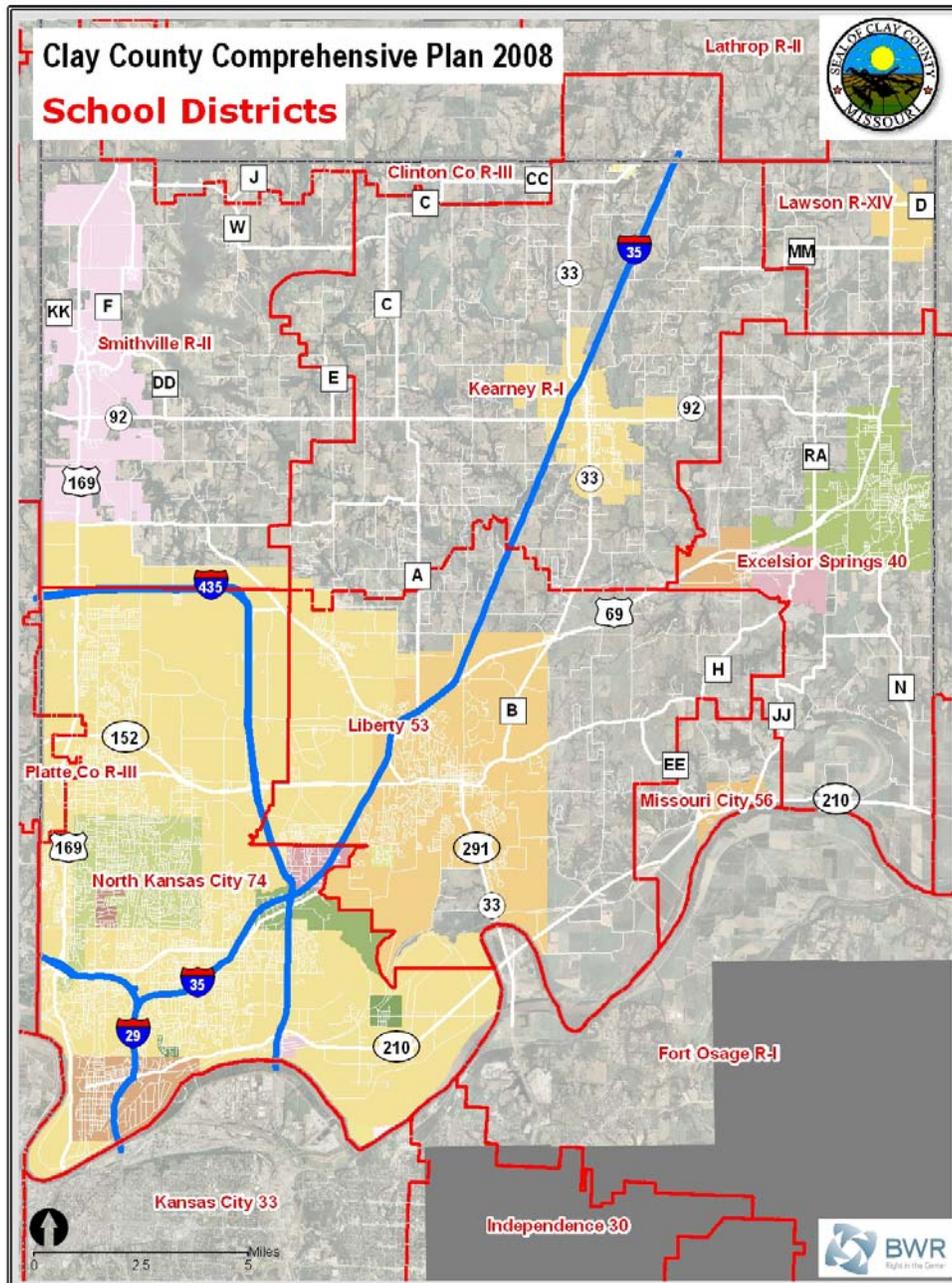
DEVELOPMENT PATTERNS

Growth and development in unincorporated Clay County is primarily along major transportation corridors, including I-35, U.S. Highway 69, and M-92.

School Districts

The County is served by several school districts, the largest being North Kansas City, Liberty, Kearney, Excelsior Springs, and Smithville. (Ref. Figure 2-3: School Districts Map)

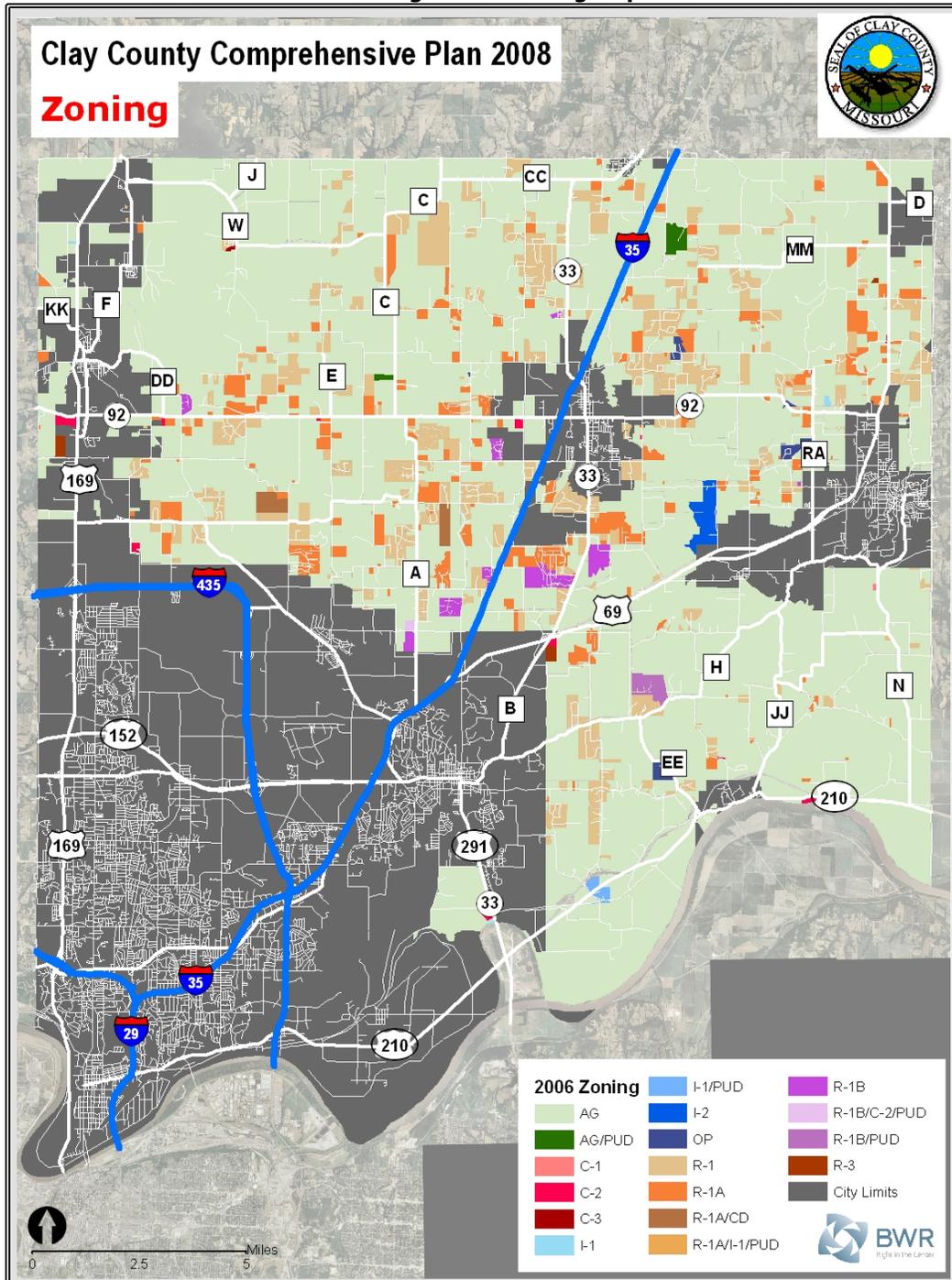
Figure 2-3: School Districts Map



Zoning

Incorporated areas within the County are governed by their respective city's ordinances, and Clay County has a zoning ordinance that covers all unincorporated areas. The majority of the unincorporated areas are zoned for agricultural use, with some areas along major roadways zoned for commercial. There are also a number of areas zoned for and developed with residential uses. (Ref. Figure 2-4: Zoning Map)

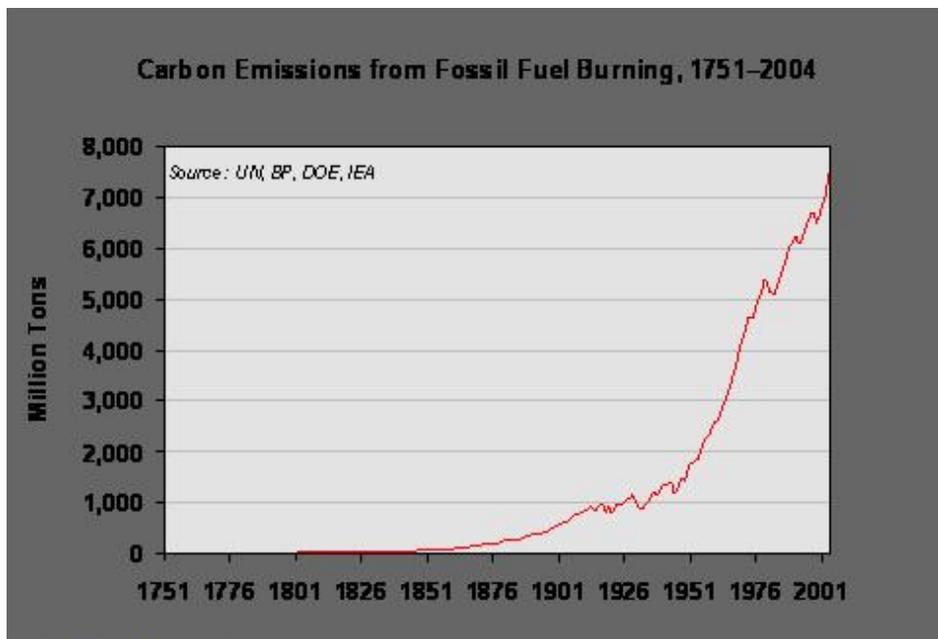
Figure 2-4: Zoning Map



ENVIRONMENTAL CONCERNS

As a part of the Kansas City Metropolitan area, Clay County is joined by other cities and counties which have begun to address environmental concerns. In 2006, Kansas City signed the U.S. Conference of Mayors Climate Protection Agreement, an agreement to reduce emissions to seven percent below 1990 levels by 2012. Also in 2006, the City of Kansas City, Missouri adopted a Climate Protection Planning Process resolution which initiated a process that will inventory current programs and establish goals and make recommendations to further reduce greenhouse gas emissions in the city. In April, 2007, the City's Climate Protection Plan Steering Committee presented Phase I recommendations to the mayor. Most of the Phase I recommendations focus on municipal government actions which are projected to reduce greenhouse gas emissions by more than 30% below 2000 levels. The formulation of a Phase II action plan is currently underway. Jackson County passed a similar resolution.

Figure 2-5: Carbon Emissions Graph



This example of carbon emissions is cited as one measure of current data indicating accelerated trends in climate change. Other measures of environmental concern may be cited and are available in the sustainability literature. The carbon emissions example is cited here to illustrate why Clay County is addressing environmental issues in response to the statutory mandate, that the plan "shall be developed so as to conserve the natural resources of the County . . ."

DEMOGRAPHICS

The U.S. Census Bureau's *2000 Census Brief* stated that the Nation's 1990 to 2000 population increase was the largest in American history. The population growth of 32.7 million people between 1990 and 2000 represents the largest census-to-census increase to date. Population growth across the United States varied significantly by region in the 1990's, with higher rates in the West (19.7%) and the South (17.3%) and much lower rates in the Midwest (7.9 %) and the Northeast (5.5%).

In contrast to trends in the Midwest, population in the Kansas City Metropolitan Statistical Area (MSA) increased 12.2% from 1,582,874 residents in 1990 to 1,776,062 in 2000.

Most of this growth is part of a growing trend among the Great Plains States including Missouri, of declining population in the rural areas and more consolidation in the urban metropolitan areas. In the Kansas City Metropolitan area, the more suburban areas, including Clay County, are growing at faster rates than the central urban core areas of the cities.

Current Population

Clay County is the third most populous county in the MSA, with only Jackson County and Johnson County having a higher population. The County grew at a substantial 19.9% while the metropolitan area grew by 12.2%. The County also outpaced the State of Missouri in population growth during the same ten year period, with the State growing only by 9.3%. The 2006 Census estimate indicates a growth rate of 12.5% for Clay County, and a growth rate of only 7.2% for the MSA.

Table 2.3 identifies the 1990 to 2000 Census population and percent change for Clay County, the Kansas City Metropolitan Area, the State of Missouri, and two other largely rural counties in the MSA.

Table 2.3: Census Population Trends (1990-2000)

Area	1990	2000	Change (90-00)		2006 Census	Change % (00-06)
			No.	%		
Clay County	153,411	184,006	30,595	19.9%	206,957	12.5%
Missouri	5,117,073	5,595,211	478,138	9.3%	5,842,713	4.4%
Kansas City MSA*	1,582,874	1,776,062	193,188	12.2%	1,904,501	7.2%
Cass County	63,808	82,092	18,284	28.7%	95,781	16.7%
Platte County	57,867	73,781	15,914	27.5%	83,061	12.6%

Source: US Census Bureau and MARC

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Population History and Projection

The Mid-America Regional Council (MARC) has estimated and forecasted the population for the metropolitan area, as well as Clay County through the year 2030 in the *2004 Kansas City Metropolitan Area Long Range Forecast*. The population data is based on trends in population growth and building permits. The projections anticipate moderate growth for the County as a whole through the year 2030, with growth slowing during each 10 year period. A majority of the population growth in Clay County is expected to be concentrated in the Liberty/Shoal Creek area.

Table 2.4 presents the 30 year population history for the County and metropolitan area. The population growth in Clay County has consistently outpaced the growth of the metro area, and that trend is expected to continue throughout the next 30 years. **Table 2.4** shows the predicted population growth for the next thirty years.

Table 2.4: Population History (1970-2000)

Area	1970	1980	Change % (70-80)	1990	Change % (80-90)	2000	Change % (90-00)
Clay County	123,702	136,488	10.3%	153,411	12.4%	184,006	19.9%
Kansas City MSA	1,327,266	1,381,915	4.1%	1,511,740	9.4%	1,695,764	12.2%

Source: MARC

Population Projection (2010-2030)

Area	2000	2010	Change % (00-10)	2020	Change % (10-20)	2030	Change % (20-30)
Clay County	184,006	215,517	17.1%	239,606	11.2%	262,712	9.6%
Kansas City MSA	1,695,764	1,905,522	12.4%	2,083,776	9.4%	2,248,933	7.9%

Source: MARC

Future population growth will impact Clay County's community services and infrastructure which must respond to a larger population. Services such as the water supply, sanitary sewer systems and the capacity of the wastewater treatment facilities are greatly impacted by new residential developments and supporting commercial and employment businesses. A growing population and new businesses will also impact traffic volumes on roads within the County. A larger population will require increased demands for a wide range of community services such as parks, recreation facilities, streets and facility maintenance, and emergency services. Future land use expectations and associated housing and commercial needs are outlined in Chapter 7.

Racial and Ethnic Diversity

Table 2.5 identifies the racial and ethnic diversity in Clay County from the 2000 Census. Minority population (Non-white) in the Kansas City metropolitan area is about 19 percent of the total population. African Americans make up 12.8% and Hispanics 5.2% of the metropolitan population respectively. In contrast, Clay County residents are more than 92% White.

Table 2.5: Racial and Ethnic Trends (Census 2000)

Race alone or in combination with one or more other races	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
White	170,129	92.5	1,435,388	80.8	4,748,083	84.9
Black or African American	4,894	2.7	226,503	12.8	629,391	11.2
American Indian and Alaska Native	890	0.5	8,429	0.5	25,076	0.4
Asian	2,479	1.3	28,654	1.6	61,595	1.1
Native Hawaiian and Other Pacific Islander	164	0.1	1,829	0.1	3,178	0.1
Some other race	2,173	1.2	40,431	2.3	45,827	0.8
Hispanic or Latino (of any race)	6,594	3.6	92,910	5.2	118,592	2.1

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Household Type and Size

The average household size in Clay County is 2.5 persons per household, virtually the same household size as for the MSA. The 2000 Census reported that approximately 70% of the households in Clay County are “families” which reflects the attractiveness of the community for younger families with children. The County, in general, has a higher percentage of family and married-couple households, than does the metropolitan area as a whole.

Table 2.6: Household Type and Size (Census 2000)

	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
HOUSEHOLDS BY TYPE						
Total households	72,558	100.0	694,468	100	2,194,594	100.0
Family households (families)	50,120	69.1	466,195	67.1	1,476,516	67.3
Married-couple family	40,192	55.4	358,186	51.6	1,140,866	52.0
Female householder, no husband	7,392	10.2	81,756	11.8	253,760	11.6
Nonfamily households	22,438	30.9	228,273	32.9	718,078	32.7
Householder 65 years and over	5,350	7.4	59,545	8.6	225,631	10.3
Average household size	2.5		2.51		2.48	
Average family size	3.0		3.07		3.02	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Employment and Unemployment

Employment is measured by the number of full-time and part-time jobs in an area. It includes farm workers and the self-employed as well as the non-agricultural wage and salary workers. The employment levels are measured where the jobs are (place-of-work) rather than where the workers live (place of residence).

Clay County contains a labor force of over 100,000 people, or approximately 11% of the total labor force in the metropolitan region. **Table 2.7** lists the distribution of employment by occupation in Clay County in comparison with the metropolitan area and state as a whole. The distribution of the workforce in Clay County is consistent with that of the MSA. Clay County has only a 2.4% unemployment rate, which is slightly lower than the unemployment rate of 2.9% for the MSA, and substantially lower than the national unemployment rate of 3.7%. A more detailed economic analysis related to the Midwest National Air Center may be found in Chapter 6, Economic Development.

Table 2.7: Employment by Occupation (Census 2000)

	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
Management, Professional and Related Occupations	31,907	32.5	318,944	35.8	836,005	31.5
Service Occupations	13,445	13.7	120,003	13.5	399,052	15
Sales and Office Occupations	30,003	30.6	257,686	28.9	714,303	26.9
Farming, fishing, and forestry occupations	144	0.1	1,793	0.2	17,240	0.6
Construction, extraction, and maintenance occupations	9,055	9.2	80,402	9	259,266	9.8
Production, transportation, and material moving occupations	13,587	13.8	112,354	12.6	432,058	16.3

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Income

Median household income in Clay County is \$48,347, which is over \$2,000 greater than the metropolitan area, and more than \$10,000 greater than the state of Missouri according to the 2000 Census. Most of the difference may be attributed to Clay County's higher percentage of family and married couple households on dual incomes and the lower percentage of elderly residents.

Persons below poverty in Clay County in 2004 were 7.7% compared to 13.0% statewide. Median household income was estimated for Clay County in 2004 as \$54,021 compared to only \$40,885 statewide. These higher incomes may make the community more attractive to new retailers in the future.

Table 2.8: Income Distribution (Census 2000)

	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
Households	72,613		694,971		2,197,214	
Less than \$10,000	3,385	4.7	50,534	7.3	221,242	10.1
\$10,000 to \$14,999	2,873	4.0	34,436	5	154,370	7.0
\$15,000 to \$24,999	7,786	10.7	79,239	11.4	319,986	14.6
\$25,000 to \$34,999	9,937	13.7	90,156	13	314,611	14.3
\$35,000 to \$49,999	13,638	18.8	120,377	17.3	385,315	17.5
\$50,000 to \$74,999	17,750	24.4	151,277	21.8	415,772	18.9
\$75,000 to \$99,999	9,440	13.0	82,144	11.8	193,561	8.8
\$100,000 to \$149,999	5,535	7.6	57,012	8.2	125,566	5.7
\$150,000 to \$199,999	1,221	1.7	14,665	2.1	31,716	1.4
\$200,000 or more	1,048	1.4	15,131	2.2	35,075	1.6
Median household income (\$)	48,347		46,193		37,934	
Per capita income (\$)	23,144		23,326		19,936	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Age Distribution

The age distribution in Clay County is roughly consistent with that in the MSA. The pie chart in **Figure 2-6** identifies the proportion of each major age group in Clay County with Generation X (20-34, using the 2000 U.S. Census as the base) representing the largest share. **Table 2.9** compares the County statistics with the metropolitan area.

Clay County has attracted disproportionately large percentages of young-family aged households and households with children.

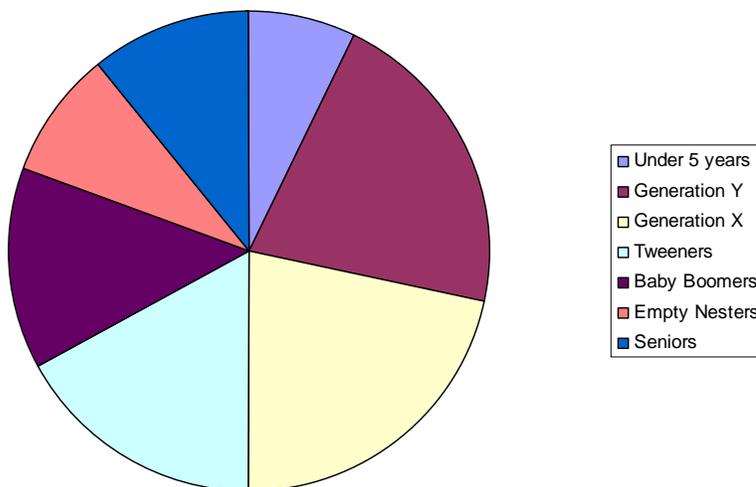


Figure 2-6: Clay County Age Distribution (2000)

Table 2.9: Age Distribution (Census 2000)

		Clay County		MSA		Missouri	
		Number	%	Number	%	Number	%
Under 5 years	Under 5 years	13,213	7.2%	128,114	7.2%	369,898	6.6%
	5-19 Generation Y	39,051	21.2%	389,122	21.9%	1,224,274	21.9%
	20-34 Generation X	39,614	21.5%	365,894	20.6%	1,108,231	19.8%
	35-44 Tweeners	31,243	17.0%	299,559	16.9%	887,569	15.9%
	45-54 Baby Boomers	25,298	13.7%	243,276	13.7%	742,462	13.3%
	55-64 Empty Nesters	15,739	8.6%	147,642	8.3%	507,398	9.1%
65 years and over	Seniors	19,848	10.8%	202,455	11.4%	755,379	13.5%
Total		184,006		1,776,062		5,595,211	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Housing

Clay County experienced a surge of new housing construction activity during the 1990s. The total number of housing units increased from 63,000 units in 1990 to over 76,000 units in 2000, an increase of 21%. The median housing value increased by more than 50% —from \$68,500 in 1990 to \$104,900 in 2000. Rents also increased from a median of \$355 to a median of \$576 in 2000.

Table 2.10 identifies the major housing characteristics from the 2000 U.S. Census.

Table 2.10: Major Housing Characteristics (Census 2000)

		Clay County		MSA		Missouri	
		Number	%	Number	%	Number	%
Housing Units		76,230		740,884		2,442,017	
Owner-Occupied Units		46,526		418,003		1,188,442	
	Less than \$50,000	1,699	3.7	50,755	12.1	198,814	16.7
	\$50,000 to \$99,999	19,735	42.4	146,771	35.1	491,675	41.4
	\$100,000 to \$149,999	15,125	32.5	113,641	27.2	262,103	22.1
	\$150,000 to \$199,999	5,970	12.8	54,842	13.1	117,791	9.9
	\$200,000 to \$299,999	3,187	6.8	34,256	8.2	74,880	6.3
	\$300,000 to \$499,999	644	1.4	13,560	3.2	30,303	2.5
	\$500,000 to \$999,999	143	0.3	3,559	0.9	10,661	0.9
	\$1,000,000 or more	23	0.0	619	0.1	2,215	0.2
	Median Housing Value	104,900		104,700		89,900	
Renter-Occupied Units		21,047		219,866		632,945	
	Median Rent (\$)	576		575		484	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

When compared to the metropolitan area, housing values are similar in Clay County to those in the metro area as a whole, but substantially higher than those in the state of Missouri. This can be primarily attributed to the newer stock of housing in Clay County. About 56% of the current housing stock in Clay County was built after 1970. In comparison, 50% of the housing stock in the state of Missouri is pre-1970s.

Occupancy rates in general, are also higher in Clay County, indicating a demand for housing in the region. **Table 2.11** identifies the housing tenure characteristics from the 2000 Census. Clay County had a relatively low percentage of vacant homeowner and rental housing units.

Table 2.11: Housing Tenure (Census 2000)

	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
Total housing units	76,230		740,884		2,442,017	
Occupied housing units	72,558	95.2%	694,468	93.7%	2,194,594	89.9%
Owner-occupied housing units	46,526	61.0%	418,003	56.4%	1,188,442	48.7%
Renter-occupied housing units	21,047	27.6%	219,866	29.7%	632,945	25.9%
Vacant housing units	3,672	4.8%	46,416	6.3%	247,423	10.1%
Homeowner vacancy rate (percent)	1.5		1.5		2.1	
Rental vacancy rate (percent)	7.4		7.8		9.0	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Education

Clay County residents as a whole have generally the same levels of education as the metropolitan area average. The percentage of high school graduates is higher than that of the metropolitan area, but the percent of residents with a Bachelor's degree or higher is lower.

Table 2.12 identifies education characteristics from the 2000 Census.

Table 2.12: Education Characteristics (Census 2000)

	Clay County		MSA		Missouri	
	Number	%	Number	%	Number	%
Less than 9th Grade	3,247	2.7	44,148	3.8	237,618	6.5
9th or 12th Grade	10,340	8.6	109,137	9.5	441,477	12.1
High School Graduate	38,610	32.0	328,047	28.4	1,189,670	32.7
Some College, No Degree	31,200	25.9	276,687	24	796,999	21.9
Associate Degree	7,056	5.9	67,249	5.8	184,666	5.1
Bachelor's Degree	21,041	17.5	218,722	18.9	507,892	14.0
Graduate/Prof. Degree	9,006	7.5	110,272	9.6	276,584	7.6
% High School Graduates or Higher	88.7		86.7		81.3	
% Bachelor's Degree or Higher	24.9		28.5		21.6	

Source: US Census Bureau

* MSA includes Johnson, Leavenworth, Miami, Wyandotte, Cass, Clay, Clinton, Jackson, Lafayette, Platte and Ray Counties

Chapter 3. Goals, Objectives, and Policies

INTRODUCTION

Using the valuable public input gained throughout the planning process, this chapter outlines “Goals”, “Objectives”, and “Policies” for implementing the Comprehensive Plan’s recommendations. “Action Strategies” for specific steps that need to be taken for implementation are identified in **Chapter 7, Implementation**. These Goals, Objectives, and Policies express how the County Planning and Zoning Commission and the County Commissioners intend to work with the citizens at large, local and regional stakeholders, and the development community in shaping the County’s growth over the next 15 years—and beyond.

The Goals and Policies should be used in the future land use and development decision-making process. The Clay County Planning and Zoning Commission should refer to the goals when formulating recommendations, such as when recommending a zoning map amendment. The goals are organized by the key topics of interest to the greater Clay County community, as expressed in the public workshops:

- **Environmental Management**
- **Land Use and Development**
- **Parks, Open Space, and Recreation**
- **Residential**
- **Commercial**
- **Industrial**
- **Public Facilities and Services**
- **Transportation**
- **Economic Development**

PLANNING PROCESS

Focus Session

The Clay County “Focus Session” was held December 19, 2006 at the County Courthouse. A Focus Session is a fast-paced, interactive workshop intended to help community stakeholders identify and prioritize critical planning issues facing Clay County both now and in the future. The session was open to the public and attended by approximately 35 individuals with diverse backgrounds, including several residents of the unincorporated areas of Clay County, city appointed and elected officials from municipalities in the County, landowners, developers, business and civic leaders, elected and



appointed county officials, and other community stakeholders. The meeting allowed participants to begin building consensus on the key community planning issues.

The process of **Issues Identification** used at the Focus Session was a structured idea-sharing process. Participants were paired-off and initially introduced themselves, sharing each other’s ideas and issues to the entire group. The opening lists of issues identified in the large group were then refined, clarified and prioritized in smaller “break-out” groups.

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The series of issues were organized and discussed in the context of the following categories:

- Quality of Life
- Economic Development
- Future Land Use and Growth

From broad perspectives, the break-out group members discussed and refined the critical issues facing the County. With the assistance of the consultant-facilitator team, participants voted and ranked the top five most important community issues.

Charrette

The Clay County "Planning Charrette" was held February 20, 2007 at the Clay County Midwest National Air Center. The session was open to the public and attended by more than 55 individuals with diverse backgrounds, including residents of the unincorporated areas of Clay County, city appointed and elected officials from municipalities in the County, landowners, developers, business and civic leaders, and elected and appointed county officials.

What is a Charrette? The Clay County Planning Charrette was conducted as a fast-paced, interactive workshop where small groups discussed the key planning issues identified during the December 2006 Focus Session and provided planning policy recommendations to address those issues. Charrette participants were asked to respond to various questions related to the planning issues, and to



recommend preferred solutions. Each group was provided with a workbook, an area map and aerial photo, markers and other tools to record their comments, preferences, and strategies to address the issues. The small groups specifically addressed issues for one of the three topic categories identified in the Focus Session:

- **Quality of Life,**
- **Economic Development, and**
- **Future Land Use and Growth**

Using their broad perspectives, the group members discussed and refined policy recommendations for the key issues facing the County. Some issues focused on unincorporated Clay County, such as land use regulation; other issues were countywide in importance, such as transit and major thoroughfares. With the assistance of the consultant-facilitator team, participants summarized their recommendations and the most important discussion points in their workbooks and on flip charts. At the end of the Charrette, a spokesperson for each small group presented the conclusions and recommendations to the entire group of participants. Those results are summarized in this document and will be used to support the future Comprehensive Plan update.

GOAL: ENVIRONMENTAL MANAGEMENT

Preserve prime agricultural lands, natural resources, and environmentally sensitive areas.

OBJECTIVE 1 (Environmental Management)

Protect the County's existing environmental assets and ensure future development in harmony with stream corridors and natural features.

POLICIES (Environmental Management)

- A. Implement buffers in new development to mitigate adverse environmental impacts on streams and associated natural resource areas.

- B. Use Conservation Districts to protect natural resources such as: stream corridors, floodplains, woodlands, steep slopes and other environmentally sensitive features.
- C. Preserve floodplains as greenway biodiversity conservation corridors for permanent open space, parks, and recreation.
- D. Limit agricultural (non-urban) development to appropriate low-density residential uses with a maximum density of one dwelling unit per 20 acres— unless the developer is willing to extend urban services.
- E. Locate residential, commercial or industrial land uses in areas where they are not likely to interfere with or become a nuisance to normal farming operations.

GOAL: LAND USE AND DEVELOPMENT

Provide the opportunity for urban, low density rural, and agricultural land uses.

OBJECTIVE 1 (Land Use and Development)

Encourage compatibility between agricultural uses and urbanizing areas.

POLICIES (Land Use and Development)

- A. Prohibit commercial or industrial land uses in rural areas if they are likely to interfere with or become a nuisance to normal farming operations.
- B. Prohibit the bulk storage of agricultural chemicals or petroleum products which are flammable or toxic adjacent to residential areas, and do not allow residential development adjacent to existing storage facilities.
- C. Locate uses such as commercial feedlots which create sustained periods of noise, dust and odor in areas away from the urban service tier or existing rural subdivisions.

OBJECTIVE 2 (Land Use and Development)

Minimize the loss of natural resources due to urbanization.

POLICIES (Land Use and Development)

- A. Locate new developments in areas which are free of environmental hazards or problems relating to soil, slope, bedrock and water table.
- B. Limit development in the 100-year floodplain to recreational uses and parks.
- C. Design and construct new development to retain the natural and visual character derived from topography, woodlands, streams, and riparian corridors.
- D. Implement practices in new developments that increase storm water infiltration and adequately treat storm water runoff from a site before discharge.

CHAPTER 3 GOALS, OBJECTIVES, AND POLICIES

- E. Implement lighting standards that prevent light pollution and reduce sky glow.
- F. Limit the location, number, and size of billboards along county roadways.
- G. Implement the land conservation methods in the Natural Resources Tier.

OBJECTIVE 3 (Land Use and Development)

Minimize initial and future public and private costs by managing the location and design of new developments.

POLICIES (Land Use and Development)

- A. Direct new urban development to areas in and around incorporated communities where municipal services and public facilities are present or may be provided in the near future, and require urban developments to connect to such services.
- B. Strongly encourage new urban development in the Urban Service Tier to annex into an adjoining city before development. If located in the unincorporated area, urban development should be consistent with the policies and development standards of the adjoining city.
- C. Locate new urban development so it is contiguous with existing unincorporated development and incorporated communities, thus limiting an inefficient "leap-frog" pattern of growth.
- D. Direct rural, low-density development to the Rural Low-Density Tier where services will be cost-effectively extended or planned at a later date.
- E. Require urban subdivisions to have direct access to a paved collector or arterial road.
- F. Require urban subdivisions to be within a public sewer district with plans for providing public sewer service; connected to a central sewer system provided by a municipality; implement a countywide sewer district plan.
- G. Use shared sewer systems whenever immediate access to a central sewer system is not available.
- H. If a package sewer plant is installed to serve development, design the system in a manner to allow a connection to a gravity central system in the future.
- I. Require all sewer lines to be at least eight inches in diameter, or a larger size if so designated by municipal service or sewer district utility plan.
- J. Promote subdivision and building designs that conserve water and implement low impact development design standards.

GOAL: PARKS, OPEN SPACE, AND RECREATION

Provide parks, open space, and recreation uses to preserve natural resources, and for the use and enjoyment by residents and visitors.

OBJECTIVE 1 (Parks, Open Space, and Recreation)

Promote and expand parks and recreation throughout the County.

POLICIES (Parks, Open Space, and Recreation)

- A. Expand the recreation and cultural offerings at Smithville Lake.
- B. Expand hiking, biking, and trail facilities in both the urban and rural areas of the County based on a coordinated park master plan strategy.
- C. Locate neighborhood green space and trails in subdivisions where easily accessible, rather than behind development or in locations isolated from the general public.
- D. Pursue alternative dedicated funding sources and joint ventures with municipalities and the State of Missouri.
- E. Amend the Park System Master Plan of 2003 to eliminate the “Greenway Conceptual Plan” which called for neighborhood parks and/or sports play fields in the streamways leading from Smithville Lake.

OBJECTIVE 2 (Parks, Open Space, and Recreation)

Implement the *Northland Trails Vision Plan*.

POLICIES (Parks, Open Space, and Recreation)

- A. Acquire land and easements for trails along streamways, and the conversion of former rail corridors—amending the current parks plan to eliminate the greenway park clusters.
- B. Pursue land and easement donation / dedications for trails and bike lanes, and secure land or easements from landowners and new developments.
- C. Develop trails and linear parkways that connect communities and historic areas—with a dedicated sales tax.
- D. Pursue bicycle and pedestrian facilities along and across the Missouri River.

GOAL: RESIDENTIAL

Encourage urban development to be located in urbanizing areas of the County.

OBJECTIVE (Residential)

Direct high density residential development to incorporated communities.

POLICIES (Residential)

- A. Allow flexibility in lot configuration, lot size, building setbacks, and other development standards if they preserve open space and natural resources.

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- B. Encourage urban development to be located within close proximity of incorporated areas and to meet the municipality's design standards.
- C. Allow manufactured home parks in properly zoned areas.

GOAL: COMMERCIAL

Provide sufficient opportunity for commercial development at appropriate locations.

OBJECTIVE 1 (Commercial)

Encourage the development of commercial establishments in urban areas.

POLICIES (Commercial)

- A. Direct the development of office and retail businesses to incorporated communities and the urban service tier.
- B. Allow farm service related nonresidential uses in rural and agricultural areas of the County.

OBJECTIVE 2 (Commercial)

Limit strip commercial development by directing commercial development to planned centers.

POLICIES (Commercial)

- A. Locate areas with large commercial land uses on major arterial roads.
- B. Implement development standards (i.e. design, setbacks, lighting, noise controls, etc.) for areas along major highways with high visibility, such as the US 69 Highway corridor to the County airport.
- C. Implement the US Highway 69 Corridor Urban Design Guidelines.

GOAL: INDUSTRIAL

Provide sufficient opportunities for industrial development at locations with suitable access and adequate municipal services.

OBJECTIVE (Industrial)

Locate industrial development to maximize efficient usage of the municipal services.

POLICIES (Industrial)

- A. Direct industrial uses to locate within existing municipalities, except for uses that are agricultural in nature or operations and which need to be in remote locations.
- B. Locate industrial sites in areas with access to arterial roads, preferably those leading directly to major highways.
- C. Locate industrial development in areas with adequate water and sewer services and police and fire protection.

- D. Locate industrial development so as to minimize the negative impact on the environment and less intensive uses.
- E. Separate and buffer industrial uses from surrounding non-industrial uses, and locate heavy industrial uses away from existing or projected residential growth areas.
- F. Locate and screen industrial uses such as salvage yards in a manner that minimizes the visual impact.
- G. Discourage residential uses in areas designated for future industrial uses, particularly in the vicinity of the County airport.

GOAL: PUBLIC FACILITIES AND SERVICES

To ensure residents are adequately supplied by municipal services or rural service districts.

OBJECTIVE 1 (Public Facilities and Services)

Encourage countywide coordination and cooperation regarding resources, supply, facilities and distribution of utility services.

POLICIES (Public Facilities and Services)

- A. Establish a countywide wastewater sewer district and limit the use of package plants in areas where sewer is not available.
- B. Encourage watershed protection and regional storm water management.

OBJECTIVE 2 (Public Facilities and Services)

Provide adequate governmental, institutional, educational, and civic facilities throughout the County.

POLICIES (Public Facilities and Services)

- A. Locate public facilities such as governmental offices to maximize their accessibility.
- B. Locate public facilities such as maintenance yards in industrial areas which contain similar types of users.
- C. Require public and civic uses, including schools and religious institutions, within close proximity of incorporated areas to meet city development standards.

OBJECTIVE 3 (Public Facilities and Services)

Pursue alternative revenue sources to reduce the County's reliance on sales taxes and to support public services and infrastructure needs.

POLICIES (Public Facilities and Services)

- A. Examine options for a dedicated property tax for roads, bridges, parks, and storm water.

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- B. Work jointly with MODOT to identify possible funding sources for roadway improvements.
- C. Examine options to implement user taxes, such as a lodging or entertainment tax.
- D. Examine the use of impact fees for major road improvements to compensate the public for the impact on the surrounding road system and the diminution of road capacities from new development.

GOAL: TRANSPORTATION

Provide easy, safe and efficient vehicular flow throughout the County.

OBJECTIVE 1 (Transportation)

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

POLICIES (Transportation)

- A. Require new development to construct paved streets to county highway department standards.
- B. Require new development to provide road right-of-way for the ultimate development of the area.
- C. Carefully control any direct access onto major thoroughfares by limiting the number of curb cuts, and by the use of frontage roads for adjacent commercial and residential land uses.
- D. Space curb cuts on major thoroughfare roads in such a manner so not to impede traffic. Prohibit residential curb cuts (driveways) onto arterial streets or highways.
- E. Evaluate and confirm the design capacities of the surrounding road system and the impact of new development before approving major new developments.
- F. Require new developments to fund infrastructure improvements, both on-site and off-site, that primarily serve property owners of that subdivision (i.e. deceleration lanes, drainage structures, etc.).

OBJECTIVE 2 (Transportation)

Minimize traffic congestion throughout the County through transportation system capacity enhancements.

POLICIES (Transportation)

- A. Coordinate future improvements with MODOT and the County's municipalities.
- B. Encourage MODOT to study and implement capacity improvements for I-35.
- C. Study and implement transit options for the entire I-35 corridor from North Kansas City to Kearney, such as express lanes and rapid transit.
- D. Study and preserve right-of-way for a corridor to provide an east-west major roadway connection between I-435 and I-35, generally in the vicinity of NE 120th Street to accommodate future development.
- E. Coordinate with municipalities to reserve right-of-way and expand the parkway and boulevard network.
- F. Provide accommodations for bicycles on major secondary roadways.

GOAL: ECONOMIC DEVELOPMENT

Provide support for new businesses and expansion / retention of existing businesses.

OBJECTIVE 1 (Economic Development)

Promote the Clay County Midwest National Air Center for long-term business and employment growth.

POLICIES (Economic Development)

- A. Coordinate with nearby municipalities to provide essential services that support urban growth around the Midwest National Air Center airport.
- B. Promote the development of airport compatible land uses including light-industrial and transportation-based industry, business park, offices, and residential uses.
- C. Provide a thoroughfare system that facilitates business development around the airport; and a highway corridor entrance that is attractive for visitors.

OBJECTIVE 2 (Economic Development)

Promote tourism and special activities to attract visitors to the County and create a unique sense of place.

POLICIES (Economic Development)

- A. Promote and fund a countywide tourism media effort.
- B. Promote tourism strategies, including special events and destinations unique to the County.

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Chapter 4. Future Land Use

INTRODUCTION

The consumption of rural land in a dispersed pattern of acreages by low-density residential development (on 2- to 3-acre lots, without connection to municipal* services) is detrimental to the long-term economic health of Clay County. This pattern of low-density residential development has the potential—if continued—to consume large sections of rural Clay County land early in the 21st Century. Problems resulting from this development pattern directly impact the long term future of Clay County, including the following concerns:

- Low-density residential development results in the loss of prime farmland, environmentally sensitive areas, and a rural appearance.
- Development that occurs without the benefit of a public sewer system creates an increasing burden on water quality and the natural environment. It also makes it economically unfeasible to establish regional or consolidated sewer districts, or to extend nearby municipal sewer services.
- Once property is split or subdivided and developed with low density suburban rural residential uses, such areas become pockets of land that obstruct the logical urban growth pattern for the County's cities.
- Due to their size and configuration, developed acreages typically are much more difficult to redevelop as more dense urban subdivisions and the acreages may be located in the most logical path for extension of public utilities.
- Conflicts tend to occur between residents of acreage properties and proposed urban development as the surrounding area becomes urbanized and the rural character of the area changes.
- It becomes more difficult to locate suitable large tracts of land for development of new employment and commercial uses.

DEVELOPMENT TRENDS

Residential building permits in 2007 totaled 50 single-family residences in unincorporated Clay County. (The County also issued another 62 permits for additions and related home improvements.) As a trend comparison, the residential building permits issued in unincorporated Clay County and countywide are listed on the following page. Long-term regional trends were stable through the 1990s and into the current decade as shown in **Table 4.1**.

[* The term "municipal" is used in this plan in its broadest, common usage. Therefore, it does not narrowly refer to a "city." Rather, it also is intended to mean civic or public, and broadly refers to community versus private infrastructure.]

Table 4.1 - Residential Building Permits in Clay County, 1990-2006

Year	Clay County - Unincorporated				Clay County - Total			
	Single-Family	Multi-family	Totals	Percent Change	Single-Family	Multi-family	Totals	Percent Change
1990	83		83		878		878	
1991	74	0	74	-10.8	943	23	966	10.0
1992	129	0	129	74.3	1,188	45	1,233	27.6
1993	119	0	119	-7.8	1,118	57	1,175	-4.7
1994	146	0	146	22.7	1,290	142	1,432	21.9
1995	139	0	139	-4.8	1,384	179	1,563	9.1
1996	160	0	160	15.1	1,525	466	1,991	27.4
1997	147	0	147	-8.1	1,389	527	1,916	-3.8
1998	160	0	160	8.8	1,391	591	1,982	3.4
1999	138	0	138	-13.8	1,519	430	1,949	-1.7
2000	132	0	132	-4.3	1,284	125	1,409	-27.7
2001	110	0	111	-15.9	1,253	252	1,502	6.6
2002	129	0	129	16.2	1,664	611	2,275	51.5
2003	114	0	114	-11.6	2,055	530	2,585	13.6
2004	116	0	116	1.8	2,024	632	2,656	2.7
2005	72	0	72	-37.9	1,682	468	2,150	-19.1
2006	91	0	91	26.4	1,578	824	2,402	11.7
Total	2,059	0	2,060		24,165	5,902	30,064	

Source: Home Builders Association of Greater Kansas City/BWR

COMMUNITY OPINION SURVEY

A random sample, statistically valid survey of Clay County residents was conducted in summer 2007 of the Clay County community (**Ref. Appendix B**). The *Comprehensive Plan Community Opinion Survey* showed support for addressing the rural development concerns listed above; and for the public workshop issues (**Ref. Appendix A**). More than 400 surveys came back of the 1,500 residents in the rural and urban areas of Clay County (excluding the City of Kansas City portions) who were randomly selected: a strong response to assure high levels of confidence at the 95th percentile. The survey requested the community's input on transportation and land use in unincorporated Clay County. One in four respondents identified themselves as rural residents, on farms or in rural subdivisions or homes. A large majority of those who responded—87 percent—were homeowners.

A highlight of the survey results shows that more than the majority of the 400 respondents said they were either somewhat or very supportive of rural land preservation. Environmental concern ranked high, with 88 percent saying that water quality and floodplains should be protected—the highest response among planning and land use issues. Preservation of open space (80 percent) and promoting growth that encourages wise land use (77 percent) ranked high, as well.

Most respondents (73 percent) want to see standards adopted for commercial/industrial development; and most agreed that new development should be encouraged to locate where growth can be served cost-effectively. Urban development can spread into rural areas if orderly growth is assured: if development pays its way, including streets and other infrastructure (46 percent) and/or rural roads are upgraded (12 percent). But 29 percent said it is not acceptable for urban development to extend into rural areas. Funding for major

road corridors was seen as important by 73 percent. The public wants the County to plan and manage growth—and the comprehensive plan update is a step in that direction. They see Clay County as a good/excellent place to live (84 percent), to raise children (82 percent) and as having a high quality of life (79 percent).

Public safety services rated highest, with 74 percent of respondents satisfied/very satisfied; followed by quality of recreation programs and facilities (67 percent); and quality of public health services (60 percent). The lowest rated services of the County, in terms of overall satisfaction, were in management of traffic flow and congestion, with only 34 percent of respondents satisfied/very satisfied; followed by maintenance of county roads and streets (only 34 percent); and attracting business and industry to the County (39 percent).

As for future focus, quality schools, more employment opportunities, and affordable housing were seen as important for future countywide efforts. See **Appendix B** for the full summary of the survey results. ETC Institute, a national leader in the field of community satisfaction research for governmental organizations, conducted the survey by mail and phone, to a random sample of households in the County outside the corporate limits of the City of Kansas City. The results of the survey aided the project consultant team—led by BWR, Kansas City, Missouri—in understanding the importance of various issues as they help guide the Clay County Plan update.

LAND USE TIER POLICY

The Comprehensive Plan emphasizes a three level land use tier strategy to protect the future environmental and economic health of Clay County. The tier concept is important to conserve agricultural uses, open space, rural lands, as well as future development opportunities. Directing growth to urban growth areas reduces overall public services and road maintenance responsibilities, thus reducing the distribution of residential properties and the extent of the roadway network that would otherwise be necessary to serve a spread-out, low density development pattern (**Ref. Table 4.2**).

The basic principle of the land use tier system is to plan for, and approve, urban density development in areas near cities expected to become urban and directing low density development (acreages and large lot subdivisions) to areas not easily provided with municipal sewer services. The development tiers are based on the following:

- proximity to an incorporated municipality,
- location within a major watershed served by/planned for service by municipal wastewater systems, and
- location within an identified municipal Annexation Intent Area.

As new development and infrastructure are built, tier boundaries should be reevaluated so that these improvements are taken into consideration. Also, the County's Land Development Code and other development standards should reflect this development strategy.

Land use planning tiers are identified on the **Planning Tier Map** and described in **Table 4.2**.

Table 4.2 - Land Use Planning Tiers – Presented on the Planning Tier Map

	Natural Resources Tier * (Yellow)	Rural Low-Density Tier * (Green)	Urban Services Tier * (Salmon)
Intent	Support continued agricultural uses in areas beyond near- and long-term urban service extensions.	To accommodate low density rural uses in areas located beyond anticipated city annexation areas.	To promote urban development compatible with the long range growth plans of adjoining cities.
Primary Uses	Agricultural-related uses, natural resources	Agricultural crop lands, livestock grazing, woodlands, grasslands, rural residences	Urban density residential and non-residential
Residential Uses	Rural Density: 1 dwelling unit per 20+ acres.	Rural Density; Rural Residential Density: low-density rural residential development: 1-dwelling unit per 20+ acres, or 1-farmstead dwelling on 5+ acres; Suburban Density: moderate-density development on municipal-level services: up to 4- units per acre.	Suburban Density: moderate-density development on municipal-level services: up to 4-units per acre. Urban Density: development on municipal-level services: greater than 4-units per acre. 20-acre minimum for agricultural and rural residential uses until such time as urban development occurs.
Non-Residential Uses	Farm service related, recreation	Farm service related, recreation	Recreation, limited commercial and industrial consistent with the long range growth plans of adjoining cities.
Minimum Sanitary Sewer Provisions	On-site septic, Community Wastewater Facility if indicated by LESA guidance.	On-site septic, Community Wastewater Facility if indicated by LESA guidance.	Municipal Wastewater Treatment Plant connection for Suburban Density or greater. ⁽¹⁾
Zoning Districts	Ag-related zoning districts; Open Space & Parks; non-agricultural zoning if on strict standards (not including Res. Low Density, such as on 3-acre lots).	Ag-related zoning districts; Open Space & Parks; non-agricultural zoning if on strict standards (not including Res. Low Density such as on 3-acre lots).	Open Space & Parks; and residential districts through general industrial (not including Res. Low Density such as on 3-acre lots). AG, Agricultural zoning is appropriate until full range of urban services available.

⁽¹⁾ On-site septic allowed for agricultural uses only.

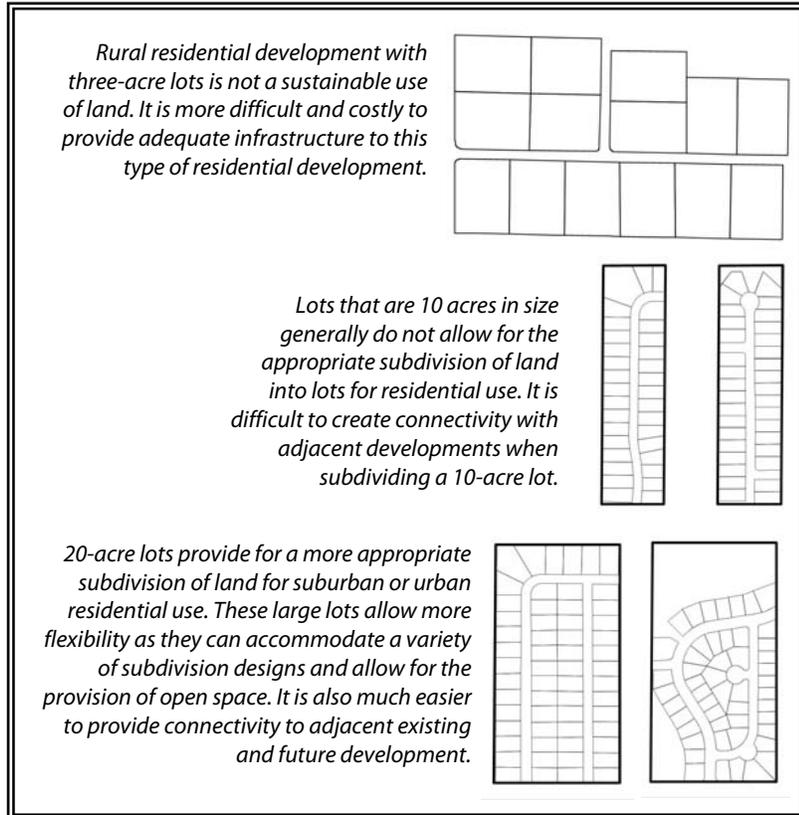
* The **Planning Tier Map** notes a special designation of areas within one mile of each city: “1-Mile Urban Coordination Sub-Tier” where advise-and-consent should be solicited from the designated city. The applicant will be required to submit a letter from the city of jurisdiction concerning the proposal. The Clay County Planning and Zoning Commission may consider the letter as a non binding city recommendation for Clay County to consider in their deliberations.

Natural Resources Tier

The Natural Resources Tier generally consists of areas principally in use for agricultural production and may be used for farming, crops, pasture, agribusiness ventures such as growing and marketing of products, and a limited number of rural residences. This tier is located outside of one of the Urban Service Tiers. Such areas are intended to remain generally undeveloped unless logical expansion of the urban area occurs inside one of the Urban Service Tiers.

Land Uses: Appropriate land uses include agricultural crop lands, livestock grazing lands, woodlands, grasslands, and rural residences in Ag-zoning Districts limited to 1-dwelling unit per 20+ acres and larger; while more dense development may be allowed only as a Conservation District.

Zoning: Appropriate zoning classifications for these rural areas in sub-basins that flow to the Missouri River and to Smithville Lake are AG, Agriculture. Other residential and non-residential zoning districts would be allowed after reference to adopted standards, such as LESA (Ref. **Appendix C**). This tier is expected to remain zoned AG, Agriculture until such time as urban development can be served by municipal or community utility systems.



Development Standards—Natural Resources Tier

Roads: Asphalt, chip and seal (existing road facilities only).

Stormwater: Implement standards for the protection of natural streams as a conveyance for stormwater. Unless otherwise provided for by City, State, or Federal ordinance, regulation, or standards, existing natural streams should be preserved and protected in accordance with the standards adopted by the County.

Waste Water Systems: Individual on-site septic systems should not be allowed if municipal sewer service is available to be extended, except for agricultural uses or non-residential uses otherwise in Planning with development standards. Individual sewage disposal systems should be allowed subject to the following:

- The system should be installed and maintained in accordance with the manufacturer's recommendations and any applicable County and State standards;
- The system should not release any effluent beyond the property boundaries, except where the effluent is being transported to an off-site treatment facility meeting County and State standards; and

- The County Health Department has the authority to periodically investigate and inspect each system.

Water Services: Private water wells should be permitted if adequate supply is obtainable and Health standards are met. However public water services including rural water districts should be used when available. Property owners should connect to a public water supply when one becomes available.

Rural Low-Density Tier

The Rural Low-Density Tier generally consists of areas located where there are no immediate or near-term urban services. Typically the areas are beyond one mile of an existing city in unincorporated Clay County, and beyond one mile from a major drainage way having existing or planned sanitary sewer service. These areas may be appropriate for large-lot subdivisions served by permitted septic systems and other low density residential development depending on environmental considerations.

Land Uses: Appropriate land uses include agricultural, woodlands, grasslands, and agricultural lands, and rural residences with an average density more than 20-acres per dwelling unit in Ag-zoning Districts, and 1-acre per dwelling or denser when served with municipal-level services; while less dense development may be allowed only as a Conservation District. Large scale commercial and industrial or employment uses may be appropriate adjacent at the intersections of state highways or inside cities.

Zoning: AG, Agriculture, or classifications that allow urban-density development if it is served with municipal infrastructure, or if it is annexed to a city. Other residential and non-residential zoning districts would be allowed if indicated by reference to LESA suggested ratings (**Ref. Appendix C**). This tier is expected to transition to urban service tier uses as urban development can be served by municipal systems.

Development Standards—Rural Low-Density Tier

Roads: Hard surfaced paved roads on-site within subdivisions.

Stormwater: Implement standards for the protection of natural streams as a conveyance for stormwater. Unless otherwise provided for by City, State, or Federal ordinance, regulation, or standards, existing natural streams should be preserved and protected in accordance with the standards adopted by the County.

Waste Water Systems: Individual on-site septic systems should not be allowed if municipal sewer service is available to be extended, except for agricultural uses or non-residential uses otherwise in Planning with development standards. Individual sewage disposal systems should be allowed in Rural Low-Density Tier subject to the following:

- The system should follow LESA guidance suggestions when scored for municipal services.
 - The system should be installed and maintained in accordance with the manufacturer's recommendations and any applicable County and State standards;
 - The system should not release any effluent beyond the property boundaries, except where the effluent is being transported to an off-site treatment facility meeting County and State standards, or except where such effluent should have first traversed the majority of the subject site;
 - The County Health Department has the authority to periodically investigate and inspect each system; and
-

- Individual on-site septic systems should not be allowed in sub-drainage basins where municipal services are provided, already planned for, or may be cost-effectively extended in the near-term period of this Plan.

Water Services: Water supply to rural / low density areas should be provided by a public water supply district.

Urban Services Tier

The Urban Services Tier is generally areas located in sub-basins that can have gravity flow sewer to existing or future wastewater treatment plants. The tier indicates land within about one mile of a city boundary, which is the area where advice and consent of the city is sought as input to the County’s regulatory decision. The areas close-in to cities with ready access to municipal or regional sewer district with a full range of urban services available should be reserved for urban development, irrespective of time frames. The areas along Highway 92 east and west and east of Kearney are also classified under this tier. Land proposed for urban development—in the higher-density residential districts, and the non-residential districts—should be served by appropriate facilities and services which are adequate to support this more intense, non-agricultural development. The intent is that land should not be approved for development unless and until adequate appropriate facilities exist or provision has been made for the following facilities, for example:

- water service,
- wastewater treatment and disposal,
- storm water management,
- electrical service,
- telecommunications service,
- public safety, and
- major thoroughfare public roads.



Citizens of Clay County met with the Planning and Zoning Commission, county staff and planning consultants for the County to consider land use policy alternatives, as a follow up to the public workshops—the Focus Session on critical issues, and the Charrette on planning policies.

Land Uses: Appropriate land uses include agriculture, non-residential if in compliance with zoning and site development conditions, and residential subdivisions with an average density not less than:

- Suburban Density: moderate-density development on municipal-level services: up to 4-units per acre if served with urban infrastructure, or annexed; and
- 20-acre minimum lot sizes for rural residential uses until such time as urban development occurs.

Zoning: Appropriate zoning classifications for areas with a full range of urban services available are those classifications providing urban-density development if served with urban

infrastructure, or annexed. This tier is expected to remain zoned AG, Agriculture until such time as

urban development is appropriate. R-1, Residential Rural District should not be considered appropriate for the Urban Services Tier until amended to require 20-acre minimum lot sizes for rural residential uses; and all other residential and non-residential zoning districts would be allowed if in Planning with development standards.

Development Standards—Urban Services Tier

Roads: Paved hard surfaced roads for urban subdivisions and non-residential development.

Stormwater: Implement standards for the protection of natural streams as a conveyance for stormwater. Unless otherwise provided for by City, State, or Federal ordinance, regulation, or standards, existing natural streams should be preserved and protected in accordance with the standards adopted by the County.

Waste Water Treatment: Development on property less than 20-acres in size should be on municipal-level sewer systems or other appropriate system. Individual on-site septic systems should not be allowed if municipal sewer service is available to be extended, except for agricultural uses or non-residential uses otherwise in Planning with development standards.

Water Services: Water supply in the Urban Services Development Tier should be provided by public systems. Improvements to the public water supply systems should conform to the standards used by the surrounding urban areas to ensure adequate fire protection and to minimize expensive system upgrades as more intense urban development occurs. The standards should apply to system sizing, materials, and engineering standards. Development on property less than 20-acres in size should be subject to the following:

- All transmission lines should be at least six inches in diameter and may be required to be larger if so designated by a distribution plan created by the district;
- All water lines within a subdivision should be constructed of materials meeting Missouri Division of Natural Resources (MoDNR) standards, and if located within an identified annexation area that standards should meet the minimum standards of the local municipality;
- The water supply system should be capable of delivering at least 350 gallons per minute for one hour for state fire code compliance.
- Provide at least one fire hydrant per 500 feet of transmission line along public streets service the property being developed.

1-Mile Urban Coordination Sub-Tier

In the “1-Mile Urban Coordination Sub-Tier” advise-and-consent should be solicited from the designated city. The applicant will be required to submit a letter from the city of jurisdiction concerning the proposal. The Clay County Planning and Zoning Commission may consider the letter as a non binding city recommendation for Clay County to consider in their deliberations.

Urban Services Transition Sub-Tier

The Natural Resources Tier includes an “Urban Services Transition Sub-Tier” area along M-92 and C-Highways that extends where urban development is influenced by the urban highway; yet remains within the Natural Resources Tier designation for purposes of enhanced environmental review and scrutiny.

Special Districts

Two Special Districts are identified: the historic collection of homes and stores called “Paradise,” and the Midwest National Air Center.

Paradise:

The town of Paradise/Gosneyville is located on the north and east sides of Smithville Lake Park and on the southwest corner of “W” Highway and Collins Road. This historic cluster of homes and stores—an unincorporated place—is less than 160 acres of land area, and was never established as an incorporated city. In 1884, the first “Gosneyville” post office was established and the mail was brought by wagon or horseback from Smithville. Around this time the name of the town was changed to Paradise.

Lots in Paradise range in size from 60 feet by 120 feet, to parcels larger than six acres. Most of these lots, if platted today, would be required to hook up to a sewer treatment plant. A common sewer district—a subdistrict, ideally, of a regional or countywide district—would be a workable response to failing septic systems in the area. With a common sewer district, the County would be able to identify grant opportunities and use bonds to generate revenue for projects in areas such as this. Subdistricts could be formed where individual homeowners could vote on whether to finance the sewer improvements.

Midwest National Air Center: The Midwest National Air Center (MNAC) serves as a growing center for air commerce in metropolitan Kansas City and surrounding areas by fulfilling local and transient corporate and general aviation needs. As such, the MNAC warrants a zoning overlay district as it has unique opportunities and needs not found elsewhere in the County (**Ref. Chapter 6**). The County has adopted a zoning overlay district for the area and should update the district over time.

The adopted County Overlay District aims to protect the public’s health, safety, and welfare through avoiding the establishment of airport hazards, lessening or preventing noise impacts affecting the public, and promoting a pattern of future land uses that encourages compatibility between the airport and its environs. The overlay district is largely focused on bulk regulations, and is intended to regulate and restrict the height of structures and objects of natural growth, as well as the use of property in the vicinity of the MNAC.

Options for Plan Implementation

To implement the Clay County Comprehensive Plan Update 2008 and its new Land Use Tier System, the County should adopt certain amendments to the Land Development Code that reflect new policies and procedures—now and in the next five years of transition from the old policies. The plan presents two options:

- A. Implement the plan as is, with no transition or phasing options, or
- B. Implement the plan through “Transition Policy Procedures” as outlined in **Table 4.3** below.

Option B is submitted in recognition that a comprehensive plan is an advisory policy guide for the County to use in administration of the Land Development Code (LDC), both its ongoing enforcement, and its routine amendment through periodic updates. The Planning and Zoning Commission may choose to recommend sequencing of new policies so that the implementation of the plan is accepted over time. In addition to immediate amendments of certain policies and procedures, the County should review the plan periodically in a public hearing—for official comment from the public—in a formal update of the plan to assure the proper phasing of the new policies. To do this, the Planning and Zoning Commission should take several steps:

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FUTURE LAND USE

- Inform countywide constituents on a regular basis of changes and developments regarding the new Plan, using technology to support the dissemination of information such as a new county interactive Web site;
- Coordinate relevant municipal, county and state agencies in reviewing and updating the Plan as it holds its periodic public hearing for comment, and formal update; and
- Apply the policies and principles of the plan through a collaborative process of review, discussion and resolution/recommendation.

Acknowledging that these principles may at times need to be applied with flexibility, such resolutions should maintain the integrity of historic development while implementing new regulations.

Table 4.3 – Option B for Land Use Tier Implementation: Transition Policy Procedures			
	Natural Resources Tier* (Yellow)	Rural Low-Density Tier (Green)	Urban Services Tier (Salmon)
Intent	Exceptions from 20-acre minimum lot size in Ag-districts / phasing in of new regulations		
Density Exceptions for Legal Lots of Record as of the date of Revision of the Land Development Code	Subdivision of land to 5+acre lots, provided that 50% of the subdivided parcel is preserved, such as in an agriculture deed restriction.		Subdivision of land to 10+acre lots, provided that a “shadow plat” at urban density is approved, and—for plats within one mile of a city—the city’s issues have been addressed.
		Or, subdivision of land to 10+acre lots, provided that a “shadow plat” at urban density is approved.	
Other Exceptions	Farmstead** dwellings allowed on 5+ acre parcels.		City within one mile may review and recommend other exceptions granted in other tiers, provided a “shadow plat” at urban density is approved.

* The Natural Resources Tier includes an “**Urban Services Transition Sub-Tier**” area along M-92 and C-Highways that extends where urban development is influenced by the urban highway; yet remains within the Natural Resources Tier designation for purposes of enhanced environmental review and scrutiny.

** A “Farmstead Dwelling” is the original residence built and initially occupied by a farm family, regardless of whether the current household occupant is associated with farming.

HIGHWAY CORRIDOR OVERLAY DISTRICT GUIDELINES

U.S. Highway 69 leading to the Midwest National Air Center and M-92 Highway traversing east-west across Clay County are highly visible and highly traveled routes through Clay County. A special overlay district for these areas is intended to heighten both the drive experience and safety of the routes, and is indicated on the **Land Use Tier Map**. The Corridor Overlay District Guidelines should also be applied to the I-35 corridor in development matters pertaining to landscaping, buffering and screening, lighting, and land use.

Setback and Drive Experience

The placement of buildings, parking lots, and paved areas along the U.S. Highway 69 / M-92 Highway corridors are expected to maintain the sense of openness with a wide landscape area.

- Establish large setbacks from highway rights-of-way for buildings, parking lots and paved areas, or residential subdivision fencing.
- Establish low maximum building heights for non-residential development to reduce its visual impact on the corridor landscape.
- Require landscape buffers to screen building utility meters, loading docks, or other back-of-building features that face a public right-of-way.
- Encourage clustering of development to concentrate and limit vehicular access to and from U.S. Highway 69 / M-92 Highway to planned major intersections.
- Establish large lot standards for residential development such that housing developments with higher densities are channeled from low intensity transects into the urban areas of the corridor.
- Use berms and/or landscape buffers to reduce views of “big box” or clustered retail development allowed in low intensity transects through the establishment of special districts.

Buffers and Screening

- Perimeter landscaping should consist of a wide variety of plantings. Open green space plantings should be used in more rural areas of the corridor.
- Open space perimeter landscaping should consist of native grass and wildflowers and should not exceed 24-inches in height.
- All perimeter landscaping should be low maintenance, unless installed as part of a residential subdivision.
- Perimeter landscape buffers for residential subdivisions should include berming and consist of a large quantity and variety of plants to provide screening and a buffer from highway noise and located in a manner to allow access for regional trails where designated.
- Permitted outdoor storage areas should be entirely screened from public view along the highway and all public streets by the use of dense landscaping. Solid walls or fencing should be softened with extensive landscaping plantings between the wall / fence and the right-of-way.

Lighting

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Lighting in low intensity transects of the Highway 69 Corridor will generally be limited to the highway and local roadways. However, for uses requiring site illumination, such lighting should be provided in a manner that meets functional and security needs without adversely impacting adjacent properties or creating glare. Dark sky compliant fixtures (focuses light onto roadway or simply down onto paved parking and buildings, rather than in scatter-horizontal patterns) should be used whenever possible for each category to reduce light pollution and to maintain the rural character of the corridor at night.

Roadway Lighting

- Street lighting should not be located in the median of the highway or other streets unless absolutely necessary.
- Existing cobra head lighting, where provided, should be maintained.

Parking Lot Lighting

- Provide parking lot illumination with individual poles and fixtures, rather than building mounted fixtures.
- Illumination of parking lots for nonresidential uses near residential should be limited to individual poles and fixtures not to exceed fifteen (15) feet in height as measured from grade.
- Where possible, parking lot lighting should have an ornamental look and should be dark sky compliant. Thematic lighting should be used where appropriate.

Building Lighting

- Building mounted light fixtures should be ornamental in appearance and compliment the architectural theme or style.
- Building lighting should be focused downward when highlighting architectural features for visual interest or safety. This should be accomplished with lighting that contains shields or reflectors that do not permit light to escape to the sides toward adjacent buildings, parking areas or roadways.

Land Use

Commercial and Industrial development in the U.S. Highway 69 / M-92 Highway corridors should maintain a well landscaped appearance and be compatible in design and appearance with a rural area by achieving the following guidelines:

Commercial:

- Limit individual building height to one story and define a maximum height.
 - Incorporate design themes for clustered development which fit the historic architecture of the area and complement the natural environment.
 - Design building facades using a combination of exterior materials (in addition to glazing), preferably common to the surrounding area, to create visual interest.
 - Incorporate glazing on sides of buildings which face a public right-of-way.
 - Screen rooftop equipment and building utilities from public view.
 - Provide landscaping between buildings and public rights-of-way.
-

Industrial:

- Provide an “office” appearance along public right-of-way for industrial uses.
- Provide architectural embellishment and details.
- Present a clean/neat appearance.
- Design and locate the building to screen parking areas, storage areas, loading areas, and other similar uses from view along public right-of-way.
- Provide landscaping between the building and the rights-of-way.

ACCESS MANAGEMENT

Access management principals should be applied to the arterial roads in Clay County not controlled by the state. MoDOT decides access onto US Highway 69, for example. Where the state does not control, Clay County should protect major road corridors, bringing such roadways into compliance with access management policies and standards. The policies can be applied when land along existing roadways redevelops. This practice can keep the situation from further deteriorating.

The Transportation Research Board’s Access Management Manual identifies 10 Principles for Access Management to limit and consolidate access points along major roadways, while promoting a supporting street system and unified access and circulation systems for development (**Table 4.4**). The result is a roadway that functions safely and efficiently for its useful life, and a more attractive corridor. The goals of access management are accomplished by applying these 10 principles.

Table 4.4: Access Management Principles

10 Principles for Access Management

① Provide a Specialized Roadway System

It is important to design and manage roadways according to the primary function that they are expected to serve.

② Limit Direct Access to Major Roadways

Roadways that serve higher volumes of regional through traffic need more access control to preserve their traffic function.

③ Promote Intersection Hierarchy

An efficient transportation network provides appropriate transitions from one classification of roadway to another.

④ Locate Signals to Favor Through Movements

Long, uniform spacing of intersections and signals on major roadways enhances the ability to coordinate signals and ensure continuous movement of traffic at the desired speed.

⑤ Preserve the Functional Area of Intersections and Interchanges

The functional area is where motorists are responding to the intersection (i.e., decelerating, maneuvering into the appropriate lane to stop or complete a turn).

⑥ Limit the Number of Conflict Points

Drivers make more mistakes and are more likely to have collisions when they are presented with the complex driving situations created by numerous conflicts. Traffic conflicts occur when the paths of vehicles intersect and may involve merging, diverging, stopping, weaving, or crossing movements.

⑦ Separate Conflict Areas

Drivers need sufficient time to address one potential set of conflicts before facing another.

⑧ Remove Turning Vehicles from Through Traffic Lanes

Turning lanes allow drivers to decelerate gradually out of the through lane and wait in a protected area for an opportunity to complete a turn, thereby reducing the severity and duration of a conflict between turning vehicles and through traffic.

⑨ Use Non traversable Medians to Manage Turn Movements

Non traversable medians minimize left turns or reduce driver workload and can be especially effective in improving highway safety.

⑩ Provide a Supporting Street and Circulation System

A supporting network of local and collector streets to accommodate development, and unify property access and circulation systems. Interconnected streets provide alternate routes for bicyclists, pedestrians, and drivers.

Table 4.5 outlines the U.S. Highway 69 / M-92 Highway Corridor Access Management Standards for development and redevelopment along intersecting local roads, including standards for street intersection spacing, traffic signal spacing, number of full access points and right-turn only access points, turn lanes, and traffic studies.

Table 4.5: Major Road Corridor Access Management Standards

Standard	Description
All Areas: A traffic impact analysis should be performed by a qualified traffic engineer for each requested access to principal arterial roads.	The purpose of the traffic impact analysis is to identify potential safety and mobility impacts resulting from the new access.
All Areas: Allow new access onto principal and minor arterials only for public streets.	Public streets can provide access for multiple property owners, whereas private access benefits only one property owner.
All Areas: Allow only those streets designated as collector streets or minor collector streets with connections to all adjacent properties to access principal and minor arterials.	This standard ensures that streets with access to the arterials will provide access to multiple developments.
All Areas: Proposed plats of all properties within an arterial road corridor should provide street connections to all adjacent properties, and provide collector streets as designated by the <i>Clay County Major Roads Map</i> .	This ensures collector and minor collector streets are able to provide access to properties that would otherwise be deprived of access onto principal and minor arterials.
All Areas: The first access onto street intersecting principal and minor arterials should be setback a distance no less than 600 feet from the edge of the major road pavement. A greater setback distance may be required by a traffic impact analysis.	This distance is sufficient in most cases for traffic entering the intersecting street from an adjacent development to be outside the functional area of the intersection. The functional area is the area near an intersection that includes the space needed for decelerating, accelerating, and queuing.
All Areas: Provide right-turn and left-turn auxiliary lanes off the principal arterial, and right-turn and left-turn auxiliary lanes onto the principal arterial for all new intersections with principal arterials. Auxiliary lanes should not be less than 150 feet in length, plus tapers. A greater turn bay length may be required by a traffic impact analysis.	The auxiliary lanes will provide a refuge for turning vehicles out of the path of through traffic on the arterials, and will allow right-turn traffic to enter the arterials unimpeded by queued left turn and through vehicles waiting to cross or turn onto the arterials.

FARMLAND AND AGRICULTURAL PRODUCTION

Prime farmland, as defined by the U.S. Department of Agriculture, is “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.” The UDSA recommends the wise use of these lands, as urban and industrial uses apply pressure on marginal lands, which are less productive. Other productive soils, termed “farmland of statewide importance,” include soils that “nearly meet the standards for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.”

Prime farmland soils can be found throughout Clay County, especially in floodplains such as along the Missouri River and the Fishing River. The reach of the farmland of statewide importance is even more extensive, covering the vast majority of the undeveloped land in the County. The high productivity of these soils should be considered when planning for future development (**Ref. Chapter 7**).

LAND EVALUATION AND SITE ASSESSMENT (LESA) SYSTEM

Developing counties are constantly faced with the pressure to allow non-agricultural development at the urban fringes and in rural areas. Without predetermined factors to be considered, the decision to approve or disapprove proposed development of this nature is arbitrary. The decision making process often is reduced

to weighing the individual desires of the land owner against public “outcry” at public meetings, instead of consideration of relevant development factors.

LESA for Clay County

A Land Evaluation and Site Assessment (LESA) System provides a rational process for assisting Clay County elected and appointed officials in making farmland conversion decisions (**Ref. Appendix C**). The system allows local officials to quantify the impacts of land use change through a “scoring” system. In other words, the LESA system is a way of quantifying both objective and subjective factors in order to make an informed determination in zoning, site planning and similar land use proposals for converting farmland to non-agricultural uses.

To determine the value of the land, the system uses two (2) separate but related calculations:

- Land Evaluation (LE) - an evaluation of soil properties and their relative desirability for agricultural use; and
- Site Assessment (SA) - an assessment of other factors relating to the site that should be considered before farmland is converted to other uses.

It will be the determination of the County planning director whether to apply the USDA rating system to a project (**Ref. Appendix C**). In any case, the County’s policy will be to use the LESA evaluation system as an administrative guide, not as a required numerical score that triggers development approval or disapproval.

Land Evaluation

Soils within any given area of Clay County can vary drastically from site to site. These differences in soil conditions should be carefully considered when determining whether land should be retained in agricultural uses or converted to non-agricultural uses. For this reason, the system’s land evaluation calculation is designed to provide an average site value based on soil compatibility for farming.

As part of the calculations, soils are grouped into land compatibility classes by using a soil capability class, productivity index and a prime or important farmland designation. Each soil group is assigned a relative value by dividing the highest productivity index of the groups found in the study area into the productivity index for each soil group. Using these given factors for each evaluation, sites can be scored by determining an average site value percentage. Percentage values above 50 percent indicate that the site is a prime location for agricultural retention. Percentage values less than 50 percent indicate that the site is suitable for non-agricultural related uses.

Site Assessment

Agricultural economic viability of a site cannot be measured in isolation from existing and impending land use needs of the overall study area. The Site Assessment process provides a calculation for identifying important factors other than soils that affect the economic viability of a site for agricultural uses.

The LESA System’s Site Assessment calculates multiple factors when a change to another land use is proposed in the regulatory jurisdiction of Clay County—all of the unincorporated portions of the County. Site Assessment factors are grouped into the following three major areas of consideration:

- 1. Location and Land Use Considerations.** These factors can include:
 - Land area in an Agricultural Use within one mile of the site;
 - Percentage of land in Agricultural Use adjacent to the site; and
 - Size of the site to be converted.
-

2. Public Policy Considerations. These factors can include:

- Land area zoned for agricultural uses within one mile of the site;
- Land area zoned for agricultural use adjacent to the site;
- Availability of development clusters at the site – to preserve land and open space;
- Environmental considerations (flood hazards, wetlands, aquifer recharge area, wild life habitat and unique community values);
- Creation of open space; and
- Protection of vistas in view sheds and view corridors.

3. Public Service and Community Facility Considerations. These factors can include:

- Access to adequate transportation;
- Availability of the public sanitary sewer system;
- Availability of a public water system
- Public protection classification (Fire Issuance Rating);
- Proximity of elementary and secondary schools/ capacity – current and planned;
- Cost/benefit of non-residential development; and
- Positive environmental effects of development.

Based on current land use data, land use regulations, site inspection and other pertinent information, a point value is determined by analyzing each site assessment factor and selecting a number value that best reflects the quality of the property in question. The higher the point value the more valuable the land is in an agricultural or farmland use.

Site Assessment—Example for Clay County: Availability of Public Sanitary Sewer

For example, a site in close proximity to a municipal (public) sanitary sewer system with sufficient capacity encourages growth and reduces the long-term viability of a site for agriculture. For this reason, the further the distance between the site and the sewer system the higher the points awarded. This factor might be calculated as follows:

Availability of a public sanitary sewer system

Sewer system not available	20 points	_____
Sewer system more than 1500 feet from site	16 points	_____
Sewer system between 750 and 1500 feet from site	12 points	_____
Sewer system less than 750 feet from site	6 points	_____
Sewer system available at site	0 points	_____

The lower the point total, the more appropriate it is for urban development. The higher the point total, the higher it rates for farmland preservation. By allowing values to be assigned to development factors the LESA System calculations for Land Evaluation and Site Assessment helps Clay County staff and officials determine:

- whether the conversion of land to non-agricultural uses is appropriate, and
- whether the proposed development is “ripe” for approval from a land use and fiscal policy perspective.

As a result, many negative aspects of premature development can be minimized, such as premature extension of utilities and infrastructure, development conflicts and loss of valuable agricultural resources. In this example above re sanitary sewer, if the sewer system was not yet extended to the site, and the developer was willing to pay for that extension, then the application would be given 0 points.

Appendix C presents the full LESA system to be implemented by Clay County as development proposals are considered during land use regulatory review.

Are agricultural easement programs working? Among advocates of farmland protection efforts, agricultural easements are now regarded as the most promising tool for dealing with urban conversion trends. Largely because of their non-regulatory and landowner compensation features, easements just in the past quarter of a century have become a widely popular technique for the express purpose of protecting farmland—and it is estimated that about 1,100,000 farmland acres nationwide have been put under easements at an approximate cost of \$2.3 billion.

We know a great deal about the strategies and practices of organizing, funding, and acquiring easements—the “front end” of the agricultural easement story. What is less certain, however, is the effectiveness of the technique in reversing or minimizing the farmland conversion trend in the United States—the “back end” of the process. Considering that additional billions of federal, state, local and private sector dollars soon will be added to what has already have been spent, how do we evaluate the public benefits of this large investment? (Source: *American Farmland Trust*)



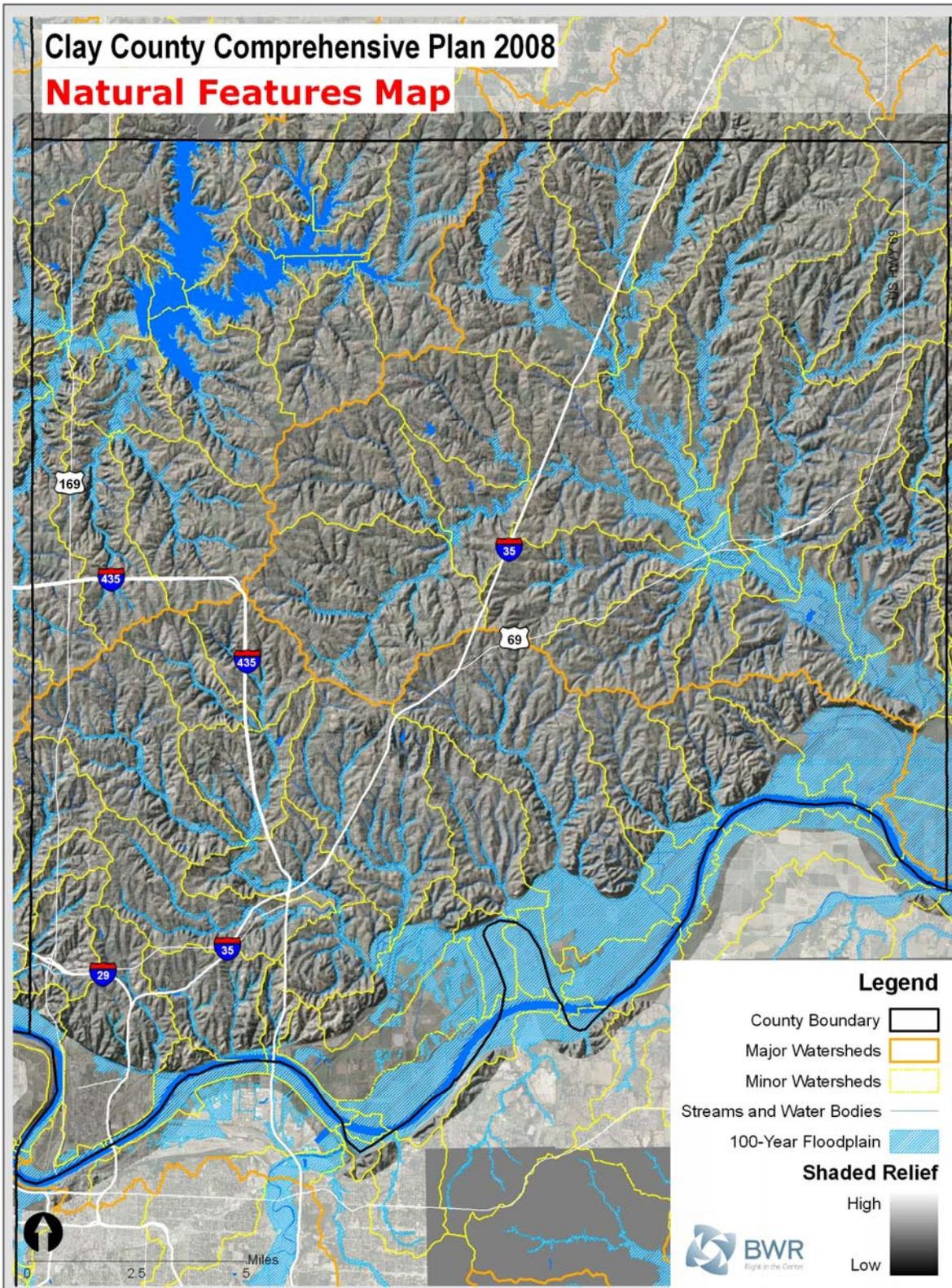
UTILIZATION AND PRESERVATION OF NATURAL RESOURCES

The Clay County plan analyzes land use policy in terms of watersheds. Small watersheds are more suitable for certain types of planning than other units, such as a farm or ranch, a major river basin, a county, township, or a metropolis. A watershed is generally the logical planning unit for water management (**Ref. Figure 4-1, Natural Features Map**).

Most land problems are linked with water problems. Nearly all of our surface water and most of the food and fiber we produce comes from small watersheds. More than one half of the flood damage in the United States occurs in small watersheds. A large percentage of the irrigated farmlands get their water from streams within small watersheds. Most of the drainage needs are confined to small watersheds. Small cities use surface water from Smithville Lake as secondary supplies, which is fed from the surrounding small watersheds. Many of the problems of erosion, as along watercourses, can be solved only by public action in small watersheds.

The following conservation policies reflect the high degree of support for these issues during public involvement (**Ref. Appendix A**) and in the Countywide opinion survey (**Ref. Appendix B**). Clay County should reference these policies when reviewing development proposals in the Natural Resources Tier, giving extra weight to these factors. The policies should be considered in the other tiers, as well.

Figure 4-1, Natural Features Map



Conservation Districts

Clay County should consider allowing and incenting conservation districts when reviewing development proposals in the Natural Resources Tier. A Conservation District is used to preserve and maintain natural features, prime agricultural lands, and rural amenities in areas becoming more densely populated. In this District, portions of a subdivision should be preserved to provide permanent open space, wetlands, floodplains, existing vegetation, wildlife habitats, woodlands, and steep slopes; and developed portions may be approved for higher-density development than would otherwise have been approved. Physical design elements cluster housing to preserve natural characteristics and environmentally sensitive areas. Conservation districts should be used to discourage “leap frog” and “piano key” development. Open space may be either private or public and may be used to implement the **Northland Trails Vision Plan** and the **MetroGreen Plan**. Conservation areas may be located in each of the Development Tiers.

If parkland is indicated on county maps, as a Northland Trail, developers should dedicate land (in lieu of the park fee) for implementation of the plan; and if no dedication, the County should assess a fee in lieu of dedication for the parkland acquisition fund. Easements for public utilities should be made wider if in the vicinity of a planned trail system for co-location of trails and utilities.

Natural Storm Water Treatment Practices

Clay County should consult Natural Storm Water Treatment Practices when reviewing development proposals in the Natural Resources Tier. The Comprehensive Plan encourages efficient subdivision design that provides more open space and greater natural resource protection than conventional development designs. Open space and conservation development designs allow more compact and less costly networks

Sustainability cannot be simply defined, just as “environmentalism” is not given to a simple definition. The principles underlying “sustainability” are articulated in the Clay County comprehensive plan and are expressed as choices (public and private) that meet the needs of the present generation without compromising the ability of future generations to meet their needs; choices that work well for the Clay County economy, the people and fabric of life in the County, and in the natural environment.

“Then I say the earth belongs to each...generation in its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence.” Thomas Jefferson September 6, 1789

of roads and utilities. Natural Storm Water Treatment Practices can also help reduce storm water runoff and non-point source pollutant loading rates and can be used to preserve the County’s semi-rural character.

Storm water management should be enhanced by implementing a series of Best Management Practices (BMP’s) through the

development process that achieve the following goals:

- Increase infiltration (water absorbed by the soil) of storm water runoff while in the basin;
- Increase the amount of time for storm water runoff to reach it’s receiving stream;
- Reduce the potential amount of sediment/pollutants that can be carried off by storm water runoff from rainfall; and
- Treat storm water runoff before it reaches the receiving stream.

To improve water quality, BMP’s should be designed and located in such a manner that runoff is routed through a chain of successive treatments that remove pollutants and increase water quality as much as possible before entering the creeks and streams of a watershed. The use of BMP’s should meet the minimum standards set forth in the **Manual of Best Management Practices for Storm Water Quality**, September 2003 prepared by the Mid-America Regional Council and the American Public Works Association.

Developers should submit storm water studies that demonstrate the effectiveness of proposed BMP's in lieu of localized detention facilities.

Careful consideration of the placement of BMP's throughout a watershed should be given to ensure water quality. Most BMP's implemented to improve storm water "quality" will also reduce the storm water "quantity". This reduction in water "quantity" will also reduce the amount of detention storage required for the development, which in turn will reduce development costs. Potential reductions in development cost are true for many of BMP's that can be implemented. The use of natural buffers and native vegetation will reduce the need for grading and the need for larger enclosed pipe systems which reduces up front development costs as well as long-term maintenance needs.

Green Infrastructure

Clay County should apply "green infrastructure" principles when reviewing development proposals in the Natural Resources Tier. Green Infrastructure as defined by Mid-America Regional Council (MARC) means: "A strategically planned and managed network of parks, greenways, conservation easements, and working

Recommendation: Clay County should consider a stormwater utility fee for building up a fund for regional stormwater management improvements.

lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for communities and people." It is this initiative—outlined by MARC in their *Creating Quality Places* initiative—that Clay County should follow in amending the County *Park System Master Plan* of 2003.

The county should eliminate the "Greenway Conceptual Plan" of the *Park System Master Plan* of 2003 which called for neighborhood parks and/or sports play fields in the streamways leading from Smithville Lake. In its place the Comprehensive Plan Update 2008 calls for conservation of greenways and water resources through the means presented in **Chapter 7, Implementation:**

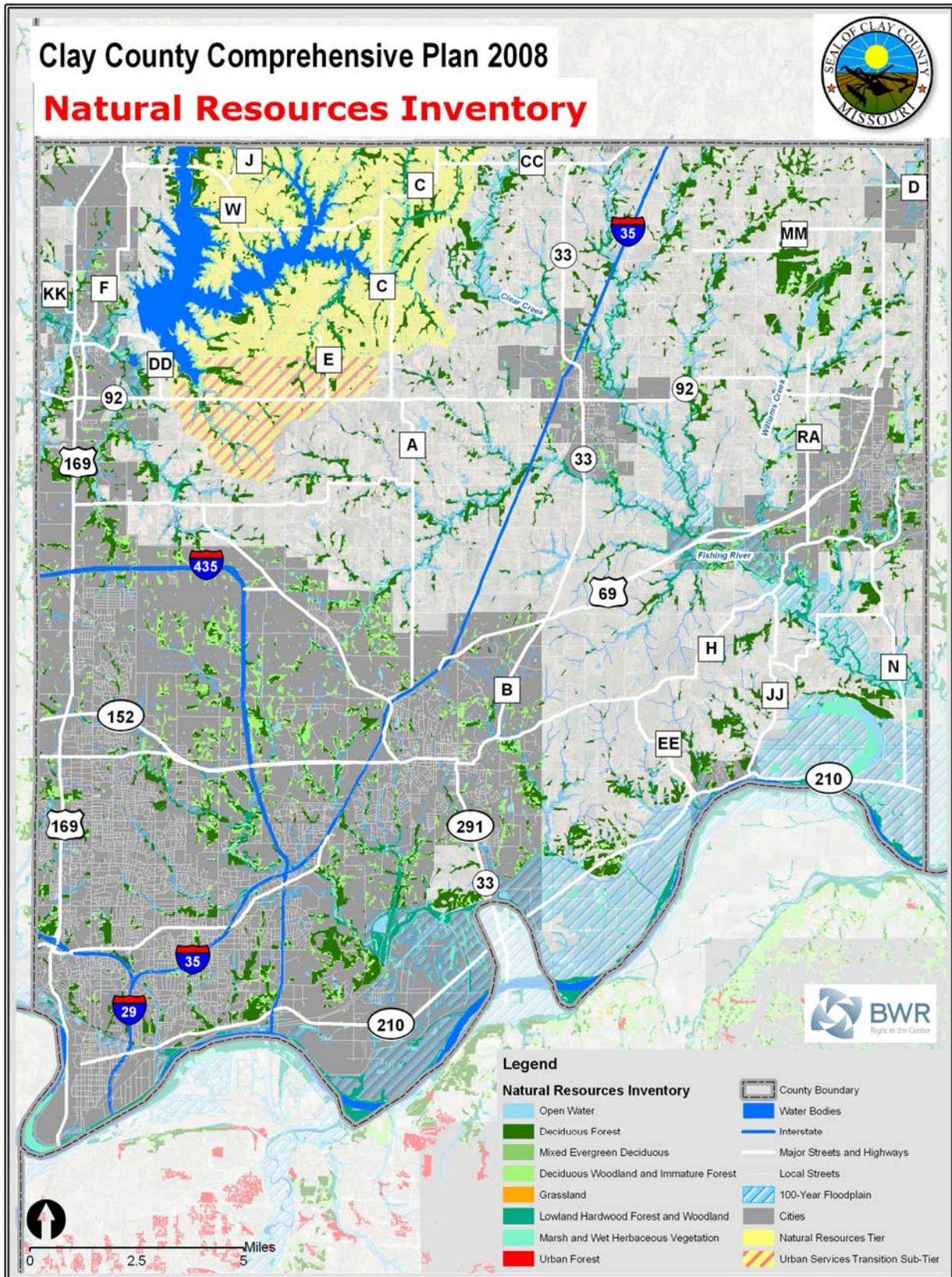
- Stream buffers,
- deeper setbacks, and
- conservation easements to be dedicated by development plat approval, for private use and maintenance.

If such areas coincide with an active recreation park facility indicated in the Clay County *Park System Master Plan*, then the County would consider acceptance of land dedication for public parkland. Such an active recreation facility may be a linear bike/walking trail if integrated with a larger park, such as at Smithville Lake. This amendment would eliminate the concept of "streamway parks" in rural Clay County.

Natural Resources Inventory

Clay County should consult the MARC natural resources inventory when reviewing development proposals in the Natural Resources Tier (**Ref. Figure 4-2, Natural Resources Inventory**). MARC has developed a Natural Resources Inventory (NRI) of the natural assets and ecological features of the 3,000 square mile Kansas City region. The inventory is a useful data source and tool in conservation planning and ecological preservation; it also represents the first steps of a comprehensive conservation planning process. The inventory identified 22 percent of the metropolitan region as potentially supporting high quality vegetative communities and natural resources, and that many of

Figure 4-2, Natural Resources Inventory



these areas support native vegetative communities similar to those found 150 years ago. In addition, the urban areas in the Kansas City region continue to support extensive forests and restorable savannas, which are concentrated along rivers and streams, near open water, on steeply-sloping land, and in rural and semi-rural areas.

Numerous ecological land covers are identified by the NRI. They are listed below, with the number of existing acres in Clay County in parentheses.

- *Open Water* – Standing water for a significant part of the year (7,702 acres; 2.9 %)
- *Lowland Hardwood Forest & Woodland* – Open to closed forest canopy in flooded or wetland areas (6,039 acres; 2.3 %)
- *Marsh & Wet Herbaceous Vegetation* – Wetlands without a closed forest canopy; includes brush and scattered trees (4,978 acres; 1.9 %)
- *Deciduous Forest* – Mostly closed canopy of deciduous trees, often mature; includes former savannas on south to west slopes (17,078 acres; 6.5 %)
- *Mixed Evergreen Deciduous Forest* – Open to mostly closed canopy of junipers and deciduous trees; often oaks; may include former savannas (0 acres)
- *Deciduous Woodland/Immature Forest* – Open canopy of deciduous trees; often immature; may contain former savannas, or glades on soils with bedrock close to surface (9,351 acres; 3.6 %)
- *Grassland* – Grassland, often containing native wild plants; may include CRP plantings (0 acres)
- *Urban Forest* – Deciduous canopy cover within an urbanized location (specific to Jackson and Johnson Counties) (N/A)
- *Cultural Grassland* – Grassland of planted domesticated grasses, or formerly cultivated land reverting to grassland and sometimes brush (94,332 acres; 35.9 %)
- *Agricultural Land* – Used as farmland (specific to Jackson and Johnson Counties). (N/A)
- *Cultivated Land* – Used as cropland (47,878 acres 18.2 %)
- *Developed Land* – Urban and suburban land uses, including homes, businesses, roads (75,594 acres; 28.8 %)

Tree Inventory

Clay County should consult the established tree inventory when reviewing development proposals in the Natural Resources Tier. Projects larger than 20 acres that involve land identified in the Clay County **Natural Resources Inventory** should include a tree inventory with site plan or preliminary plat submittal. Trees needing removal should be marked and replaced if they are species-worthy trees. The tree inventory should include the following information:

- Location of trees;
- Species;
- Tree diameter;
- Canopy cover;
- Tree height;
- Tree condition/health; and
- Proximity to infrastructure.

Stream Asset Inventory

Clay County should consider conducting a stream inventory of riparian area that feed into Smithville Lake within the Natural Resources Tier. In August 2003, the City of Kansas City completed a Stream Asset Inventory Phase I study for the Line Creek Watershed and the Stadium/Park East Planning Area. This study created a natural resources inventory identifying water quality and adjacent riparian (stream) corridor conditions. Stream asset inventories use a three-tiered approach—Inventory, Prioritization, and Protection—to formulate tools and strategies to improve stormwater management practices. The inventory

process includes a field assessment of stream banks, stream beds, erosion and sedimentation, stream flow rate, vegetation, and aquatic life. These factors are given scores based on USDA scoring methods and are weighted according to the judgment of stream biologists, enabling stream segments to be classified into the following types:

- Type 1 - Highest Quality: Generally described as the highest quality naturally occurring stream with little negative impact. Erosion and sedimentation is low, water quality indicators are positive, and the surrounding riparian zone is a healthy, mature, succession woodland or other high-quality environment.
- Type 2 - High Quality: This type of stream may have some down or side-cutting; however, bank and bed composition (bedrock) assist in keeping the impact low. Water quality is generally good and the riparian zone is largely intact, although vegetation may be altered from that of a typical native plant association.
- Type 3 – Restorable: Deterioration of the riparian corridor is more noticeable. While some remnant plant associations may be present, overall vegetative canopy cover is comprised of immature tree species. The potential for restoration exists although erosion and sedimentation can be greater than desirable.
- Type 4 - Low Quality: Impacts are greater on this stream type with significant indicators of bank erosion and sedimentation present. The adjoining riparian corridor may be intact but vegetation is not representative of a native plant association.
- Type 5 - Lowest Quality: The channel in this type is the most changed. The riparian corridor is becoming impaired to the point of providing little protection or benefit, and erosion and sedimentation indicators are significant. Water quality is questionable with noticeable phosphate and nitrate loading (large algae blooms).

Clay County should consider undertaking a similar inventory in the Natural Resources Tier to formulate tools and strategies to improve stormwater management practices, preserve natural resources, and make ecologically sound land use decisions.

Stream Buffers

Clay County should apply stream buffer standards when reviewing development proposals in the Natural Resources Tier. Headwater streams are often severely degraded by urbanization. Stream buffer standards are intended to mitigate the adverse environmental impacts that development can have on streams and associated natural resource areas. The purpose of stream buffer is to:

- improve storm water management and water quality while preventing flooding;
- increase the public's knowledge and understanding of natural resource protection issues; and
- decrease infrastructure construction and maintenance costs.

Stream buffers are an integral element of a local stream protection program. By implementing stream buffer standards to all stream corridors Clay County will retain its natural infrastructure and visual character derived from topography, woodlands, streams, and riparian corridors.

The ability of a particular buffer to actually realize its many benefits depends to a large extent on how well the buffer is planned or designed. In general, a minimum base width of at least 100 feet is recommended to provide adequate stream protection (**Ref. Chapter 7**).

LEED SUBDIVISION PRACTICES

The Leadership in Energy and Environmental Design (**LEED**) tools and performance criteria for sustainable green building and development practices should be referenced by Clay County, as well, when implementing LESA (**see above and Ref. Appendix C**). When evaluating development proposals

developers may “earn” mitigating points by preserving prime farmland (and land currently in agricultural production), implementing Stream Corridor Inventory objectives, and proposing related environmental measures. These principles are adopted to better promote local food sources; to protect natural resources, such as wetlands, aquifer recharge area, wildlife habitat and other community values identified by the Clay County public during the plan update process in 2007. Implementing these procedures will promote better management of natural resources and mitigation of manmade hazards,

WHAT IS LEED?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria.

such as flooding.

Planning with environmental measures—as outlined in this Chapter, as promoted in LEED-certified developments—will provide effective ways to mitigate negative environmental impacts, in furtherance of natural resource conservation.

CLAY COUNTY PARK SYSTEM MASTER PLAN

The Clay County Park System Master Plan was updated in 2003 to define a general framework for actions to be contemplated by the Clay County Department of Parks, Recreation, and Historic Sites (**Ref. Significant Parks Map following Chapter 4**). The Plan evaluates and responds to three primary issues: are citizens supportive of the current park system?; what values do citizens have, and are they supportive of changes?; what steps are required to make changes? The “significant parks” are the community parks and regional parks; and the “service radii” are the areas shown (in green circles) where the public is logically served based on travel distance and park use parameters.

The planning process included extensive citizen involvement, a benchmarking study, and a community attitude survey. These aspects of the plan led to the final recommendations. A marketing plan for parks is being developed by Clay County in 2008, including the historic and tourist sites maintained by the County. Based on the study team’s analysis of key issues and citizen preferences which surfaced during the process, the following recommendations were made:

- Adopt the Park Fee Ordinance.
- Identify a revenue stream to further support the recommendations in the plan; possibly Missouri House Bill (#88), which provides for the use of a sales tax for parks and stormwater improvement projects.
- Design an Educational Plan to inform citizens of the benefits of implementing the Park System Master Plan.
- Seek voter support for a funding mechanism to implement the Park System Master Plan.
- Develop a recommended Implementation Plan for the Greenway System.
- Emphasize capital improvements for the County’s current core services; namely:
 - Smithville Lake,
 - Historic Sites, and
 - Golf Courses.

CHAPTER 4 FUTURE LAND USE

- Develop a Marketing Plan which positions Clay County as a premier place to live, work and play. The Plan should highlight the value of the Greenway System, Smithville Lake, Historic Sites and Golf Courses.
- Consider partnership opportunities with other entities when the need is consistent with the County's goals. Partnerships may include public/public opportunities, public/private opportunities and/or public/not-for-profit opportunities.

Park Master Plan Survey of County Residents

When drafting the master plan for its park system in 2002, Clay County undertook a statistically valid, random sample survey of county residents. Below are listed the major findings of citizen preferences taken from the mail-in survey that was part of that plan.

- Over one half (52%) of respondent households indicated they had visited Smithville Lake during the past 12 months.
 - Boating (51%) is the activity at Smithville Lake that the highest percentage of respondent households had participated in during the past 12 months.
 - Over three-fourths of respondent households who indicated they had visited Smithville Lake during the past 12 months rated the activities they had participated in as either excellent (16%) or good (62%).
 - Over 70% of respondents indicated they would travel more than 15 minutes from their residence to visit facilities at Smithville Lake. That group includes 28% who would travel 30 minutes or more, 13% who would travel 21-29 minutes, and 31% who would travel 16-20 minutes.
 - Nearly one half (48%) of respondents indicated they would travel more than 15 miles from their residence to visit facilities at Smithville Lake. That group included 10% who would travel 30 miles or more, 11% who would travel 21-29 miles, and 27% who would travel 16-20 miles.
 - Nearly one half (46%) of respondent households indicated they had visited parks in Clay County other than Smithville Lake during the past year.
 - Paved walking/biking trails (68%) are the recreational facility that the highest percentage of respondent households indicated they have a need for.
 - Lakes for boating and fishing (58%) and adult softball fields (58%) are the recreational facilities that the highest percentage of respondent households indicated as completely meeting their needs.
 - Paved walking/biking trails (41%) had the highest percentage of respondents rate it as one of the four most important recreational facilities to their household.
 - Based on a list of four historic sites operated by Clay County, the Jesse James Farm and Museum (25%) is the one visited by the highest percentage of respondent households during the past two years.
 - Based on a list of five possible reasons for visiting a Clay County operated historic site, "touring historic site" (38%) is the reason that the highest percentage of respondent households have visited a historic site.
 - Eighty-two percent (82%) of respondent households indicated they had not visited the Claybrook House prior to it closing.
 - Over one half (52%) of respondent households indicated they would be either very likely (21%) or somewhat likely (31%) to visit Pharis Farm.
 - Seventy percent (70%) of respondents indicated they would be either very supportive (41%) or somewhat supportive (29%) of using tax dollars to continue to operate and make improvements to existing historic sites.
 - "Continue to operate and make improvements to existing historic sites" (33%) is the potential
-

improvement that the highest percentage of respondent households indicated as their first choice for the improvement they would most support with tax dollars.

- Eighty-seven percent (87%) of respondent households indicated that driving in an automobile is the most frequent way they travel to use parks, recreation facilities, historic facilities, and trails in Clay County.
- From a list of five options regarding acquiring and developing open space for parks and recreation purposes, “providing natural areas for wildlife and animal habitats” had the highest percentage of respondents indicate they were either very supportive (45%) or somewhat supportive (32%) of using tax dollars to support it.
- “Passive uses” (39%) had the highest percentage of respondents indicate it as one of the two potential land acquisitions they are most willing to support with their tax dollars.
- Over one half (57%) of respondent households indicated that new commercial development does create a demand for additional parks and open space in Clay County.
- Over one half (54%) of respondents indicated they would be very supportive of requiring developers to set aside a portion of new developments for parks or make cash contributions for parks to serve new developments.
- “We are too busy or not interested” (41%) is the reason that kept the highest percentage of respondent households from using parks and recreation facilities in Clay County more often.
- Walking and biking trails (66%) is the potential renovated/new recreation facility that the highest percentage of respondent households indicated they would use.
- New overnight cabins are the potential renovated/new recreation facility that respondents indicated they would travel the farthest to use, with an average of 25 miles.
- Walking and biking trails (33%) had the highest percentage of respondents rate it as one of the four facilities they would be most willing to support with tax dollars.
- Respondents indicated they would allocate \$28 out of every \$100 to the improvement/maintenance of existing Clay County park facilities.
- Exactly one half of respondents indicated they would be either very supportive (16%) or somewhat supportive (34%) of approving some increase in property taxes to fund acquisition of open space and improvements to parks, recreation, trails, and historic sites.
- “Do not favor increasing property taxes for any amount” (40%) is the reason that the highest percentage of respondents indicated they were either not sure, or were not supportive of approving some level of property tax increase.
- Over 60% of respondents indicated they are either very supportive (22%) or somewhat supportive (39%) of approving some increase in sales taxes to fund acquisition of open space and improvements to parks, recreation trails, and historic sites.
- A ¼ cent sales tax increase (31%) is the potential tax increase most supported by respondent households for improving parks, trails, historic sites, and recreation facilities.
- Over one half (59%) of respondent households indicated they would support increasing taxes for improving parks, trails, historic sites, and recreation facilities if the tax expired in a few years after the improvements were made.

Based on citizen preferences, the study team developed four critical assumptions upon which final recommendations would be made; those assumptions were:

- Cities, not-for-profit and private providers are best equipped to provide close to home parks and facilities.
- Development in the County has an impact on existing park facilities and the need for new ones.

- Citizens are supportive of the County's current core services which include the historic sites, Smithville Lake and golf courses; therefore, it is prudent to continue to emphasize and provide resources for those services.
- A greenway system is consistent with "smart growth" principles and offers the County an important tool to protect its water quality, and is an equitable long-term improvement which responds equally to large and small cities.

NORTHLAND TRAILS VISION PLAN SUMMARY

The ***Northland Trails Vision Plan (December 2000)*** outlines a non-motorized transportation system plan for Clay and Platte Counties, and is intended to guide the development of a system of on-road facilities and off-road trails for pedestrians, bicyclists and equestrians. Through the development of the ***Vision Plan***, as well as through the 2008 Comprehensive Plan Update process, residents of Clay County identified open space as an essential attribute to the quality of life in the County. The Plan was adopted by the County Commission to help preserve some of the existing open space, and to maintain and strengthen the County's quality of life (**Ref. Northland Trails Plan Map following Chapter 4**).

The benefits of a Northland trail system will be greater mobility options, increased recreational opportunities, added environmental protection for habitat and wildlife and for urban development from flooding, and an enhanced economic climate through added community amenities and tourism. A Northland trail system will offer increased opportunities for safe non-motorized vehicular access to public, historic and cultural destinations in the two-county area. The system will assist businesses to attract and retain a skilled technical and professional work force by offering an enhanced quality of life. Residents will have additional opportunities for exercise and recreation. Finally, the system is expected to promote increased tourism by linking important historical, cultural and environmental assets in the two-county area. The Plan includes:

- A multi-use corridor system plan for the two-county area that is linked to systems planned by cities within the two counties as well as connections to adjoining counties.
- The identification of priority projects with cost estimates for use by the two counties in seeking Transportation Enhancement, Congestion Mitigation Air Quality, or other federal or state resources, or to program local capital improvement funds.
- Design guidelines for all elements of the corridor system.
- Identification of specific financing options, including the possibility of land dedication, for each county to implement as it develops and maintains its system.
- Identification of institutional arrangements that each county might adopt to encourage public involvement and support for the trail system.
- Recommendations for adoption of the Plan by both county commissions and amendments to existing county regulations to aid in implementation of the Plan.

The Plan includes facilities for bicyclists and pedestrians or hikers, shared use trails, and equestrian trails. The plan offers a combination of on-road facilities, including wide paved shoulders and bicycle lanes, primarily along state and county highways. Stream corridors have offered trail opportunities throughout the Northland, and many shared use and equestrian trails follow the area's streams and the Missouri River. Finally, abandoned railroad lines and other corridors have been identified as possible trail facility locations. Overall, the Plan identifies 27 trail routes and a total of 306 miles of trails in Clay County. First priority routes were identified as trail corridors that are build-able without major land acquisition or extensive construction or corridors that are already in the planning and design stage. These highest priority routes consist of 73

miles of proposed paved shoulders, shared use paths, and combined use trails. Specifically, first priority routes include:

- Smithville Lake Route- 14.5-mile, off-road trail for shared use trail users in the Smithville Lake Park Area.
- Watkins Mill State Park- Clay/Platte County Line- 21.05 mile, off-road trail for shared use, soft-surface, equestrian trail. Located between Watkins Mill and Smithville Lake by way of county roads.
- Watkins Mill Park/H Highway via Old Quarry Road- 4.55 mile, hard surface, off-road shared use trail that runs along Old Quarry Road. It begins at Watkins Mill State Park and runs south to H Highway.
- Liberty-Excelsior Springs- 12.93-mile corridor composed of several segments. The first two segments consist of 7.24 miles of hard surface, on-road bike trail that begins on H Highway in Liberty and runs northeast to JJ Highway. From JJ Highway the remaining segments will be off-road, hard-surfaced trail.
- Riverside/Liberty via Vivion Road- 12.61-mile east-west route along Vivion Road begins in downtown Riverside and runs east through Kansas City, Claycomo, Pleasant Valley and Liberty.

For more details on these and other potential routes, see the full text and maps of the **Northland Trails Vision Plan**, December 2000.

BUSINESS RETENTION SURVEY

In 2006, the Clay County Economic Development Council conducted a survey with the executives of 68 existing Clay County businesses regarding the company's value, growth potential, and level of satisfaction with the community. The businesses interviewed represented a total of 17,080 employees.

Over 58% of the businesses reported plans to expand in the next three years, with a projected creation of nearly 2,000 new jobs. However 81% of respondents reported that the community's technology infrastructure was not adequate for their growth plan, and lack of coordinated planning among governmental entities within the County was identified as a serious weakness. It can be expected that if these concerns were to be resolved, business growth would expand even more. In addition, if these concerns are not addressed, future business growth can be expected to slow, and business retention for the County could begin to fall.

MUNICIPAL PLANS IN CLAY COUNTY URBAN SERVICE TIERS

Clay County should coordinate with the cities of the County, in particular when reviewing development proposals in the Urban Service Tier. As explained in the footnote to **Table 4.2**, a special designation is given to the “1-Mile Urban Coordination Sub-Tier” where comment should be solicited from the designated city (**Ref, Planning Tier Map**). In the case where an urban development is proposed in the Sub-Tier mile area, the applicant will be required to submit a letter from the city of jurisdiction concerning the proposal. The Clay County Planning and Zoning Commission may consider the letter as a non binding city recommendation for Clay County to consider in their deliberations.

Kearney I-35 Master Plan

In April of 2006, the Kearney Planning & Zoning Commission approved a master development plan designed to guide growth in the area west of I-35. The plan looks at ways to expand the city’s business district west of I-35, how to take advantage of the interstate visibility for “big box” retail opportunities, and the possible creation of a retail and entertainment district to serve as a destination attraction.

A key physical element of the plan is an overpass linking the historic district east of the interstate to the future expansion area to the west. Also included are plans for a lifestyle retail center and entertainment district, as well as a waterway esplanade and walking trail linking the entire proposed development. Big box retail is planned for an approximately half-mile stretch paralleling the interstate, as the site has excellent visibility and suitable grades for such development.

At this time, no development has taken place. However, potential developers will be required to consider the master plan as they bring proposals to the table.

Kearney Annexation

In May of 2007, the Kearney Board of Aldermen moved forward a proposal to annex the Clay County airport and surrounding land. The annexation passed public vote in fall 2007. The territory involves 1,900 acres that border US Highway 69 and Summersette Road to the south, Water District 8 boundaries to the north, Rhodus Road to the east, Northeast 130th Street on the southwest corner and Missouri Highway 33 to the west.

The annexation extends to the Clay County airport and involves 12 rooftops. It excludes the subdivisions of River Bend, Victoria Estates, South Meadow Estates and Whitehall Estates. The city was required to draw an uneven boundary line in part to avoid rural subdivisions and water districts that have developed in rural areas and did not want to be included. The annexation plan had to circumvent rural, small lot development on 2- acre and 3-acre lots to extend planned wastewater services to the Midwest National Air Center.

Liberty Comprehensive Plan

The Land Use Plan reflects the input of Liberty residents gathered through several workshops from November of 1998 through June of 1999. The vision for Liberty's future balances economy, ecology, and cultural resources. Balancing these resources ensures the long-term success of Liberty as a unique town where people can live, work, and play. The citizen input reflected the following central ideas:

- maintaining Liberty's sense of community & small town feel
- making room for green space and rural areas
- ensuring a variety of housing options
- stormwater management in harmony with nature
- getting from here to there not only by car but on foot and by bike
- trees, trees, trees
- connections beyond Liberty to the metro area via public transportation.

City of Kansas City Focus Plan

In 2003, the City of Kansas City adopted a 1st District Focus plan. The 1st district is comprised of the northeastern corner of Kansas City, or the extreme southwestern corner of Clay County. The Focus plan suggests that development should be encouraged in mixed-use and transit centers along transportation corridors including I-435 and Highway M-152. The Focus Plan has little impact on overall development in Clay County.

Shoal Creek Valley Area Plan

In 1992 the City of Kansas City adopted the Shoal Creek Valley Area Plan. The Shoal Creek Valley area is predominantly rural in character, and agricultural in land use. The Area Plan was developed to guide urban development along the I-435 corridor and how it relates to the larger area.

The Shoal Creek Valley area is unusual in that regional freeways and highways cut through the heart of the area and on its edges, yet the area is largely rural. For that reason few arterial and collector street have been improved to urban standards to link with these significant regional transportation network. A Major Street Plan was adopted as part of the Area Plan that identified which existing and future roads should be classified as major thoroughfares.

Generally, the Shoal Creek Valley area is served by public water mains only at the extreme southwest, southeast, and northern portions of the area. Service is provided by two existing water transmission mains. The City of Kansas City has an adopted Capital Improvement Program which establishes plans for future main transmission lines and interceptor improvements. These improvements, along with regional facility enhancements, will affect development in the Shoal Creek Valley area in the long-term future.

Two main sanitary sewer interceptors serve basins of the Fishing River, and pump approximately 50,000 GPD of effluent, with a design capacity of 1 million GPD. The only other sanitary sewer interceptors in place are at the extreme southeast and southwest ends of the study area at Pleasant Valley Road: one interceptor to serve future extensions up the East Fork Shoal Creek basin along the I-435 corridor; the other to serve the Little Shoal Creek basin east of Hodge Park.

CHAPTER 4
FUTURE LAND USE

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Chapter 5. Major Roadway Plan

The transportation system for Clay County involves different modes of transportation to achieve the safe, efficient and convenient movement of persons and goods. This Chapter addresses the street and highway system of unincorporated Clay County.

INTRODUCTION

This Chapter represents the existing and recommended transportation system for the unincorporated Clay County planning area by street classification. The ability to transport people and goods from one place to another is one of the basic components the County's economic and social systems depend. Long range planning helps ensure the street system is able to expand efficiently to manage future growth and to remain consistent with the **Planning Tier Map**.

ROAD CLASSIFICATIONS

Clay County's existing street and highway network is classified by its function, which is based on the type of land uses for which the roadway is intended to serve. Roadways are classified by many factors, including the amount of traffic they carry. However, higher traffic volumes are often consistent with upper level roadway classifications. The factors in roadway classifications are:

- The level of through-traffic movement; and
- Access to adjacent land or individual properties.

The functional street classification system assists the County and the development community in the planning, design, management and maintenance of transportation facilities. These roadway classifications project the right-of-way and design standards for the ultimate construction of a roadway. Ultimately, however, the function of a roadway, traffic volume, and adjacent land use determine the type of roadway which should support daily traffic activity.

The functional classification for roadways uses a hierarchical structure to identify the operation of all roadways within the County's transportation system (**Ref: Major Roads Map**). The hierarchy of road types in ascending order is:

- Interstate (equivalent to "Highways" in the former plan);
- Principal Arterials and Minor Arterials (equivalent to "Arterials" in the former plan);
- Local County A Roads and Local County B Roads (equivalent to "Collectors" in the former plan); and
- Local Streets (no formal designation).

A corridor to link I-435 and I-35 is indicated on the map as "Conceptual Interstate Linkage", and is identified for further study of how an east-west "freeway" type connection could occur to accommodate future traffic needs resulting from growth north of M-152 (**Ref. Page 5-4**).

Interstate: The Missouri Highway and Transportation Department (MoDOT) is the entity responsible for construction and maintenance of the Interstate, and the "Principal and Minor Arterials" within Clay County.

Principal Arterials: The primary function of an arterial road is to move large volumes of traffic from one place to another at moderate- to high-speeds, provide continuous linkages between major traffic

generators and serve as a transition roadway between Local County roads and expressways. Planned access is its secondary function. Principal arterial roads require a minimum of 120-feet of right-of-way.

Minor Arterials: Minor arterials provide shorter links of continuous distances throughout the County than principal arterials. Minor Arterials require a 100' right-of-way.

Local County A Roads and Local County B Roads: Local County roads serve as “connector” roads for traffic desiring to travel between arterial and local roads, and are used mainly for traffic movement within residential, commercial and industrial areas. Connector routes provide the services of funneling traffic and protecting local roads from bearing unnecessary traffic volumes. Connector roads are generally developed to discourage any long through trips which should more appropriately be carried by arterial roads. Standards for width of local roads is 60 feet because they are typically more residential in character than the Minor Arterials. Turning lanes may be provided at primary entrances. Major/Minor distinctions should be made in Capital Improvement Program (CIP) funding priorities and design parameters.

Table 5.1 - Roadway Design Standards				
	Arterial		Local County A	Local County B
	Principal	Minor		
Right-of-Way Width	120 feet	100 feet	60 feet	60 feet ⁽¹⁾
Roadway Pavement Width	44+feet	32+feet	24+feet	24 feet
Degree of Curve	12.5	12.5	23	28
Maximum Gradient	5%	5%	8%	8%
Minimum Gradient	0.5%	0.5%	0.5%	0.5%
Curb Radii	30 ⁽¹⁾	30 ⁽¹⁾	25 ⁽¹⁾	25 ⁽¹⁾
Sidewalks	(1)	(1)	(1)	(1)
Curbs	(1)	(1)	(1)	(1)
Number of Travel Lanes	2-4	2-4	2-3	2
Min. Sight Distance on Vertical Curves	350 feet	350 feet	300 feet	200 feet
Min. Curve Radius	573	573	573	573
Min. Horizontal at C/L	510	510	380	200

Source: Clay County Highway Department, Planning Department, BWR

Note: Road construction standards and specifications determined by the Missouri Department of Transportation and others.

⁽¹⁾When required by the Planning and Zoning Commission. The Commission may increase maximum gradients and decrease minimum radii where unusual topographical conditions exist.

TRANSPORTATION PLANNING ISSUES

A quality transportation network system that promotes safe, efficient and convenient travel throughout the County will play a significant role in long term economic development opportunities and quality of live for citizens residing in Clay County. Since most roadways cross multiple jurisdictions, long range transportation planning should be conducted as a multi-jurisdictional effort.

Interstates, U.S. Routes, and state highways serve as the framework of the County’s roadway network, particularly in unincorporated Clay County. Interstate 35 connects downtown Kansas City with outlying areas in the County. U.S. Highway 69 serves as the major route from I-35 at Liberty to

Excelsior Springs, while State Highway M-92 provides a significant east-west linkage through the center of the County connecting Smithville, Kearney, and Excelsior Springs. These two highways are recommended for special land use development standards in “corridor overlay districts” where special guidelines apply to site plan review, given their high visibility in residential and commercial areas of unincorporated Clay County (**Ref. Chapter 4**). State Highway M-210 provides a significant east-west linkage across the south end of the County to industrial areas along the Missouri River.

U.S. Highway 69 Corridor Plan

In 1999 a Study was completed for the U.S. Highway 69 Corridor extending from Liberty to Excelsior Springs. The Corridor Plan was intended:

- to promote quality development through urban design recommendations;
- to propose a development pattern that incorporates good design features without hindering private development;
- to enhance and compliment existing viable development areas in the County; and
- to protect the Midwest National Air Center environs by identifying appropriate future land uses that conform to Federal Aviation Administration guidelines.



Intersection of U.S. Highway 69 and Highway 33—an old design that can degrade traffic Level of Service (LOS), which is a measure of the satisfaction of drivers as they move through the area.

I-29 / I-35 Improvements

In the fall 2006 the Federal Highway Administration issued its Record of Decision on the I-29/I-35 Final Environmental Impact Statement (FEIS) which impacts the urban portion of the County generally south of M-210 highway. The proposed action consists of operational and capacity modifications to the existing I-29/I-35 roadway and bridge corridor from the northern terminus at M-210 (Armour Road) to a connection with the existing freeway loop which encompasses downtown Kansas City, Missouri. MoDOT will receive a \$1 Million federal grant for rebuilding I-29/I-35 from Route 210/Armour Road to the northeast corner of downtown Kansas City loop, to include a new Missouri River bridge. Included in the action is the widening of the existing Paseo Bridge crossing which currently carries I-29/I-35 over the Missouri River.

While improvements to I-29/I-35 corridor in the southern portion of the County are anticipated in the near future, there continues to be significant traffic congestion in the I-35 corridor north of M-210 Highway. Long-range transportation planning for the corridor should include possible highway improvements as well as other mass transit opportunities to benefit the bridge corridor in the central and northern portions of the County.

I-435 / I-35 Connection Improvements

A corridor to link I-435 and I-35 has been discussed for a number of years, and should be identified for further study of how an east-west “freeway” type connection could occur to accommodate future traffic needs resulting from growth north of M-152.

- MoDOT is concerned about the I-35 / M-152 corridors already being overloaded with traffic and the feeling was there is a long-term need for another east-west “freeway” generally mid-way between M-152 and M-92.
- This east-west corridor might be along an alignment between NE 120th and NE 128th Streets. Further study is underway in fall 2007 by the City of Kansas City—as part of their update of the city’s *Major Street Plan*—to find the best alignment given the existing rural subdivisions that already dot the area.
- The connector would require new interchanges on both I-435 and I-35. An interchange in the vicinity of NE 112th Street, now being considered by the city of Liberty as part of a large “New Urbanist Town Plan” would be too far south to serve this larger regional connector of the two interstate freeways.

In summation, a corridor needs to be identified and right-of-way preserved before it is too late and before more subdivisions are platted in that area, so that a freeway connector alignment may be planned.

M-210 Improvements

The State plans for M-210 Highway include safety improvements in south Clay County, and widening of the highway to the east as it continues along the Missouri River floodplain. MoDOT is assessing traffic volumes and peak hour movements from significant industrial users, such as the Hunt Midwest cave facilities and the auto plant transfer facilities. Final improvement plans have not been announced.

Transportation Strategies

The County must continue to work cooperatively with MoDOT staff to monitor improvement plans and funding programs. One of the most critical transportation planning issues is the need to provide critical connections between major transportation corridors and addressing how county road facilities interface with the state highway network. Such cooperation includes providing an adequate roadway network to serve future growth in the Urban Service Tiers and throughout unincorporated Clay County, implementing the following action steps:

- Finance county road system maintenance and road improvements through an equitable and efficient combination of taxes, fees, and exactions;
- Evaluate financing mechanisms to equitably assign the costs of road construction and maintenance to those who benefit;
- Target public funding of road improvements to the Urban Services Tier to encourage compact contiguous development;
- Prepare county capital budgets that prioritize road improvements in areas most contiguous to existing development and incorporated cities, with excess funds allocated to improving roads in the rural areas;
- Require new development to provide road right-of-way for the ultimate development of the area;
- Require new urban development to provide upgraded and/or paved streets constructed to county highway department standards; and
- Follow access management standards whenever residential curb cut requests (driveways) are submitted on major streets designated on the **Major Roads Map** under county control.

Access Control

Local access control policies, along with projected traffic volumes, affect specific design characteristics associated with each functional classification. For example, higher traffic volumes, such as those exceeding 10,000 vehicles per day, warrant construction of a four or five-lane major road to effectively move traffic. Conversely, traffic volumes between 4,000 and 10,000 vehicles per day can be accommodated by a two-lane major road that has turn bays, good signalization and intersection spacing, and private driveway access control. In many cases, a well built two-lane arterial road can function as well as a four-lane street at less cost.

Adopting an access control policy in Clay County will maintain existing capacity by controlling access to connector roadways while improving traffic flow as new development occurs. Constructing intersection improvements, turn bays, medians, and/or providing traffic signal timing is a method to increase road traffic-carrying capacity. Conversely, adding cross streets, driveways, traffic signals, and other stop controls can decrease capacity.

ROADWAY FINANCING

There is a wide range of possible funding sources for roadway improvements in unincorporated Clay County. Primarily, financing may be from public sources including local, state and federal taxes and programs; and private financing, such as contributions from or impositions upon an individual developer who creates a development and generates traffic in the County.

Impact Fee for Major Roads

Clay County imposes a road impact fee as a monetary exaction on new development, imposed as a part of the development approval process. The County needs to update its fee policy and procedures to assure compliance with the *Dolan* "rough proportionality" test when assessing and spending its fees.



Maintenance responsibilities of Clay County extend throughout the unincorporated regions of the County.

Road impact fees are thought to be exempt from the election requirements of the Hancock Amendment if structured as a impact fee consistent with Missouri case law; otherwise, an election would be required at which a majority of those voting on the question would be required to approve its imposition. All road impact fees collected by the County must be spent for improvements to the road network that benefit those who paid the fee. This generally is done today by Clay County; however, the County should amend its procedures by designating multiple geographic areas (Impact Fee Areas) within the County for imposition of the fee. The fees collected from developers within each area will then be spent for *Major Roads* (connectors not improved by private developers as a condition of regulatory approval) within that area. (This is contrasted with excise taxes, which would be collected countywide and be spent on public infrastructure anywhere in the County.)

Other Roadway Financing Options

The following is a summary of certain financing options that may be available to Clay County for funding major road improvements. The term "major road improvements" is defined for purposes of construction, reconstruction or major maintenance (milling and overlay) of connector streets.

It must be emphasized that the options summarized in this section merely represent a list of possible financing tools. In-depth research must be conducted to determine whether or not each of these tools is a viable option for the County. It is likely financing strategies ultimately selected will incorporate several of these options. Some of the options may be mutually exclusive and some of the options may be of limited utility. In addition, some mechanisms are designed to fund improvements to serve demand created by new development while others are designed to fund improvements associated with existing roadway deficiencies.



In order to avoid attaching any significance to the placement of options in the report, the options have been listed in alphabetical order.

Two-lane road in rural Clay County—access control and impact fees need to be continually re-evaluated over time.

- Automobile Sales Tax;
- Capital Improvement Sales Tax;
- County Access Road Tax (CART);
- Capital Improvements Sales Tax;
- County Special Road and Bridge Tax;
- Federal Highway Administration Programs;
- General Obligation Bonds;
- Government Programs;
- Neighborhood Improvement Districts;
- Real Estate Tax;
- Right-of-Way Exactions;
- Road Impact Fees;
- Special Road District;
- Tax Increment Financing;
- Transportation Corporations;
- Transportation Development Districts;
- Vehicle Fees; and
- Excise Tax.

Automobile Sales Tax: A sales tax on the vehicle purchase price that provides funding for roadway improvements.

Capital Improvements Sales Tax. Missouri statutes authorize counties to impose a sales tax on all retail sales in the County for the purpose of funding capital improvements, including operation and maintenance. The sales tax must be authorized by the County Commission and approved by a simple majority of the voters in an election. The funds collected from this tax must be deposited in a special trust fund and may be used solely for the purpose designated in the vote which is approved by the citizens of the County.

Capital Improvement Sales Tax: A county-wide capital improvement sales tax may be earmarked for specific roadway projects.

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



County Special Road and Bridge

Tax. Missouri statutes authorize a county commission in a county

Intersection in rural Clay County—where sight lines can be at obtuse angles on old alignments.

which has not adopted an alternative form of government to levy a tax in addition to other taxes which does not exceed thirty-five cents on each one hundred dollars of assessed valuation to be deposited in the County's "Special Road and Bridge Fund." The money collected in this fund may be used for road and bridge purposes only. Where any such tax is collected from any property located in a special road district, four-fifths of the tax is credited to the special road district.

Excise Tax. An excise tax is a method of raising revenue by levying a tax on a particular activity: to raise revenue, not to pay for costs created by the activity upon which the tax is imposed. Unlike a road impact fee, the funds collected from an excise tax need not be "earmarked" for a particular purpose, such as road improvements. It has not been definitively determined, under Missouri law, that an excise tax is available to counties such as Clay County. Research has not uncovered any specific authority for the County to impose an excise tax, but has uncovered limitations in the Missouri Constitution and Statutes which may prohibit an excise tax. Therefore, a road impact fee should be continued by Clay County, rather than excise taxes initiated.

Federal Highway Administration Programs. The Intermodal Surface Transportation Efficiency Act of 1991 (as amended) provides federal-aid programs for transportation improvements. The federal-aid program available to Clay County is the Surface Transportation Program. This is a block grant program for any roads that are not functionally classified as a local or rural minor collector,

CHAPTER 5 MAJOR ROAD PLAN

referred to as Federal-aid roads. These funds are distributed to the states and the State must set aside 10 percent for safety construction activities and 10 percent for transportation enhancements, including environmental-related activities. 30 percent can be used in any area of the State.

General Obligation Bonds. Subject to certain constitutional and statutory limitations, primary of which is a constitutional limit on the total amount of debt the County can incur based upon a set percentage of its assessed valuation, the County has the ability to raise funds for street improvements by the issuance of general obligation bonds. General obligation bonds are long-term obligations of the County backed by the full faith and credit of the County.

Missouri statutes authorize the County Commission to issue bonds for the “construction, reconstruction, improvement, maintenance and repair of any and all public roads, highways, bridges and culverts” within the County, and includes the acquisition of property through eminent

domain powers. The proceeds from such bonds must be kept as a separate fund to be known as “The Road Bond Construction Fund.” These funds may also be used in the construction, reconstruction, improvement, maintenance and repair of any street, avenue, road or alley in any incorporated city, town or village if that construction or improvement forms part of a continuous road, highway, bridge or culvert of the County.



Large-lot subdivision in rural Clay County.

domain powers. The proceeds from such bonds must be kept as a separate fund to be known as “The Road Bond Construction Fund.” These funds may also be used in the construction, reconstruction, improvement, maintenance and repair of any street, avenue, road or alley in any incorporated city, town or village if that construction or improvement forms part of a continuous road, highway, bridge or culvert of the County.

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

Neighborhood Improvement Districts. State statutes authorize the creation of a Neighborhood Improvement District (NID). Under the NID statutes, particular areas of land may be designated by the County Commission as a “neighborhood” that will benefit from a particular public improvement. Landowners within each neighborhood must authorize the formation of the NID either by a vote of approval or by execution of a petition to the County Commission. The boundaries of the NID are created at an election and the approval percentages are the same as those for approval of general obligation bonds. State statute requires a landowner petition to create a NID, which must be signed by the owners of record of at least two-thirds by area of all real property located within the proposed NID. If approved, the County Commission may authorize

the issuance of general obligation bonds to finance construction of an improvement, such as road improvements. To secure the bonds, a portion of the total cost is assessed against each landowner within the NID and the special assessment becomes a tax lien against the property. The method of apportioning assessments among the property owners within the NID is established prior to the creation of the NID. The bonds may be issued without a vote of the public if the County agrees to rely on existing revenues and surpluses as a source of repayment in the event that the special assessments made against property in the NID prove to be insufficient to fund repayment. Bonds issued count against the County's debt limit. A NID allows the County to construct an applicable improvement sooner than other financing methods such as road impact fees.

Real Estate Tax: Roadway improvements financed by a real estate property tax.



Rural Clay County road maintenance is an on-going obligation; and conversion of chip and seal roads to asphalt roads must be funded over time where larger traffic volumes warrant.

Right-of-Way Exactions. Exactions are requirements imposed as part of the development approval process that require a person seeking such approval to give something to the County or to a common maintenance entity as a condition of such approval. Traditionally, counties have required developers to dedicate right-of-way for streets within the development and for streets abutting the development as a condition of a specific development's approval requiring such a dedication is an exercise of the County's regulatory police power. Typically, these right-of-way exactions have been imposed at the time of zoning or subdivision approval, with the understanding that the dedication would take place at no cost to the entity requiring the dedication. In 1994, the United States

Supreme Court decided the case of *Dolan v. City of Tigard*, in which it held that any requirements for the dedication of land imposed as a condition of development approval must be roughly proportional to that development's contribution to the need for new public facilities. Further, the Supreme Court held that the local government imposing the exaction must make an "individualized determination" regarding the proportionality between the exaction and the impacts caused on public facilities.

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

Road Impact Fee. (See prior discussion)

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Special Road District. The Missouri statutes authorize the County to form a special road district comprised of any portion of the territory of the County as deemed necessary and advisable. Once properly formed, the road district has the authority of a public corporation for public purposes. The commissioners of the road district maintain sole, exclusive and entire control and jurisdiction over all public highways, bridges and culverts, other than roads and highways controlled by MoDOT, and may improve, repair and construct such highways, bridges and culverts or have that work completed by contract. The road district may issue bonds, levy a special tax for road improvements or repairs, and issue special assessments in accordance with the procedures set forth in the statutes.

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

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

Transportation Development Districts. Missouri statutes authorize the County to create transportation development districts encompassing all or a portion of the County. The purpose of a transportation development district is to "fund, promote, plan, design, construct, improve, maintain, and operate one or more [transportation] projects or to assist in such activity." A

transportation development district is created by submission of a petition to the circuit court from either 50 registered voters in each county in the district or by the County Commission. The petition must identify the district's boundaries, each proposed project, and a proposal for funding the projects.

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

A transportation development district may fund approved transportation projects (subject to the approval of the County or MoDOT, depending upon the project) utilizing one or more financing mechanisms authorized in the election. The financing mechanisms available are special assessments, property taxes, sales taxes and tolls. After enactment, the sales tax is subject to a citizen petition for an election to repeal the tax.

Vehicle Fee: A vehicle license fee may be used to pay for roadway improvements. The licensing fee is based on state statutes and is calculated in the same manner as the automobile sales tax.

CLAY COUNTY ROAD OPTIONS

Road impact fees are a viable program for Clay County to continue for generating long-term significant revenues for improving major roads; however, the amount of the fee collected with respect to each development cannot exceed the cost of constructing improvements to the road network caused by that development. Therefore, the Clay County road impact fee program should be updated to establish "Impact Fee Areas" with their own funds discretely designated for each area. The funding formula should continually be updated through public hearings as costs increase. This is a more appropriate fee than an excise tax. Several other counties in Missouri impose impact fees for road improvements as a condition of regulatory approval for developments.

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MAJOR ROAD PLAN

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Chapter 6. Midwest National Air Center

INTRODUCTION

This chapter addresses economic development opportunities for the Midwest National Air Center (formerly the “Clay County Regional Airport”). The Midwest National Air Center (MNAC) represents a growth opportunity for airport-related business development in Clay County and the Kansas City metropolitan area. The new name better reflects the regional and national service provided by the County airport.

The airport land and land parcels adjacent to the airport offer unique opportunities to enhance airport-generated business and economic development. Recent improvements at the MNAC have created a basis for new and existing business expansion, and have positioned the airport to emerge as a major center for aviation and business in the County. As part of the Comprehensive Plan update an assessment of economic conditions was conducted and recommended strategies were prepared. The five tasks of this assessment included:

- Airport Area Economic Conditions Assessment;
- Benchmark Survey to Compare the Airport to other actively expanding general aviation airports in the metropolitan area;
- Project Airport Area Commercial and Industrial Demand;
- Airport Business Expansion Strategies; and
- Review of the airport zoning overlay district as it relates to the business expansion strategy for the airport area.

MIDWEST NATIONAL AIR CENTER

The MNAC serves as a viable, growing center for air commerce in metropolitan Kansas City and surrounding areas. As stated on their web site, www.claycogov.com, “The airport enhances business and economic development in Clay County by fulfilling local and transient corporate and general aviation needs. The completion of \$6.1 million in upgrades and improvements has created a solid foundation for business expansion in the northeast quadrant of the Kansas City metropolitan area. Because of these enhancements, the Midwest National Air Center is poised to emerge as a major center for aviation and business in Clay County.”

The MNAC web site continues: “Owned and operated by Clay County, Missouri, through the Clay County Commission, MNAC is situated on approximately 608 acres (as of end of 2007) at Rhodus Road and US 69 Highway, on land that is being considered for annexation by Kearney,



Midwest National Air Center

CHAPTER 6 MIDWEST NATIONAL AIR CENTER

Missouri. This prime location is a nexus of air, rail and highway access, ideally positioned for future development and perfect for light industry such as shipping, warehousing and distribution centers.”

Multi-modal access may be provided from an adjoining Union Pacific Railroad line to the immediate east of the MNAC. Services available at the MNAC include:

- Aircraft fueling facility;
- Airport terminal building/meeting room, with pilot's lounge, meteorological weather, intra/internet access, restroom/shower facilities, supplies (oil, etc.), pilot supplies;
- Aircraft maintenance hangars;
- Heated aircraft maintenance building (70'x80');
- Aircraft hangars, tie-downs, shade port;
- Instrument Landing System for lower landing minimums;
- Automated weather observation system (2008); and
- Engine preheat/hangar or engine manifold.



Vacant field adjacent to Union Pacific Railroad line.

Planned for future General Aviation service are aircraft tug with APU 14/28/30 volt start assist, fuel truck, and related FBO services. The County is constructing a 9,600 sq. ft. clear-span maintenance hangar for major airframe and power plant maintenance services, including aircraft charter service and (in the future) aircraft rental.

In addition to these existing and planned improvements, another future long-term possibility is to extend the existing runway to 7,000 feet in length to accommodate commercial air travel. This increased activity would have the potential to generate additional economic development opportunities surrounding the airport. Nearby highway and railroad access could contribute to the development of a multi-modal hub with airport-compatible development.

Development possibilities around the MNAC are impacted significantly by the area's natural drainage system. Three generally north-south watershed areas drain from north to south and meet in the Mosby / Prathersville area where they drain into the Fishing River. On the west is the Muddy Fork / Clear Creek basin, in the central area is Carroll Creek, and Williams Creek is to the east (**Ref. Chapter 2**).

Airport Land Use Study

A *Clay County Airport Land Use Study* was completed in 1994 to evaluate development factors and trends in the vicinity of the airport and to address future land uses to allow expansion and unrestricted operation of the airport and to maintain the facility from obstructions and hazards to air navigation. The Midwest National Air Center Area Overlay district (A-O) was subsequently adopted to regulate and restrict the height of structures and objects of natural growth and otherwise regulate the land uses in the vicinity of Midwest National Air Center to:

1. Protect persons and property near the airport,
2. Provide for aircraft safety in the use of the airport,
3. Regulate land uses and development to ensure compatibility with the airport, and

4. Provide a comprehensive zoning plan to provide for orderly development of land near the airport.

The regulations of the A-O district are supplementary to the regulations of the underlying zoning districts. In the event of a conflict between the regulations of the overlay and any other regulations applicable to this same area, the more stringent limitation or requirement govern and control to the extent of such conflict.

MIDWEST NATIONAL AIR CENTER PLAN

This section of the County Comprehensive Plan addresses the issues and opportunities for commercial and industrial development adjacent to the Midwest National Air Center. This section is presented in three parts.

- I. Airport Business Park Development in the Region
- II. Clay County Industrial Market Description
- III. Projected Midwest National Air Center Industrial Demand

Airport Business Park Development

In a metropolitan area with seven general aviation airports and over 230 million square feet of industrial buildings, attracting industry and aviation-related business activity is extremely competitive. Business parks adjacent to general aviation airports have a varying degree of success in attracting non-aviation related businesses. Because the general aviation airports in the region are publicly owned, the opportunities for accomplishing economic development are enhanced by local officials willing to offer the most competitive “deal” to prospective companies through a combination of service, availability of infrastructure, attractive lease rates and financial incentives.



Midwest National Air Center

The most common business role for general aviation airports is support of corporate needs and transportation, as opposed to shipping materials and products. Companies and other park tenants have been lured to the region’s two most developed airport business parks (Downtown Wheeler and New Century in Olathe) as a result of a combination of the following:

- Financial incentives – including cheaper land leases, lower building rents and financial incentives;
- Complementary transportation (good access to Interstate Highway and rail service);
- Availability of infrastructure;
- Proximity to a skilled workforce;
- Proximity to other support services; and
- Aggressive and on-going marketing of the airport, its buildings and/or sites.

CHAPTER 6 MIDWEST NATIONAL AIR CENTER

The most common business role for a general aviation airport is support of corporate activity and as an enhancement to a county's ability to compete for new business. However, very limited production and manufacturing is enhanced by an airport. The most successful airport business park in the Kansas City region is the New Century AirCenter located in Olathe, Kansas owned by Johnson County government. The airport is slightly further away (driving time) from downtown Kansas City as is the Clay County Midwest National Air Center. Located southwest of downtown Kansas City along Interstate 35, New Century AirCenter offers multi-modal opportunities with direct access to Interstate 35 and rail and potential developable sites ranging from one to 100 acres. The airport's large business park footprint is the result of the amount of land that was transferred to Johnson County from its former use by the federal government as the Olathe Naval Air Station.

Airport business park development not only requires public investment but is a long term process. Johnson County assumed ownership of the closed air station site in 1973. Since then, New Century has grown to serve 45 businesses. It is important to note that only five of the park's 45 businesses need to be near the airport, according to New Century Airport management. Otherwise, the other tenants

have no connection to the airport. The non-aviation businesses are located in the New Century AirCenter because Johnson County has been very aggressive recruiting industry and have made attractive leasing deals. Johnson County has invested in major infrastructure improvements to accommodate new industry.



Vacant land south of Midwest National Air Center

2006 did Kansas City engage a major national commercial real estate company as a development partner for the 640 acre KCI Business Airpark, located on the southeast corner of the airfield at Kansas City International Airport.

The KCI Business AirPark tract offers direct runway access for prospects. The city's new development partner is actively seeking tenants on the KCI Airpark property, including air cargo facilities, logistics firms, distribution facilities, light manufacturing and commercial office space. KCI incentives also include one of the nation's largest Foreign Trade Zones and have direct access to two Interstate highways which gives the AirPark certain strategic advantages.

A survey of the five most active general aviation airports in the region illustrates some of the key comparable characteristics of both the airport facility and related characteristics that reflect how each facility is positioned for economic development (**Ref. Table 6.1 - Midwest National Air Center**

Another example of the long term time frame required to realize an airport's economic development is Kansas City International Airport (KCI). Although not a general aviation facility, it has taken three decades for KCI to begin to fulfill its role as a meaningful contributor to the Platte County economy beyond the commercial passenger-related uses. Though KCI opened in 1972, only in

Benchmark Survey). Each of the general aviation airports has or are seeking non-aviation tenants. The characteristics are measured and categorized into three areas as follows:

- Airport facility profile;
- Demographic and economic setting; and
- Non-aviation transportation and services.

An airport's business park development will be tied to the availability and quality of airport related services offered, the cost of doing business at MNAC, as well as incentives to match those available at other airport-related business parks in the region. More specifically, the factors in each category and relevance to growing economic development are addressed below.

Airport Facility Profile

General aviation facilities are most impacted by the following profile attributes:

- a. Active Runway – The length of the airport's runway determines the type and level of potential aircraft activity at the facility. Improvements, such as ILS service, also have impacts.
- b. Non-Aviation office Space – The existence of surplus office space for lease not required for aviation related uses provides a facility with a built-in opportunity to recruit new business.
- c. Airport Acreage – The acreage at the airport that is available for lease to non-aviation businesses.

Demographic and Economic Setting

Economic development is critically linked to the prevailing and projected economic conditions of an area's resident characteristics, prevailing business climate and the economic environment in which a new business park is established. The industry types most commonly located at or around other airport business parks include:

- Manufacturing,
- Wholesale trade,
- Transportation and warehousing.

In comparison to the Kansas City area, Clay County's economic strength is in the manufacturing, transportation and warehousing sectors. Of the five central counties in the Kansas City metropolitan area, Clay County represents 13 percent of population, 11 percent of the area's business establishments and 10 percent of the area's employment. Nevertheless, Clay County exceeds its fair share in the following areas:

- The number of persons employed in manufacturing in Clay County are 18% of the five county metropolitan market;
- The number of persons employed in transportation and warehousing in Clay County represent 14% of the total area;
- The number of manufacturing establishments in Clay County are 12% of the area's total;
- The number of transportation and warehouse establishments in Clay County represents 17% of the area.

To provide a more thorough and meaningful analysis and project the demand for commercial and industrial development adjacent to Midwest National Air Center, the most relevant demographic and economic factors to competitively assess the area include the following:

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- a. County Median Household Income – Income levels reflect the economic health and well-being of an area’s residents and enhance the demand for and attraction of business growth.
- b. County Labor Force – The size of the County workforce influences the number of new businesses likely to be attracted to an area when a company is considering competing locations.
- c. Percent of County’s Workforce in Manufacturing, Transportation and Warehousing – These figures reflect the skills of the County’s labor force most likely to be employed in the future airport business park and will further influence corporate decision-makers when deciding where to locate their industry.
- d. Property Tax Rate – Although airport business parks are located on public land, it is not uncommon that a tenant will be obligated to make payments in lieu of taxes (PILOTs) to the local and/or state government. Therefore, the comparative property tax rate will influence the degree of incentives and/or costs offered and/or imposed on prospective park tenants.
- e. Vacant Industrial Space – The total amount and amount of vacant commercial space in an area is a reflection of the relative health of the County’s business economy. (See related data in Table 6.2 - “Kansas City Metropolitan Area Industrial Market Overview 2006.”)
- f. Projected Employment Growth – This MARC data measures how Clay County’s employment base is projected to grow in comparison to the total metropolitan area.

Non-Aviation Transportation and Services

The demand for air service is also a function of the airport’s proximity to other modes of transportation, trucking access to major highway and rail access for shipping of certain types of goods and commodities. Access and availability of non-aviation transportation links are critical to support and enhance the development potential around an airport. The most relevant factors included in this benchmark comparison include:

- a. Highway Access – Although not mandatory, direct access to the Interstate Highway system is the most important transportation factor for a majority of industrial users. Where direct Interstate access is not available, access to a 4-lane state or federal highway is second best, assuming that the 4-lane highway offers direct connection to the Interstate System, as found near MNAC in Liberty and Kearney.
- b. Rail Line Availability – The use of a rail line or spur is limited to certain types of businesses requiring the movement of large supplies and/or overweight products and materials. As a result, rail is not a variable to a majority of prospects attracted to an airport area site. Nevertheless, given the competitive industrial recruitment environment, the opportunity to offer rail access will expand the potential base of prospects for Midwest National Air Center and other airport business parks that can present this option. Although rail to truck connections for freight and materials are more widely sought than rail to air linkages, a majority of general aviation airports are not able to offer a rail alternative in their airport business park.
- c. Lodging Services – Pilots and their passengers routinely prefer or need to stay in close proximity to an airport for both practical and convenience reasons. Hotels and motels located near an airport enhance the appeal of the facility to pilots and their customers.

The following table compares Midwest National Air Center to five other general aviation airports in the region.

Table 6.1 - Midwest National Air Center Benchmark Survey

Airport	Midwest National Air Center	Lee's Summit	New Century	Executive Airport	Wheeler Downtown	Skyhaven CMU
City, County, State	Kearney, Clay, MO	Lee's Summit, Jackson, MO	Olathe, Johnson, KS	Olathe, Johnson, KS	Kansas City, Clay, MO	Warrensburg, CMU Johnson, MO
Airport Facility Profile						
Based Aircraft	43	175	177	228	224	43
Primary Runway Length	5,504'	4,016'	7,339'	4,098'	7,002'	4,206'
Air Traffic Control Tower	No	No	Yes	Yes	Yes	No
Jet Fuel Available	Yes	Yes	Yes	Yes	Yes	Yes
Total Airport Acreage: 2007	608	433	2,600	568	700	402
Acreage Available for Development	34 Available but no w/ww	Would require land acquisition	1,200 (includes hangers)	Would require land acquisition	Would require land acquisition	105 Available but no w/ww

Source: RCA and BWR, 2007

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Table 6.2 - Midwest National Air Center Benchmark Survey—Continued

Airport	Midwest National Air Center	Lee's Summit	New Century	Executive Airport	Wheeler Downtown	Skyhaven
Demographic and Economic Setting						
County Median Household Income 2004	\$54,021	\$42,351	\$68,013	\$68,013	\$54,021	\$38,345
County Labor Force 2000	111,784	343,236	286,807	186,807	111,784	25,747
% Workforce in Manufacturing	17%	9%	7%	7%	17%	16%
% Workforce in Transportation & Warehousing	6%	2%	4%	4%	6%	4%
Property Tax Rate (per \$1,000 of improvements)	\$2.65 (Kearney)	\$3.25	\$3.09	\$3.09	\$3.09	\$1.98
County Industrial Vacancy Rate	8.0%	8.1%	6.8%	6.8%	??%	N / A
Projected County Employment Growth 2010 – 2030	28%	18%	32%	32%	28%	KC Metro: 24%
Source: U.S. Decennial Data						
Non-aviation Transportation and Services						
Nearest Interstate access	I-35; 3.8 miles	I-470; 1.2 miles	I-35; ½ mile	I-35; 4 miles via 151 st St.	I-70; 0.8 miles	I-70; 19 miles
Nearest 4 lane highway access	U.S. 69; 0.4 miles	I-470; 1.2 miles	I-35; ½ mile	U.S. 69; 3 miles	U.S. 169 Entrance	U.S. 50 Entrance
Rail line availability; Nearest access	Spur adjacent: Burlington Northern	None; Union Pacific 2 miles	On-site; Burlington North Santa Fe	None; No spur possible or planned	None on site; Burlington Northern across 169 Highway	None; Union Pacific 2 miles
Distance to Nearest Lodging facility	3.8 miles in Kearney	1.2 miles in Lee's Summit	1.8 miles in Gardner	3.9 miles in Olathe	1.4 miles in Downtown KC	3.3 miles in Warrensburg
Non-aviation office space for lease available	No	No	yes	no	yes	yes

Source: Kansas City Area Development Council; AirNav; Yahoo maps; Clay Council Economic Development Council; MARC; U.S. Census; Bureau of Economic Analysis; Co-Star. Grubb & Ellis Real Estate. BWR

Advantages of MNAC

In addition to the advantages identified in the Airport Benchmark Survey, Midwest National Air Center's advantages include:

- New airport-related infrastructure,
- Location on the edge of the expanding metropolitan area with population and business growth moving in the direction of the facility,
- A pro-active business climate in the County,
- Lack of encroachment to date by adjacent land uses toward the airport which can "land-lock" a facility over time,
- Competitive prices for aviation-related services, and
- Professional, entrepreneurial management of the Clay County airport facility.

Challenges of MNAC

For all its strengths, the Midwest National Air Center will face challenges as it competes for new business development—as does any such facility. Its challenges include several constraints:

- The amount of land available for development is small, thereby potentially limiting the number of potential large tract users;
- The distance to the Interstate Freeway system is greater than the competitors in the metropolitan area;
- The 4-lane divided US 69 Highway has signalized intersections and other movement constraints not under the control of Clay County, which lengthens the travel time and traffic flow of the route to and from the airport;
- The appearance of the "gateway" to Clay County from the airport is attractive in most sections of the highway, but not in all sections, challenging the County to address this long-term land use issue; and
- Lodging accommodations for pilots and airplane passengers is less convenient than other general aviation airports.

There are many factors that must continually be re-evaluated that affect airport operations, airport maintenance, and personnel needs to serve the airport facility. In summary, when comparing Midwest National Air Center to the other airports surveyed, MNAC offers the following strengths:

- Projected employment growth in Clay County through 2030 which exceeds the region's employment growth rate;
- The above average percentage of the County's workforce already engaged in manufacturing provides a more suitable labor pool for prospective businesses;
- Property tax rates, if paid in full and in lieu, are lower than tax rates serving other airports—though taxes and other fiscal source should continually be re-evaluated; and
- The BNSF rail line along the east edge of the airport provides more transportation / economic development opportunity not commonly available at other general aviation airports.

Finally, there are modern societal factors—our national effort against terrorism, among them—that favor small, general aviation (GA) airports. Indications are that more and more airport users will favor a small, convenient GA airport for ease of entry and use, as compared to larger commercial airports.

Clay County Industrial Market Description

Clay County is currently home to over 46 million square feet of industrial buildings representing almost 20 percent of the five county Kansas City metropolitan industrial inventory. The largest industrial park and buildings in Clay County's existing space are concentrated in Executive Park/Northland and North Kansas City. In the past decade, the region has absorbed approximately

1,200,000 square feet of industrial space annually according to data maintained by several area commercial real estate companies. A summary of the metropolitan area's industrial market is presented in the following **Table 6.3 - Kansas City Metropolitan Area Industrial Market Overview 2006**.

Table 6.3 - Kansas City Metropolitan Area Industrial Market Overview 2006

Metropolitan County	Total Space	Percent of Metro Area Market	Vacant Space	Vacancy Rate
Clay County	46,018,939	19.9%	3,632,932	7.9%
Jackson County, MO	88,635,538	38.4%	7,161,794	8.1%
Wyandotte County, KS	39,183,954	17.0%	2,750,639	7.0%
Johnson County, KS	49,025,398	21.2%	3,330,487	6.8%
Platte County, MO	7,852,537	3.4%	819,603	10.4%
TOTALS	230,711,366	100%	17,695,455	7.7%

Source: Block & Company; Clay County EDC; City of North Kansas City.

As illustrated by the data in Table 6.3 for the Kansas City Metropolitan Area industrial market in 2006, Clay County's vacancy rate is approximately the same as the metropolitan area. On average, industrial rental rates for warehouse and bulk industrial space in Clay County are higher than the metropolitan area and lower for light industrial and flex space (**Ref. Table 6.4 – Industrial Real Estate Rental Rate Comparisons 2006**). These rental rates are a direct reflection of the type of industrial demand sought by tenants in Clay County, i.e., the County's strongest demand is for warehouse space while having weaker demand for light industrial and flex space.

As of January 2007, the three cities nearest to Midwest National Air Center account for eight percent of the County's vacant industrial space. According to the Kansas City Area Development Council, the three nearby cities report approximately 300,000 vacant square feet of industrial building including 244,000 square feet in Liberty; 50,000 square feet in Kearney; and 10,000 square feet in Excelsior Springs.

Table 6.4 - Industrial Real Estate Rental Rate Comparisons 2006

Type of Space	Kansas City Area	Clay County (excluding North Kansas City)	Clay County vs. Kansas City Area
Warehouse / Bulk Industrial Space:			
Average Rent (per square foot)	\$4.16	\$4.54	9% or \$0.38 per square foot <u>above</u> average rental rate
Light Industrial / Flex Space:			
Average Rent (per square foot)	\$6.72	\$6.26	8% or \$0.46 per square foot <u>below</u> average rental rate

Source: Block & Company, Inc.

The nearest major industrial park to the Clay County airport is Heartland Meadows in Liberty. Heartland Meadows is a 260 acre light industrial park with land still available for new development and is located at U.S. Highway 69 off I-35. Heartland Meadows began development in 1991. There are a wide range of light industrial and manufacturing tenants. Heartland Meadows is considered by the commercial real estate industry as a quality industrial park that is well positioned in the regional market as a result of its Liberty location, access to highways, professional marketing by one of Kansas City's leading commercial real estate companies and on-going park maintenance.

PROJECTED MIDWEST NATIONAL AIR CENTER INDUSTRIAL DEMAND

In order to properly plan for a new airport business park at the Clay County airport, an industrial demand analysis has been prepared and projected through 2027. The acreage adjacent to the airport planned as an airport park has the potential to absorb approximately 300,000 square feet of commercial and industrial buildings over the next 20 years. This conclusion is based in part on the growth of aircraft operations at MNAC which serves the airport's long term economic development strategy. Increasing aviation activity provides exposure for the potential opportunities in and around the airport, although as noted in the New Century Airport experience, airport use in and of itself does not translate into business activity.

New commercial and industrial development adjacent to Midwest National Air Center will compete with other existing areas within Clay County, especially in Executive Park / Northland Park and Heartland Meadows in Liberty. While these in-county competitors lack immediate airport access, these business parks have infrastructure in place and vacant ground ready for development.

A new business park at Midwest National Air Center will require time, effort and further investment to evolve into a successful business park for Clay County because of both the amount of competition for airport business park activity and the site preparation and infrastructure improvements required—primarily extension of sanitary sewer, either as a force main or other facility, from Kearney. Industrial absorption at the business park will also be constrained by the site's physical characteristics including:

- The amount of developable land for airport business park usage;

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- The current limitations on direct highway and rail accessibility;
- The rate of growth in northern Clay County in comparison to competing suburban settings in the Kansas City metropolitan area.

Key assumptions incorporated into the demand analysis include:

- The airport’s business park will begin to be aggressively marketed, and recruitment for tenants will be in place by 2011 as sewers and other infrastructure become available to serve prospective business tenants.
- Clay County will capture 15% of the region’s total industrial demand over the next decade and grow to 16% of the industrial demand as the County’s share of the regional population climbs and vacant land in other parts of the metropolitan area becomes less available.
- The average annual demand for the region will increase from 1.2 to 1.3 million square feet as the region’s population continues to grow.
- A new business park at Midwest National Air Center will capture five percent of Clay County’s industrial demand over the next decade and grow to 10 to 12 percent of the County’s demand over the following decade as residential development continues to move north in Clay County and other business parks in the County begin to mature and have less available land.

Therefore, new business development in and around Midwest National Air Center will require anywhere from three to seven acres on average for a total of approximately 25 to 30 acres by 2027, as shown in **Table 6.5 – Industrial Space and Acreage Demand Analysis for MNAC**, below.

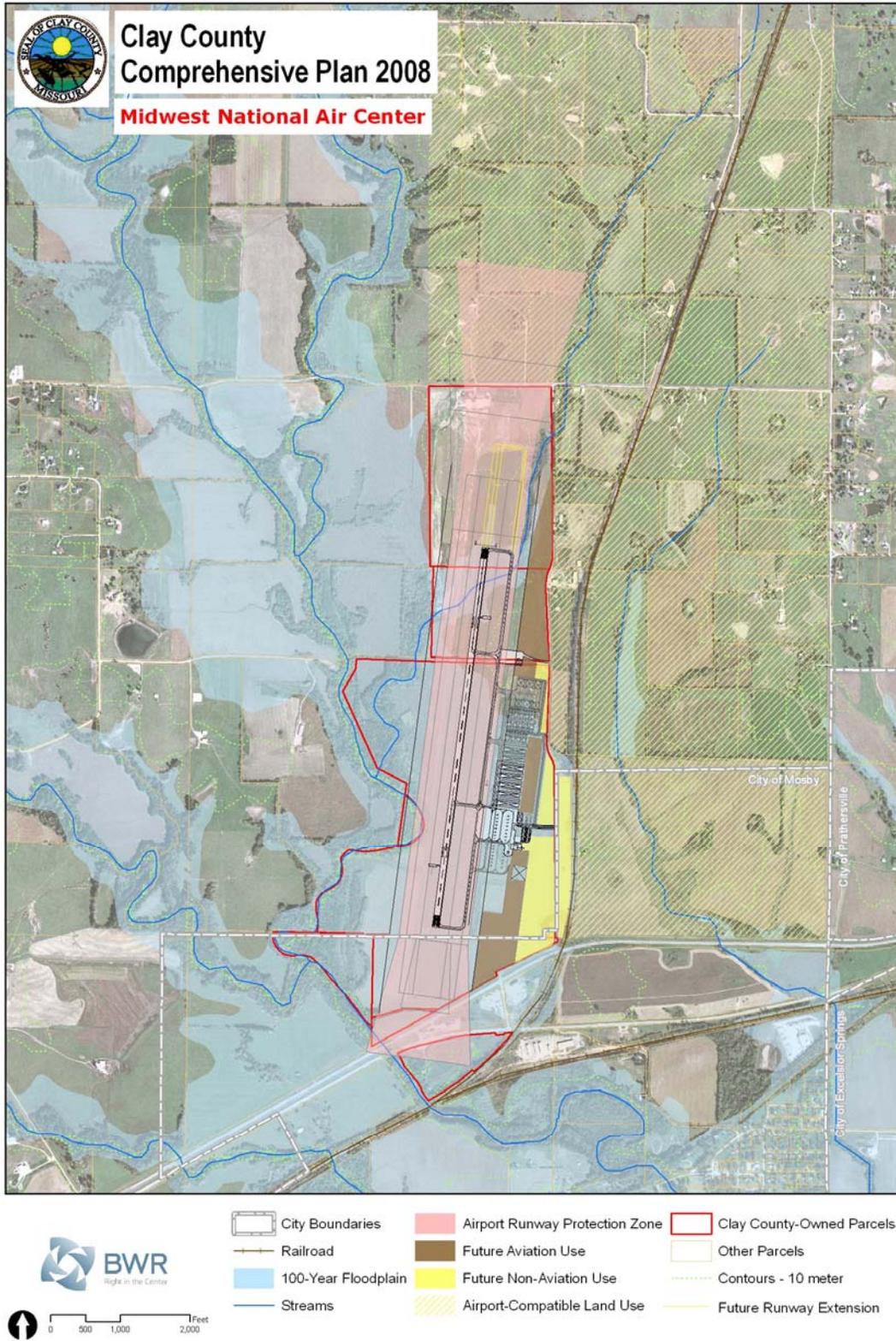
Table 6.5 - Industrial Space and Acreage Demand Analysis for MNAC

Demand Component	2007 – 2017	2017 - 2027	TOTAL 2007 – 2027
Annual Regional Demand (in square feet)	1,200,000 SF	1,300,000 SF	25,000,000 SF
Clay County Market Capture Rate of the Regional Market Area Total	15%	16%	15.5%
Average Annual Projected Clay County Demand (in square feet)	180,000 SF	208,000 SF	3,880,000 SF
Projected Midwest National Air Center Capture Rate of Clay County Total	5%	10 - 12%	7 - 9%
Average Annual Midwest National Air Center Park Demand (in square feet)	9,000 SF (beginning in '11)	20,000 – 24,000 SF	275,000 - 300,000 SF
=====	=====	=====	=====
Estimated Park Acreage Required (@ 25% site coverage)	5 - 8 acres	20 - 22 acres	25 - 30 acres

Source: Colliers International; Grubb & Ellis; RICHARD CAPLAN & ASSOCIATES.

In conclusion, as Clay County addresses the planning and infrastructure challenges of preparing the Midwest National Air Center for business development, the County can continue building a viable business airpark at the MNAC in the years ahead—including expansion to the north as shown in the graphic on the next page (**Ref. Figure 6-1: Existing and Future Development**).

Figure 6-1: Existing and Future Development



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Chapter 7. Implementation

Chapter 4 outlines planning objectives and policies for future land use and development. These are the framework for future land use decisions. Chapter 7 sets for key implementation recommendations through “Action Steps.” The recommendations are in three time frames:

- On-going Actions, which become the basis for policy decisions;
- Short-Term, which may be immediate or up to three years; and
- Longer-Term, beyond the next three years up to ten years—at which time the County will have updated the Plan based on changing conditions.

The Action Steps implementation matrix below includes the following components:

- ★ **Action Steps** - initiatives to implement the Comprehensive Plan recommendations.
- ★ **Implementation Responsibilities** - Primary participants and partnerships to work on the initiatives. These may include:
 - **County:** Includes various County Departments, Boards, and Commissions;
 - **Agencies:** May include Federal and State departments and agencies, Rural Water Districts, Farm Bureau;
 - **Private Sector:** May include developers and land owners;
 - **Residents:** May include homes associations, neighborhood groups, and homeowners;
- ★ **Time Frames** – A general phasing of actions and durations over which the initiatives are projected to occur. In addition to On-going Action Items listed below, two other time frames are identified in the matrix:
 - Short-Term – 1 to 3 years; and
 - Long-Term – beyond 3 years.

Table 7.1 – On-going Action Items for the Clay County Comprehensive Plan

On-Going Action Items				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Landowners / Developers	Residents
Environmental Management				
Limit development in the floodplain to recreational uses and parks.	★		★	
Reward development through the LESA system that is designed to retain the natural and visual character derived from topography, woodlands, streams, and riparian corridors.	★		★	
Preserve environmentally sensitive areas such as floodplains, wetlands, and wildlife habitats, especially within the Smithville Lake basin.	★	★	★	★
Land Use and Development				
Strongly encourage new urban development in the Urban Service Tiers to annex into an adjoining city before development.	★		★	

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On-Going Action Items				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Landowners / Developers	Residents
Require urban development in the unincorporated area to be consistent with the development policies and standards of the adjoining city.	★		★	
Direct non-residential development to where there are adequate infrastructure systems in place or planned.	★		★	
Promote subdivision and building designs that conserve water and implement low impact development design standards.	★	★	★	★
Encourage public water supply districts to construct, or require construction of mains and related facilities to an urban standard within the Urban Service Tier.	★	★		
Require new development to be connected to a public water supply.	★			
Require new roadways to be paved.	★			
Parks, Open Space, and Recreation				
Enhance the County's parks and open space areas by pursuing alternative funding sources such as special taxes, user fees, impact fees, and joint ventures with municipalities and the State of Missouri.	★	★		
Pursue land and easement donation / dedications for trails and bike lanes, and secure land or easements by landowners and developers of new developments.	★	★	★	★
Preserve the Fishing River floodplain corridor for permanent open space, natural resource preservation, and recreational uses.	★	★	★	★
Residential				
Require residential development located within close proximity of incorporated areas to meet the municipality's design standards.	★			
Allow flexibility in lot configuration, lot size, building setbacks, and other development standards to preserve open space and natural resources.	★			
Commercial				
Implement the Highway Corridor Overlay District Guidelines.	★	★	★	
Limit the location, number, and size of billboards along all county roadways and highways.	★			
Industrial				
Direct industrial uses, other than those of an agricultural nature or operations which need to be in remote locations, to locate within existing municipalities.	★			
Public Services and Facilities				
Encourage watershed protection and regional storm water management.	★	★	★	★
Implement a strategically planned and managed network of parks, conservation easements, and working lands with conservation value that supports native species, and maintains	★	★	★	

On-Going Action Items				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Landowners / Developers	Residents
natural ecological processes. Implement MARC "Green Infrastructure Plan."				
Transportation				
Actively participate in MARC and MoDOT transportation committees to see State and Federal funding for high priority throughout the County.	*			
Provide accommodations for bicycles on major secondary roadways.	*	*		
Require traffic impact studies for larger developments to evaluate and confirm the capacity of the surrounding road system before development approval.	*		*	
Coordinate with municipalities to reserve right-of-way and expand the parkway and boulevard network.	*	*		
Economic Development				
Coordinate with nearby municipalities to provide essential services that support industrial development around the Airport where urban services can be cost-effectively extended.	*		*	
Promote and fund a countywide tourism media effort as a joint effort with the municipalities in the County.	*	*		

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Table 7.2 – Short-term Action Items for the Clay County Comprehensive Plan

Short-term Action Items (1 to 3 years)				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Private Developers	Residents
Environmental Management				
Limit development in the floodplain to recreational uses and parks.	★		★	
Design and construct new development to retain the natural and visual character derived from topography, woodlands, streams, and riparian corridors.	★		★	
Land Use and Development				
Revise the County’s Land Development codes to implement the policies of the Comprehensive Plan.	★			
Implement practices in new developments that increase storm water infiltration and adequately treat storm water runoff before discharge.	★	★		
Adopt lighting standards that prevent light pollution and reduce sky glow.	★			
Parks, Open Space, and Recreation				
Implement a dedicated funding source for parks and recreation, and trails development, such as a dedicated sales tax for parks and trails.	★			
Amend the Land Development Code to include provisions for the purpose of securing land or easements for open space, parks, and trail facilities as part of the platting process.	★			
Eliminate “Greenway Conceptual Plan” in the County Park System Master Plan which called for “streamway parks” along trail routes linking neighborhood parks and/or sports play fields in the streamways from Smithville Lake.	★			
Residential				
Initiate public education sessions to familiarize the development community and current land owners and residents about the County service tier planning hierarchy.	★	★		
Commercial				
Revise the County’s Land Development codes to limit the location, number, and size of billboards along all county roadways and highways in accordance with the standards recommended by the Highway 69 Corridor Plan.	★			
Revise the County’s Land Development codes to require higher development standards for areas along major highways, city entrances, commercial and industrial parks, and transit corridors.	★			
Industrial				
Target the Midwest National Air Center for industrial development.	★	★	★	
Plan for expansion of industry north of the Midwest National Air Center as part of an extended runway—developed longer-term.				
Public Services and Facilities				
Establish in 2008 a countywide wastewater sewer district.	★	★	★	

Short-term Action Items (1 to 3 years)				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Private Developers	Residents
Examine options for a dedicated property tax to roads, bridges, parks, and storm water.	*			
Transportation				
Update the existing impact fee system for major road improvements to compensate the public for the impact on the surrounding road system and the diminution of road capacities from new development.	*	*		
Study and identify a corridor to provide an east-west major roadway connection between I-435 and I-35, generally in the vicinity of NE 120 th Street to accommodate future development.	*	*		
Examine options for a dedicated property tax to roads, bridges, parks, and storm water.	*			
Economic Development				
Establish and fund a countywide tourism media effort as a joint effort with the municipalities in the County.	*	*		
Establish an aggressive marketing and recruitment plan for tenants at the Midwest National Air Center by 2011.	*			

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Table 7.3 – Long-term Action Items for the Clay County Comprehensive Plan

Long-term Action Items (3-10 years)				
ACTION STEPS	IMPLEMENTATION RESPONSIBILITY			
	County	Agencies	Private Developers	Residents
Environmental Management				
Continue evaluating an updating LESA to effectively implement new and evolving environmental management objectives over time.	★	★		
Land Use and Development				
Continue evaluating the Land Use Tier System to effectively implement new and evolving development objectives in urbanizing areas over time.	★			
Parks, Open Space, and Recreation				
Preserve greenways, constrict multi-use trails, and pursue conversion of former rail corridors to trails to implement the <i>Northland Trails Vision Plan.</i>	★	★	★	★
Residential				
Promote urban density housing inside municipalities or in urban service tiers; and rural density housing in rural tiers.	★		★	
Commercial				
Concentrate commercial development inside municipalities, or if not, on major roads in unincorporated areas.	★		★	
Industrial				
Encourage industrial development to locate at the Midwest National Air Center and on major roads in unincorporated areas..	★	★		
Public Services and Facilities				
Establish a Countywide common sewer district for coordinated sanitary sewer systems: forming sub-districts for existing problem areas, and regional districts for urbanizing portions of the urban service tiers.	★	★		
Restrict common sewer districts from locating in rural low-density/conservation tiers.	★	★		
Transportation				
Study and implement interstate capacity improvements for I-35.	★	★		
Study and implement transit options for the entire I-35 corridor from North Kansas City to Kearney, such as express lanes and rapid transit.	★	★		
Economic Development				
Construct a thoroughfare system that facilitates business development around the Midwest National Air Center. Develop expansion of industry north of the Midwest National Air Center as part of an extended runway.	★	★		
Extend sanitary sewer service from a new Kearney WWTP force main after 2011 as infrastructure becomes available to serve new business tenants.	★	★		

BIG IDEA IMPLEMENTATION

There are several “Big Ideas” in the Clay County Comprehensive Plan 2008 update, the one of which is to redefine “low-density residential” development as primarily 20+ acre lot development unless service by municipal services (**Ref. Chapter 4**). There are two other “Big Ideas” in the Plan, which call for special attention when planning implementation, and include:

- The plan presents new **environmental objectives** that not only promote sustainability, they articulate a new “perspective” on the topic and call for special emphasis in implementation.
- The plan calls for updates to its funding mechanism for major roads and planning for regional trails—enhancing trails so that the public has better multimodal transportation options. Major public improvements need funding through shared fees. An updated road **impact fee** program to pave thoroughfares in unincorporated Clay County that are not state-funded is needed to assure proper administration. Finally, the County should update procedures for evaluating the dedication of land and easements, and the design and construction of trails.

The following considerations should be followed when moving immediately to implement these new ideas, now and in an on-going process.

Environmental Objectives

Watershed Level Planning

Small watersheds are more suitable for certain types of planning than other units, such as a farm or ranch, a major river basin, a county, township, or a metropolis. A watershed is generally the logical planning unit for water management. Most land problems are linked with water problems. Nearly all of our surface water and most of the food and fiber we produce come from small watersheds. More than half of the flood damage in the United States occurs in small watersheds. A large percentage of the irrigated lands get their water from streams within small watersheds. Most of the drainage needs are confined to small watersheds. Small cities use surface water supplies from small watersheds. The development of fishing, wildlife, and recreation must be accelerated on small watersheds if they are to be brought within reasonable distance and cost to most citizens. Many of the problems of erosion, as along watercourses, can be solved only by public action in small watersheds.

The comprehensive plan for Clay County and its planning region is comprehensive by virtue of following four principles:

1. First, the plan applies to all land use and circulation systems.
2. Second, the plan covers the entire geographic area affected by common problems of development.
3. Third, the plan is designed to meet long-range consequences, which will show up in 15 years, say, or in 50 years.
4. Fourth, the plan is part of a continuing process, in which all the essential steps are taken by studying facts, making plans, and executing plans.

The first principle requires simultaneous planning for all uses and functions of land, and the watershed is the best level to plan from, as shown in the Clay County **Natural Features Map (Ref. Figure 4-1)**. The Rural Low-Density/Natural Resources Tier (**Ref. Chapter 4**) generally consists of areas principally in use for agricultural production and largely follows small watershed boundaries, as do the other tiers. Land uses in this rural tier are planned for farming, crops, pasture, agribusiness ventures such as

growing and marketing of products, and a limited number of rural residences. This tier is located outside of the Urban Service Tiers.

Green Infrastructure

Many objectives of the Plan focus on environmental concerns of sustainability, which is defined here as choices that meet the needs of the present generation without compromising the ability of future generations to meet their needs. The Countywide opinion survey indicated widespread support for environmentally sensitive and progressive action items (**Ref. Appendix B**). The County seeks to maintain healthy forests; promote tree planting to increase shading and to absorb CO₂; and help educate the public—both countywide and in local city jurisdictions, through professional associations, business and industry—about reducing global warming pollution.

Green Infrastructure as defined by Mid-America Regional Council (MARC) means: “sustains air and water resources, and contributes to the health and quality of life for communities and people.” It is this initiative, outlined by MARC in their Creating Quality Places initiative, that Clay County should follow in amending the County Park System Master Plan of 2003. In its place is a plan for conservation of greenways and water resources through the means presented in this chapter on implementation, including:

- Stream buffers,
- deeper setbacks, and
- conservation easements to be dedicated by development plat approval, for private use and maintenance.

If such conservation areas coincide with a Clay County Park System Master Plan indicated active recreation park facility, then the County would consider acceptance of land dedication for public parkland. Such an active recreation facility may be a linear bike/walking trail if integrated with a larger park, such as at Smithville Lake. This is distinct from a streamway park, which is a scenic corridor of green space along a local waterway that may or may not include active recreation.

“Then I say the earth belongs to each...generation in its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence.”

Thomas Jefferson September 6, 1789

Implementation Options

State and local governments throughout the United States are adopting steps to reduce global warming pollution. Some of those programs Clay County should consider include:

Buildings. Local governments are linking sustainability with development policies: revitalization of the economy equates with revitalization of the environment. They are attracting growing sustainable companies with incentives for sustainable business:

- form better partnership with local utility company through incentives;
- conduct audits of public buildings (include thermostat habits);
- set standards for new construction based on lifetime or life-cycle costing of buildings;
- require or incentivize energy points in LEED or for beating codes; and
- promote shared buildings / teleconferencing.

Work together with other counties and cities to get state utility commissions to reward conservation:

- piggyback on KCPL’s \$600,000 educational commitment for conservation;
- work with the local utility for better credibility/effectiveness;

- critique conservation programs to work better - and investigate how the regional utility can respond in kind to the County or local city for helping promote conservation at the local level;
- focus on retrofitting and tree planting - build out simplest mechanisms; and
- prepare housing/buildings for future energy production with better site orientation.

Strategies and Themes

As the County promotes and rewards conservation, work with other counties and cities to promote certain environmental strategies and themes:

- Partner with federal/state programs and/or businesses
- Invite community members to be part of the solution and help key stakeholders to participate
Promote Rain Gardens, Rain Barrels, composting and related initiatives could be enhanced and widened regionally through regional partnerships.
- Work to engage Clay County area Chambers of Commerce and the Clay County Economic Development Council to embrace sustainability and become sustainability cheerleaders - tying into Economic Development strategies.
- Work with people to help with traction in the County/region.
- Watch for opportunities in statehouse to make sustainability a strategy.
- Educate the public to develop groundswell - helping late arrivals or latent embracers get over futility feelings - e.g. better info (speaking circuit) about Climate Agreement.- help people accept county/city actions.
- Help people understand the joy of helping the common cause including helping future generations - and other aspects that aren't necessarily direct econ benefit.
- Implement regional transportation improvements for more efficient travel.
- Support local energy conservation programs including audits for the public facilities to be a model for public to emulate.

Purchase of Agricultural Conservation Easements

State governments in many regions of the United States are adopting Purchase of Agricultural Conservation Easement programs. As of 2008 in our Nation, 27 states have authorized state-level Purchase of Agricultural Conservation Easement (PACE) programs. American Farmland Trust (AFT) details the status of farm and ranch land protection programs that have acquired funding and/or easements.

Many cities and counties are reducing global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills. Further, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conservation and new energy technologies.

The core purpose of the Purchase of Agricultural Conservation Easement (PACE) programs is primarily to compensate landowners for the value of preservation easements.

State-sponsored PACE Programs	Easements / Restrictions Acquired	Acres Protected	Program Funds Spent to Date
STATE TOTALS	9,440	1,605,062	\$2.2 Billion

(Source: http://www.farmlandinfo.org/farmland_preservation_literature.)

Funding Sources

Sources of funding for PACE programs in the 27 states include:

- Transportation federal money disbursed under The Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETE) of 2005 and its predecessors for “transportation enhancements.” Easement acquisitions that protect scenic views and historic sites along transportation routes are eligible for these funds.
- The “FRPP” or the federal Farm and Ranch Lands Protection Program: Originally established in the 1996 Farm Bill as the Farmland Protection Program, the FRPP provides matching funds to state, local and tribal agricultural easement acquisition programs. The 2002 Farm Bill expanded the program to include certain non-governmental organizations.
- Local government contributions, such a portion of lottery proceeds, local bond issues, local sales tax revenues, local government contributions, portion of lawsuit settlements, real estate transfer tax, etc.
- Clean Water State Revolving Funds.
- Credit card royalties.
- Agricultural transfer tax.
- Repayment of tax credits by landowners withdrawing from the state's circuit breaker program.
- State cigarette tax.
- Interest on state securities
- Contributions from private sources.

Stream Buffers

Headwater streams are often severely degraded by urbanization. Stream buffer standards are intended to mitigate the adverse environmental impacts that development can have on streams and associated natural resource areas. The purpose of stream buffers is to:

- improve storm water management and water quality while preventing flooding;
- increase the public’s knowledge and understanding of natural resource protection issues; and
- decrease infrastructure construction and maintenance costs.

Stream buffers are an integral element of any local stream protection program. By implementing stream buffer standards to all stream corridors identified on the **Natural Features Map**, Clay County will retain its natural infrastructure and visual character derived from topography, woodlands, streams, and riparian corridors.

The ability of a particular buffer to actually realize its many benefits depends to a large extent on how well the buffer is planned or designed. In general, a minimum base width of at least 100 feet is recommended to provide adequate stream protection.

Stream buffers may include floodplains, wetlands, slopes over 15 percent, and wildlife habitat areas. Management of these areas includes limitations on alteration of the natural conditions of these resources. The total buffer width is divided into three zones, with each zone performing a different function and has a different width, vegetative target and management scheme.

- **Streamside zone:** This zone protects the physical and ecological integrity of the stream ecosystem. The vegetative target is mature riparian forest that can provide shade, leaf litter, woody debris, and erosion protection to the stream. The minimum width is 25 feet from each stream bank—about the distance of one or two mature trees from their stream bank. Land use is highly restricted, limited to storm water channels, stream bank stabilization, footpaths, and limited utility or roadway crossings.
- **Zone 1:** This zone extends from the outward boundary of the streamside zone and varies in width depending on stream order, the extent of the 100-year (or one percent) floodplain, any adjacent steep slopes, and protected wetland areas. Its functions are to protect key stream components and provide further distance between upland development and the stream. The vegetative target for this zone is also mature forest, but some clearing may be allowed for storm water management, access and recreational uses. A wider range of activities and uses are allowed within this zone, such as recreational corridors for hiking and biking and storm water best management practices. The minimum width of the middle core is about 50 feet, but it is often expanded based on stream order, slope, or the presence of critical habitats.
- **Zone 2:** This zone extends landward an additional 25-foot from the outer edge of the middle zone to the nearest permanent structure. In many instances, this zone may include a residential backyard. However when the outer zones include slopes that exceed 15 percent or if wildlife habitat areas are present, the width of the zone is increased to encompass such resource areas.

Farmland and Agricultural Production

Roughly one half of the land in the County is utilized as farmland. Since much of the southwest portion of the County is urbanized, this percentage is less than most surrounding counties and the statewide average. For example, more than 80 percent of the land in rural Clinton and Ray counties is used as farmland. About half of the farmland in Clay County is harvested cropland, while the other half consists of cropland used for grazing, pastureland, rangeland, and woodland. Soybeans and forage are by far the most common crops harvested in Clay County, while significant amounts of corn and wheat are also grown. Most of the rest of the agricultural land in the County is used for raising cattle or hogs. Clay County has more of its farmland devoted to pastureland and rangeland than do neighboring counties.

Farms in Clay County are relatively small (an average of 188 acres and a median of 78 acres), when compared to most surrounding counties and to statewide and national averages. Agricultural production in Clay County is specialized in livestock and poultry, rather than harvested cropland. Although farms in the County tend to be small, the per-acre market value of agricultural products sold is high compared to nearby counties and the state. In addition, production expenses are much lower for farms in the County, and net cash farm incomes are much higher (\$594 per acre compared to \$268 per acre in Missouri). Thus, soils used for agriculture in Clay County are an important and valuable

asset to the economy of the County. The high productivity of these soils should be considered when planning for future development.

LEED Subdivision Practices

The Leadership in Energy and Environmental Design (**LEED**) tools and performance criteria for sustainable green building and development practices should be referenced by Clay County, as well, when rating development proposals. When evaluating development proposals developers may “earn”

WHAT IS LEED?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria.

mitigating points by preserving preferred farmland (and land currently in agricultural production), implementing Stream Corridor Inventory objectives, and proposing related environmental measures. These principles are adopted to better promote local food sources; to protect natural resources, such as wetlands, aquifer recharge area, wildlife habitat and other community values identified by the Clay County public during the plan update process in 2007-2008. Implementing these procedures will promote better management of natural resources and mitigation of manmade hazards, such as flooding.

Planning with the following environmental measures—as outlined in this Chapter, as promoted in LEED-certified developments (and as numerically scored in the LESA system)—will provide effective ways to mitigate negative environmental impacts, in furtherance of natural resource conservation:

- Development within a Conservation District,
- Implementation of Natural Storm Water Treatment BMPs,
- Development that implements Natural Resources Inventory objectives,
- Development that implements Stream Buffer measures, and
- Preservation of Prime Farmland and/or Agricultural Production.

Developments that incorporate LEED tools and performance criteria for sustainable green development practices will garner points for development approval.

Multimodal Transportation Changes

The Clay County, Missouri Comprehensive Plan 2008 responds to urbanization in urban fringe areas near the cities and strong preferences for rural preservation throughout the County. Clay County developed policies and techniques to deal with development in its urban fringe areas, isolated rural subdivision development, environmental concerns, transportation issues, and public service delivery issues.

Road Impact Fee Update

Through an analysis of alternatives, the County is adopting “urban service tiers” to encourage urban-oriented land uses to occur adjacent to existing infrastructure and public services. The transportation element includes the concept for a new circumferential highway link, north and west of Liberty to I-435. The plan also points out the long-term demands on countywide infrastructure. All of these trends toward urbanization support the need for major road impact fees. This section explains how the impact fee system should be amended so that a service area system may be established. The actual fee amount is set by the County based on traffic trips. Each development pays at time of platting of land.

An "Impact Fee Areas" can be defined as a geographic area with clearly defined boundaries that serves as the basis for imposing fees upon new development created within that geographic area. Defining the area also serves as a limitation on the area in which the fees collected may be spent on public facilities and services that will serve that new development. The creation of one or more service areas for the purpose of imposing impact fees is necessary to:

- ensure that a proportional connection exists between the properties charged and the facilities that will be constructed with those fees;
- ensure that the fees collected will be spent in reasonably close proximity to the properties paying the fees, thereby providing a measurable benefit to those properties;
- correctly calculate the costs of the facility or service being provided to the public; and
- guide the creation of one or more impact fee trust funds that correspond to the service areas in order to ensure that funds are properly earmarked and spent only within the appropriate service area.

The following details must be worked out to update the Clay County impact fee program.

1. An "Impact Fee Area" is a geographic area with clearly defined boundaries set forth in the impact fee ordinance that serves as the basis for imposing fees upon new development within that geographic area and spending the collected fees in the same area. Service areas do not overlap.
2. All areas (or "service areas") must be within the unincorporated area of Clay County and discretely drawn so that improvements relate to those who pay the fee directly.
3. The areas are defined based upon "sound planning and engineering principles, or both." Clay County will therefore have flexibility to define appropriate service areas based on careful planning and engineering analysis.
4. A capital improvements program (CIP), setting forth the planned road improvements for the entire county, should serve as the foundation for the designation of the service areas. If no road improvements are planned within a reasonable distance from a parcel of property, no benefit would be provided to the property and therefore no fees could be collected from that property.
5. For a transportation impact fee system, the average trip length typically represents the greatest distance between any parcel in a service area and the furthest road in the same service area for which the fees may be expended. Average trip length may therefore serve as the primary factor for the size of the service areas. Six miles is what the County currently uses.
6. Other relevant factors that guide the creation of service areas include:
 - areas of the County that have a deficiency in area-wide traffic capacity;
 - areas that have a significant amount of zoned but un-built development (high growth areas);
 - existing and expected commuting routes and traffic patterns;
 - natural and political boundaries; other geographic limitations; and
 - the location of existing roads.
7. All service areas must provide a connection between the public facility that is funded by the impact fees and properties that pay the fees. The connection between the property and the

roads can be established by analyzing the "benefit" to the properties paying the fees. Benefit is measured, in part, by the distance between the road improvement and the development.

Clay County should update its impact fee system for funding major county road improvements, given the need to establish discrete service areas.

Evaluation Criteria for Trail Dedication and Construction

Clay County should adopt procedures for evaluating the dedication of land and easements, and the design and construction of trails in compliance with the *Northland Trails Map (Ref. Chapter 4)*. In addition, criteria should be developed by Clay County indicating design appropriate to the site's natural, historic, and cultural features, and otherwise meeting the requirements of the respective development ordinances. Each affected parcel of property will present a unique set of facts and circumstances that requires individual consideration by the local jurisdiction.

Each area city and Clay County should contemplate an evaluation that may involve not only the Planning and Zoning Commission, but the local staff and Parks Board. This evaluative process will usually take place during the review of applications for preliminary plat approval, rezoning, or preliminary development plan approval.

Diversity and originality in lot layout and property dedication should be encouraged to achieve the best possible relationship between development and conservation/recreation areas. In addition, these criteria may help ensure that the dedicated land is not merely low-quality land, poorly suited for trail use. The evaluation criteria should be established to determine whether the proposed dedication/acquisition satisfies some of the following elements:

- protects and serves floodplains, wetlands, and steep slopes;
- preserves and maintains mature woodlands, existing fields, pastures, meadows, and creates sufficient buffer areas; maintains or creates an upland buffer;
- designs around existing tree lines, hedgerows, between fields or meadows, and minimizes impacts on large woodlands;
- leaves scenic views and vistas unblocked or uninterrupted; protects wildlife habitat areas;
- designs around and preserves sites of historic, archaeological, or cultural value; protects rural roadside character;
- improves public safety; provides active recreational areas; offers adequate screening from nearby commercial or residential development; makes connections to commercial or residential development; and
- facilitates pedestrian and bicycle access; provides open space that is reasonably contiguous and whose configuration is in accordance with the respective zoning ordinances.

Appendix A – Public Participation Summary

The following is a summary of the comments and discussion from the two public workshops held for the Clay County’s Comprehensive Plan 2008 Update. Building on the key issues identified by planning participants at the December 2006 Focus Session, the project planning consultant, Bucher, Willis & Ratliff Corporation facilitated a Planning Charrette to discuss those issues in greater detail and provide recommendations for “action steps” to addressed by the County’s Comprehensive Plan.

The Clay County comprehensive plan “Focus Session” was held December 19, 2006 at the County Courthouse. A Focus Session is a fast-paced, interactive workshop intended to help community stakeholders identify and prioritize critical planning issues facing Clay County both now and in the future. The session was open to the public and attended by approximately 35 individuals with diverse backgrounds, including several residents of the unincorporated areas of Clay County, city appointed and elected officials from municipalities in the County, landowners, developers, business and civic leaders, elected and appointed county officials, and other community stakeholders. The meeting allowed participants to begin building consensus on the key community planning issues.



The process of **Issues Identification** used at the Focus Session was a structured idea-sharing process. Participants were paired-off and initially introduced themselves, sharing each other’s ideas and issues to the entire group. The opening lists of issues identified in the large group were then refined, clarified and prioritized in smaller “break-out” groups. The series of issues were organized and discussed in the context of the following categories:

- Quality of Life
- Economic Development
- Future Land Use and Growth

From broad perspectives, the break-out group members discussed and refined the critical issues facing the County. With the assistance of the consultant-facilitator team, participants voted and ranked the top five most important community issues. The following is a summary of the issues

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identified in the Focus Session, including the top issues for each discussion category as ranked by each of the break-out groups.

QUALITY OF LIFE ISSUES

Quality of Life issues and opportunities are those community assets that shape the character and facilities of Clay County as a good place to live, to raise a family, and to work and recreate.

There are many reasons that residents chose to move to and remain in Clay County, and the participants of the focus session identified several issues related to those qualities.

The following are the top five Clay County quality of life issues and opportunities identified by Focus Session participants in ranked order:



- 1. Transportation / Traffic management**
- 2. Adequate jobs with sustainable salaries**
- 3. Regional sewer system**
- 4. Open Space / Green Space / Trails / Parks**
- 5. Environmental Issues: Light pollution; Farmland preservation; Wildlife; Natural Resources; Food Security.**

Participants identified their most important issue as transportation and traffic management. Clay County includes the most rapidly developing portion of the Kansas City metropolitan area, and many residents work in, or travel to destinations in the County on a frequent basis. Major highways and interstates that serve the County are becoming more congested, and as a result the Focus Session participants recommended addressing ways in which the growing traffic volumes can be successfully managed. Expanding alternative transportation methods, such as inter-urban rail or bus service, were also identified as key issues. Pedestrian and bicycle transportation was also identified as important, with participants indicating the desire for a countywide trail system for walkers, cyclists, and horse riders.

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Participants identified preservation of open space and farm land as key considerations in maintaining “quality of life” in Clay County.

Another important quality of life issue identified at the Focus Session is the need to attract and retain businesses that provide sustainable salaries for County residents. Adequate salaries is not the only element to this issue, the residents also expressed the desire to attract businesses that can provide good benefits to employees, and that will draw their main employee base from the County instead of out-sourcing.

The patchy manner of providing sanitary sewer service in the unincorporated area of the County was identified as an important issue impacting the County’s quality of life. Participants indicated the desire to create a regional sewer system to serve urbanizing areas and to grow smarter. Participants expressed concern about past planning practices allowing many properties on septic systems or individual developments with individual subdivision sewer package plants.

The desire to address environmental and open space issues is another significant quality of life issue facing Clay County in the future. Focus session participants placed strong emphasis on more parks, trails, and other

recreational amenities. They also stressed preserving existing open space and farmland in the County, and indicted it directly contributes to the quality of life that drew them to Clay County, and keeps them here. As such a key component of their enjoyment of the area, participants felt it is important to preserve natural resource areas. Tied to the preservation of open space, is the desire to provide food security through the continued use of land as farm land, and the preservation of wild life habitats.

Also related to the open space preservation, is the desire to control light pollution. As part of their rural lifestyle, residents value their ability to see the stars at night without interference from roadway or business lighting. Continued growth will affect that quality of their lifestyle, and participants would like to explore ways in which to mitigate light pollution from future development.



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ECONOMIC DEVELOPMENT ISSUES

Clay County economic development issues and opportunities relate to preserving the character of the County's rural areas; retaining and strategically targeting businesses with long term employment and service benefits for residents; and promoting tourism to draw visitors that will spend money while enjoying the recreational and cultural opportunities offered in the County.

A consistent theme from the Session participants and each of the Focus Session break-out groups was the desire to preserve the open space and the rural visual character of Clay County. Participants felt that the County's long-term economic development strategy should include a strong emphasis on providing parks and recreation, preserving the natural character of the rural areas of the County including the preservation of prime farm land, and promoting these features as a tourism draw. For example, Smithville Lake and enhanced amenities around the lake should be used as an asset to draw visitors to the County. The possibility of expanding the trail network and developing unique destinations such as a "Powell Gardens" destination should be pursued. In addition, participants indicated the County's prime farm lands should be preserved from suburbanization for both economic and environmental reasons.

Participants strongly supported economic development strategies that create a sense of place and significantly expand the County's untapped tourism potential.

The **Midwest National Air Center** near Mosby was identified as a key element for the County's long term economic success. The airport offers an opportunity for future business and employment growth. Future development around the airport may help in the participant's desire to strategically target new business growth that provides "life-sustaining wages", which was identified as a key issue for the future.

Participants indicated it is important for the County to support new business development by maintaining and enhancing an adequate roadway / thoroughfare network. The traffic capacity of roadways in the County was identified as a key concern due to increasing traffic congestion.



It was noted during the session that Clay County does not have a property tax levy, which is very rare. The County relies entirely on sales tax and other fees and taxes to support its public services and infrastructure needs. As a result, the use of Tax Increment Financing (TIF) by various municipalities has a much greater

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impact on the County government's fiscal resources than it does in other counties with a property tax levy. The need to balance the County's fiscal revenues and to establish development finance and TIF policies was identified as a key issue for the future.

The following summarizes the top five Clay County economic development issues identified by Focus Session participants in ranked order:

- 1. Preserve Open Space and Use it to Create a Sense of Place**
- 2. (tie) Promote Development around the Clay County Airport**
- 2 (tie) Address Major Roadway Developments and their Traffic Capacities**
- 4. Balance Fiscal Revenues such as Sales Tax and other Fees and Taxes**
- 5. Promote Tourism in Clay County**

Other planning issues and concerns noted by participants during the session related to economic development included the following:

- Provide a balance of housing options.
- Implement development standards to ensure quality development.
- Coordinate the development process and procedures between the various city and county jurisdictions.
- Provide other forms of transportation.
- Ensure an adequate level of public services and public safety providers.

FUTURE LAND USE ISSUES

Future land use and growth issues in Clay County are related to preferred development patterns, and the intensity and location of land uses primarily in the unincorporated areas of the County, as well as issues related to funding and maintaining infrastructure and related utilities and public services.

Participants at the Focus Session emphasized the desire for the County to coordinate and manage growth in both the unincorporated areas, as well as in the incorporated cities, in a manner that results in long-term value. Growth should be encouraged in a quality manner that considers long-term impacts rather than short-term gains. Concerns were noted that past development decisions resulted in haphazard suburbanization of the County that has consumed prime agricultural lands, impacted natural resources and environmentally sensitive areas, and increased traffic congestion due to a lack of coordination between municipalities. In order to preserve the

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character of Clay County and promote quality development, participants strongly emphasized the need to direct development to Urban Growth Areas and to provide necessary infrastructure to support contiguous urban growth.

The following summarizes the top five Clay County future land use and growth issues identified by Focus Session participants in ranked order:

- 1. Establish an Urban Growth Area and Provide Necessary Infrastructure and Urban Services to Support Contiguous Development**
- 3. Provide Regional Green Space, Parks, and Trails**
- 4. Preserve and Protect Agricultural Land Areas**
- 5. Allow Higher Intensity Development in Urban Growth Areas and Limit Suburban Sprawl**
- 5 (tie) Promote Inter-jurisdictional Coordination and Cooperation.**
- 5 (tie) Re-establish the Interurban Rail Corridor and Provide Transportation Linkages**

In order to support urban growth and minimize environmental impacts, participants suggested the County consider a regional sewer district to provide sanitary sewer to urbanizing areas and thus limit new development in the unincorporated areas with septic systems or individual subdivision sewer package plants. There was strong support for directing the County's infrastructure improvement funding, especially for roadway improvements, to targeted urban development growth areas. It was felt the County should take a leadership role and promote inter-jurisdictional coordination for future growth planning in order to minimize conflicts and traffic congestion resulting from new development. The possibility of re-establishing an interurban rail corridor as an alternative transportation option was identified as one of the top five future land use and growth issues at the session, and is an example of an initiative that would require leadership by the County to manage the necessary coordination and dialogue between numerous cities in the County.



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Participants felt strongly that future growth should be directed to an Urban Growth Area and supported by necessary infrastructure, while preserving the rural and agricultural areas of the County from suburban development.

The emphasis to direct future growth to designated growth areas was largely based on the desire to preserve the County's existing rural areas, agricultural lands, and natural resources. Participants expressed the desire to ensure natural resources are preserved, and that the County plan for long term needs related to regional park lands and the implementation of the Northland Trails Vision Plan. While it was noted it will be challenging to obtain necessary easements and right-of-way along streamways and through rural areas, participants felt future trails should be established through areas of natural beauty and even suggested a long-term concept of eventually extending the State of Missouri Katy Trail through eastern Jackson County where it could cross the Missouri River and run northward through Clay County. Participants felt trails that closely parallel major roadways and act as "wide asphalt sidewalks" are not desirable and should be discouraged in favor of trails through natural areas and along streamways.

In addition to the top future land use and growth issues, the following other planning issues and concerns were noted by participants during the session:

- Need to address aging neighborhoods throughout the County and target areas for revitalization.
- Plan for future development around the Clay County Airport and promote it as a long-term employment center. Surrounding land uses should be control, possibly by an overlay district.
- Need to plan for and provide housing options, including housing for seniors.

Planning Charrette Overview

The Clay County "Planning Charrette" was held February 20, 2007 at the Clay County Midwest National Air Center. The session was open to the public and attended by more than 55 individuals with diverse backgrounds, including residents of the unincorporated areas of Clay County, city appointed and

elected officials from municipalities in the County, landowners, developers, business and civic leaders, and elected and appointed county officials.



What is a Charrette? The Clay County Planning Charrette was conducted as a fast-paced, interactive workshop where small groups discussed the key planning issues identified during the December 2006 Focus Session and provided planning policy recommendations to address those issues. Charrette participants were asked to respond to various questions related to the planning issues, and to recommend

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preferred solutions. Each group was provided with a workbook, an area map and aerial photo, markers and other tools to record their comments, preferences, and strategies to address the issues. The small groups specifically addressed issues for one of the three topic categories identified in the Focus Session:

- **Quality of Life,**
- **Economic Development, and**
- **Future Land Use and Growth.**

Using their broad perspectives, the group members discussed and refined policy recommendations for the key issues facing the County. Some issues focused on unincorporated Clay County, such as land use regulation; other issues were countywide in importance, such as transit and major thoroughfares. With the assistance of the consultant-facilitator team, participants summarized their recommendations and the most important discussion points in their workbooks and on flip charts. At the end of the Charrette, a spokesperson for each small group presented the conclusions and recommendations to the entire group of participants. Those results are summarized in this document and will be used to support the future Comprehensive Plan update

QUALITY OF LIFE ISSUES



Quality of life issues are those community assets that shape the character and facilities of Clay County as a good place to live, to raise a family, and to work and recreate.

Participants in the small groups that addressed quality of life issues focused their discussions on topics related to land use, development patterns, parks/open space/trails, and transportation and traffic management. The future land use and development pattern was recognized as being very important in maintaining a unique ‘sense of place’ for Clay County.

Land Use

Related to land use, Charrette participants recommended the following to maintain a high quality of life:

- ***Protect historic places;***
- ***Develop trails and recreational facilities;***

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- **Preserve existing farm lands;**
- **Manage development and do not allow development on parcels smaller than 5 acres unless sanitary sewer and adequate infrastructure is available; and**
- **Prevent light pollution and require lighting standards to reduce sky glow.**

Urban Service Areas

Related to urban growth areas and rural areas of the County, Charrette participants recommended the following:

- **Address the adequacy of roads, schools, public safety services (police, fire, ambulance), and noise from freeways in development planning;**
- **Require 40-acre minimum for Conservation Districts, or “performance based” conservation without the 40-acre minimum;**
- **Require developers to provide adequate infrastructure in new development areas; and**
- **Regulate animal feed lots and landfills.**

Natural Resources

Maintaining natural resources, existing farm land, and open space areas was a significant quality of life issue identified in the Focus Session. Participants at the Charrette discussed a variety of approaches for environmental management and open space preservation throughout the County, resulting in the following recommendations:



- **Land uses outside of the urban growth areas should be limited to rural farmlands, parks, and trails;**
- **Promote the connection of existing green spaces;**
- **Protect water sources, streamways, and floodplains;**
- **Promote “biodiversity conservation corridors” with trails along streamways;**
- **Promote urban farms and community gardens;**
- **Pursue land trusts and grants;**
- **Require “no net loss” of open space; and**
- **Protect and restore the Fishing River watershed.**

Trails and Open Space Utilization / Conservation

Specifically related to trails in the County, participants identified support for the **MetroGreen** system by the Mid-America Regional Council. Participants had the following trail recommendations:

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- **Promote greenways and trail development along streamways;**
- **Use trails and linear parkways to connect communities and historic areas including the Watkins Woolen Mill State Historic Site near Lawson;**



- **Pursue land and easement donation / dedications for trails and bike lanes;**
- **Pursue conversion of former rail corridors to trails;**
- **Require new development to provide trail easements or land dedication; and**
- **Locate neighborhood green space and trails in subdivisions where they are easily accessible, rather than in locations isolated from the general public.**

ECONOMIC DEVELOPMENT ISSUES

Clay County economic development issues and opportunities relate to preserving the character of the County's rural areas; retaining and strategically targeting businesses with long term employment and service benefits for residents; and promoting tourism to draw visitors that will spend money while enjoying the recreational and cultural opportunities offered in the County.

The economic development groups at the Planning Charrette began their discussions by addressing policies to preserve open space and how to use it to **"create a sense of place"**. This issue was the top-ranked economic development issue identified at the Focus Session.



Urbanizing Areas

The Charrette participants recommended the following policies for urbanizing areas of the County:

- **Promote the use of "conservation districts" or similar developments to preserve open space and natural features;**
- **Preserve floodplains and limit encroachment;**
- **Promote trail development along streamways rather than placing them along major roadways;**
 - **Construct a unique "signature" bridge; and**
 - **Use former rail right-of-way for new trails.**

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Transportation

Charrette participants had extensive discussion about major roadway linkages throughout the County and possible future improvements to the roadway network. Transportation is viewed as one of the most important aspects for future economic development throughout Clay County. It was noted there are underdeveloped north-south transportation routes in the County, and most importantly a need for more detailed countywide transportation planning. Such planning should be conducted as a multi-jurisdictional effort. Transportation policy recommendations include:

- ***Update the County major street plan, and ensure coordination with MoDOT and the cities throughout the County;***
- ***Identify and plan for transportation corridors that need improvement;***
- ***Analyze potential highway improvements along major state routes throughout the County;***
- ***Study and implement capacity improvements for I-35 south of I-435;***
- ***Study and implement transit options for the entire I-35 corridor from N. Kansas City to Kearney, including possible express lanes and rapid transit;***
- ***Study and identify a corridor to provide an east-west major roadway connection between I-435 and I-35, generally in the vicinity of NE 120th Street to accommodate future development. Preserve right-of-way for the future connection;***
- ***Add bike lanes along secondary roadways (i.e. “A” Highway);***
- ***Develop new parkways and boulevards; and***
- ***Provide adequate highway and arterial street access to the future Liberty “New Town” development.***

Transportation corridors and transit are considered key for future economic development in Clay County.



Airport Economic Development

Development around the Midwest National Air Center will play an important role in the County’s long term economic success due to opportunities for business and employment growth. Charrette participants recognized the Airport will continue to be operated by the County. However, nearby cities such as Kearney are better positioned to provide essential services to support urban growth around the Airport. Suggested land use planning at the airport should include light-industrial and transportation-based industry, business park, as well as opportunities for offices and residential uses.

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Fiscal Resources

Participants discussed the County's fiscal resources and the current reliance on sales tax and other taxes to support its public services and infrastructure needs. It was noted that relying on sales tax as a primary funding source is problematic in times of economic downturns. As a result, the following was recommended by participants:

- ***Examine options for a dedicated property tax to roads, bridges, and parks;***
- ***Work jointly with MoDOT to identify other possible funding sources for roadway improvements;***
- ***Implement user taxes, such as a lodging or entertainment tax; and***
- ***Approve tax incentives for private development when and where it provides for infrastructure improvements.***

Tourism

Tourism is seen as an opportunity to promote the quality of life in Clay County and to attract new business. Participants stressed the need to maintain and promote existing historic sites such as the Jesse James historic farm and the Watkins Woolen Mill State Historic site. Promoting tourist attractions should be a joint effort by the County and the various cities within the County. Recommendations to expand tourism options include:

- ***Fund and promote a countywide tourism media effort;***
- ***Develop a county sports complex, including a possible ice rink;***
- ***Expand the recreation and cultural offerings at Smithville Lake;***
- ***Expand hiking and biking facilities;***
- ***Provide more special events such as a grand prix, balloon fest, skydiving, biking, triathlons, ultralite shows, golf tournaments, etc., and***
- ***Develop and promote special destinations such as boutique farms, wineries, nature sanctuaries, hall of waters, etc.***

Charrette participants recommended economic development strategies that create a 'sense of place' and expand the County's untapped tourism potential.

FUTURE LAND USE ISSUES

Future land use and growth issues in Clay County are related to preferred development patterns, and the intensity and location of land uses primarily in the unincorporated areas of the County, parks and recreation, as well as issues related to funding and maintaining infrastructure and related utilities and public services.

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Charrette participants emphasized the County should manage future growth in a manner than directs urban development to identified urban growth zones in order to ***“keep urban areas urban and rural areas rural”***.

Future Land Use

The future land use groups recommended the County’s land use policies should include the following related to future growth areas:

- ***Preserve farm lands by restricting uses allowed in rural areas to those related to agricultural and large acreage residences;***
- ***Direct large lot acreage development, farms, and other traditional rural activities to areas outside of the urban growth areas;***
- ***Limit residential density in rural areas by establishing a “minimum” size for acreages;***
- ***Cluster development into urban services areas;***
- ***Discourage large lot residential development in the urban service areas by establishing a “maximum” lot size; and***
- ***Direct urban growth to areas within or contiguous to the cities where urban services are available.***



Natural Resources and Open Space

Policies to preserve open space and nature features were suggested for both the urban growth area and the rural areas of the County. Several participants indicated they believe the County’s current “Conservation District” regulations do not result in the desired outcome of natural resource preservation, but instead results with large-lot subdivisions with large front yards and secluded open space. Recommended policies for open space and natural resource preservation include:

- ***Protect streamways by increasing stream setback requirements and implementing stream buffer regulations;***
- ***Do not allow unusable land, street landscape medians, and other similar areas to count toward meeting open space preservation requirements;***
- ***Establish standards to preserve woodlands, fragile areas prone to erosion, land around historical sites, and hunting and fishing areas;***

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- ***Provide incentives for subdivision design and building designs that conserve water and implement low impact development design standards;***
- ***Preserve the streamway corridors and floodplains, and provide public access for future trailways in such areas;***
- ***Use “cluster development” standards that permit higher density and flexible standards for lots, setbacks, and street designs to concentrate buildings on part of property (the cluster area) to allow the remaining land to be used for recreation, common open space, or preservation of environmentally sensitive areas.***

Infrastructure

Participants strongly emphasized the need for urban growth to be directed to areas with adequate infrastructure and basic services, and to promote contiguous urban growth rather than “leap-frog” subdivisions. The following policies were recommended:



- ***Pursue a regional waste water sewer system(s) and limit the use of “package plants” in areas where sewer is not available;***
- ***Direct commercial development to the cities, or to designated planned commercial clusters;***
- ***Provide adequate roadways to support new development; and***
- ***Require new developments to provide necessary infrastructure including road improvements, trails, parks and green space preservation.***

Other

Other recommended land use policies by planning participants addressed visual identity and parks and recreation issues:

- Establish higher development standards (i.e. setbacks, lighting, noise controls, etc.) for areas along major highways, city entrances, commercial and industrial parks, and transit corridors; and

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- Enhance the County’s parks and open space areas by pursuing special sales taxes, user fees, park impact fees, and joint ventures with the cities and the State of Missouri.

Next Steps

Building on the meaningful public input from the Focus Session and the Planning Charrette workshop, the discussion and recommendations served as the basis for preparing goals, objectives and action steps for the Clay County Comprehensive Plan update 2008.

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Appendix B – Community Opinion Survey

To test public opinion against the issues listed and ranked by the Clay County planning participants (Ref. Appendix A), the County sought the input of residents of unincorporated Clay County and the cities of the County (outside the City of Kansas City) in a random sample opinion survey. The survey results helped set priorities for the comprehensive plan and county policy: growth is managed well and tax dollars are spent wisely.

ETC Institute of Olathe, Kansas was subconsultant to BWR and led the survey effort. Responses were kept confidential.

2007 Clay County DirectionFinder®

DRAFT Results



conducted for

Clay County, Missouri

By

ETC Institute

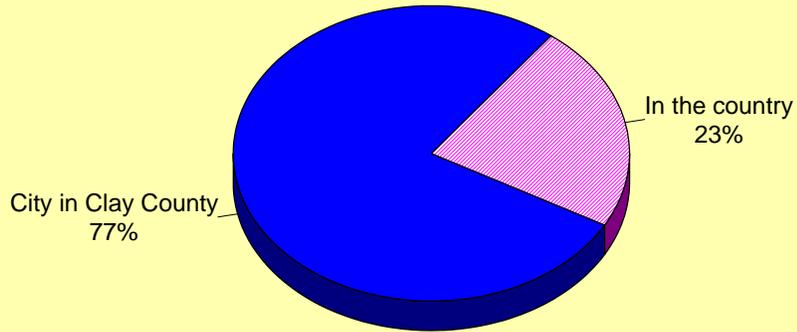
725 West Frontier
Olathe, Kansas 66061
(913) 829-1215

August, 2007

Section 1:
Charts and Graphs

Q1. Where Do You Live In Clay County?

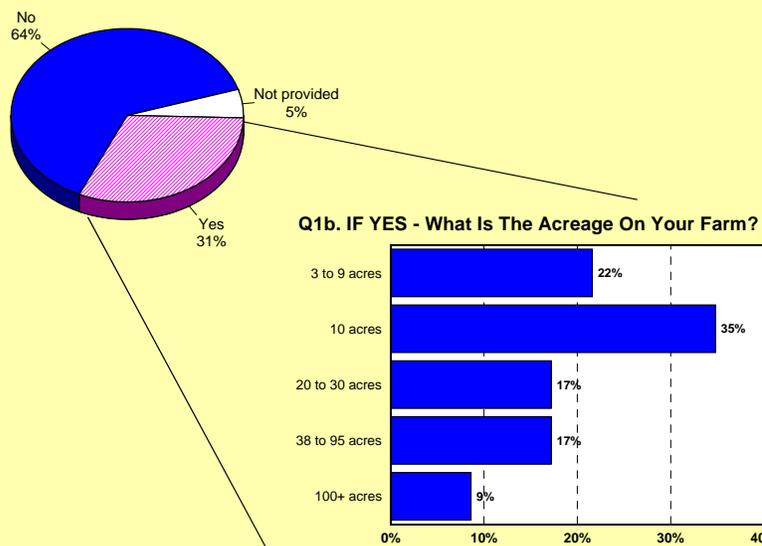
by percentage of respondents



Source: ETC Institute DirectionFinder (August 2007 - Clay County , MO)

Q1a. If Living In the Country, Do You Live On A Farm?

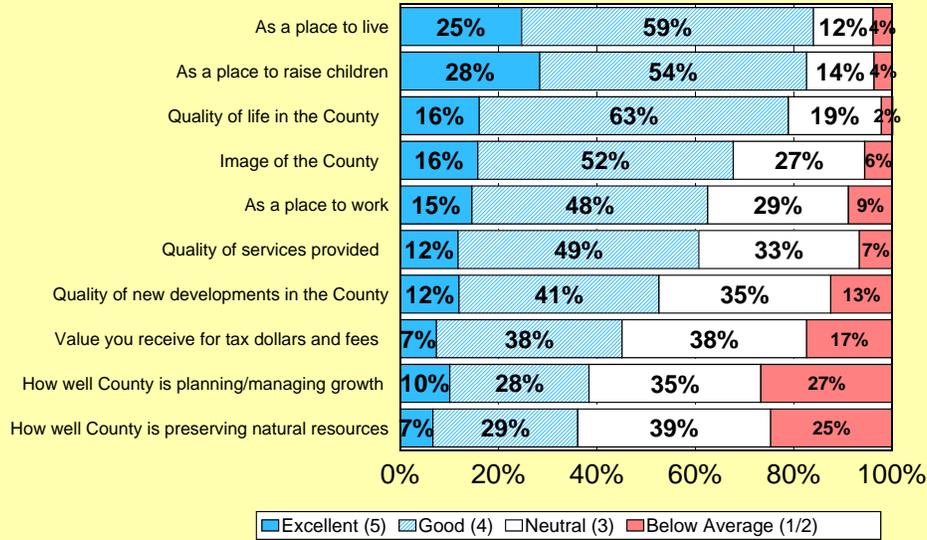
by percentage of respondents who lived in the country



Source: ETC Institute DirectionFinder (August 2007 - Clay County , MO)

Q2. How Residents Rate Various Issues that Influence Their Perception of the County

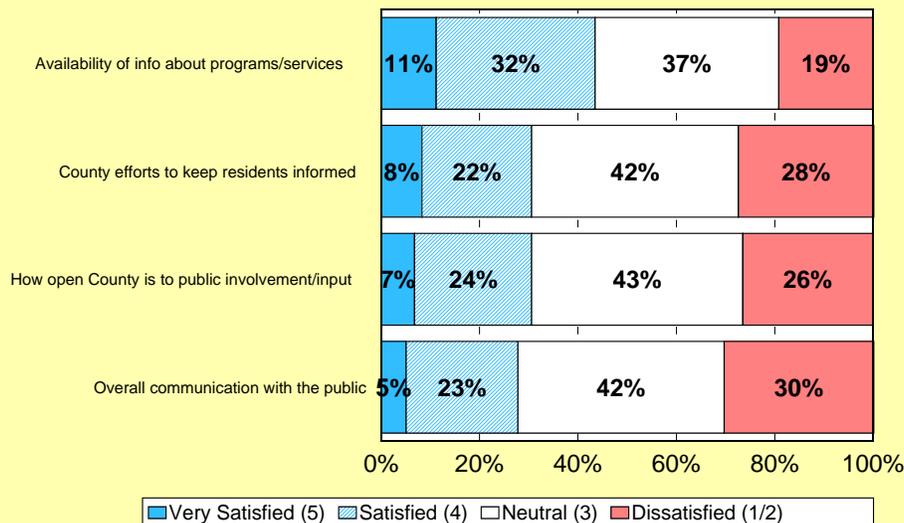
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q3. Satisfaction with Various Aspects of County Communications

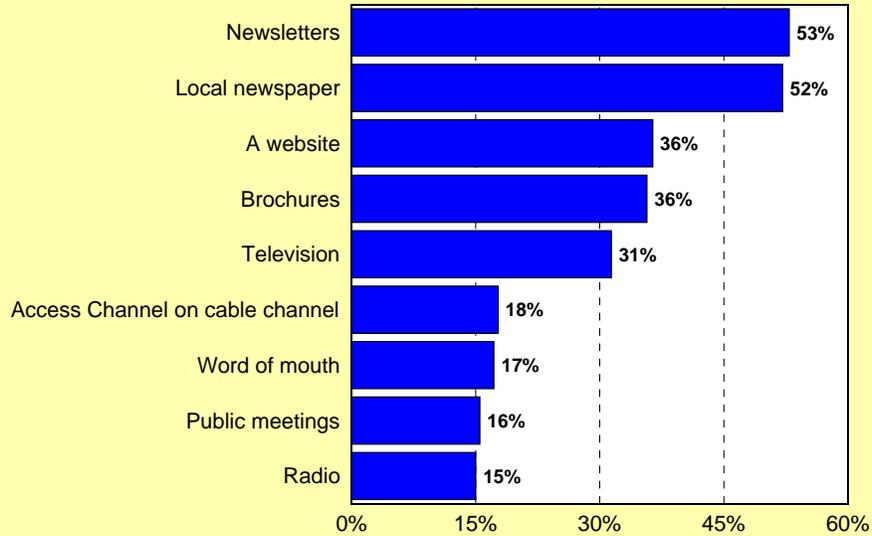
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q4. Best Way To Receive Information About Clay County Services and the County Comprehensive Plan Update

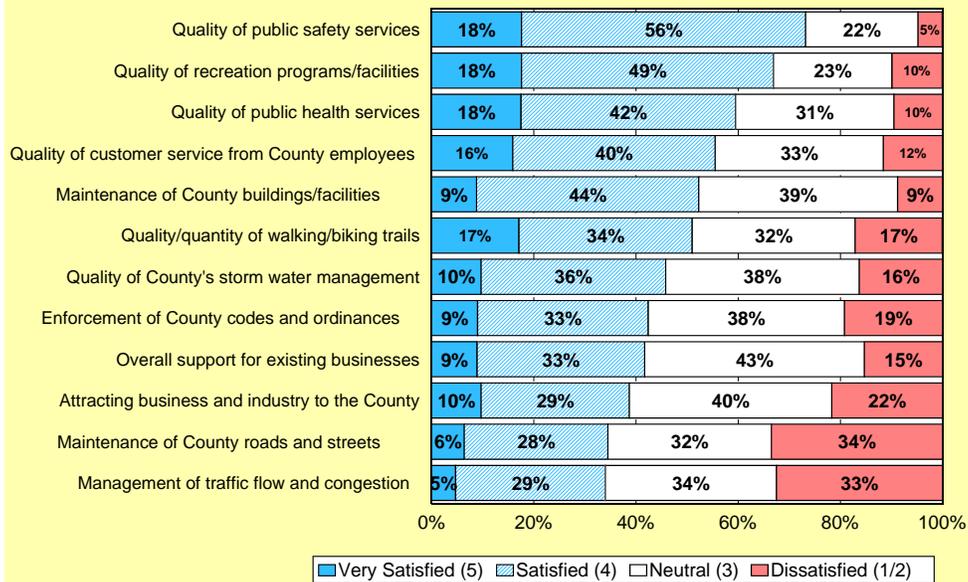
by percentage of respondents (multiple responses allowed)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q5. Overall Satisfaction with Various County Services

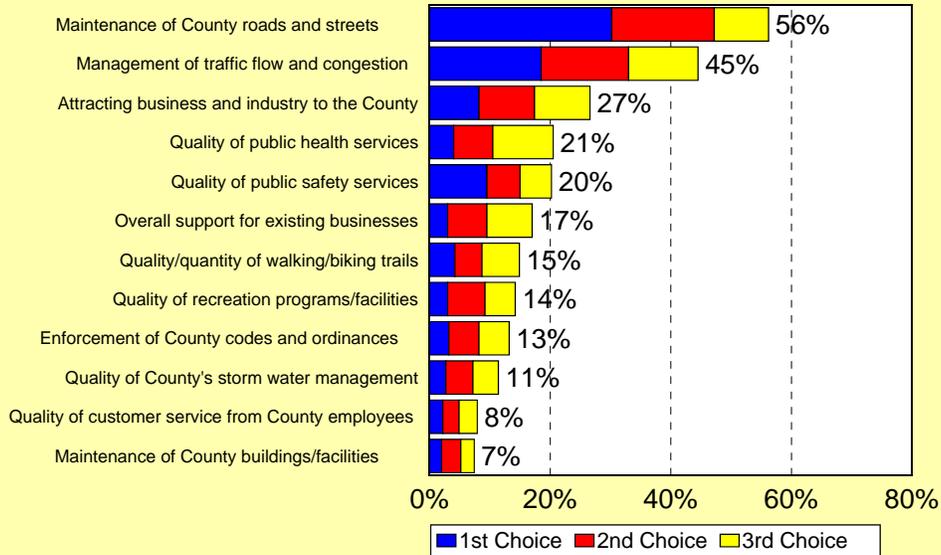
by percentage of respondents (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q6. County Services That Should Receive the Most Emphasis Over the Next Two Years

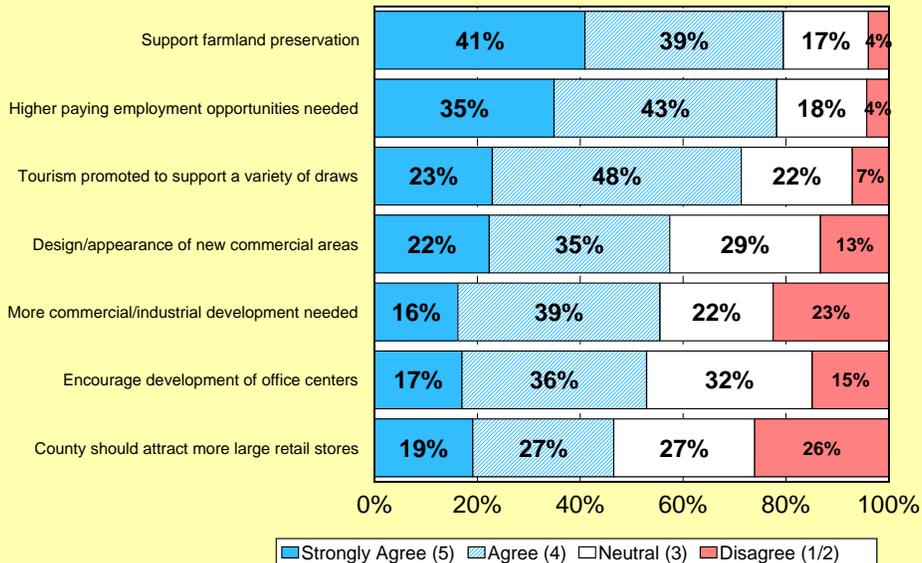
by percentage of respondents who selected the item as one of their top three choices



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q7. Level of Agreement with Various Statements Concerning Economic Development

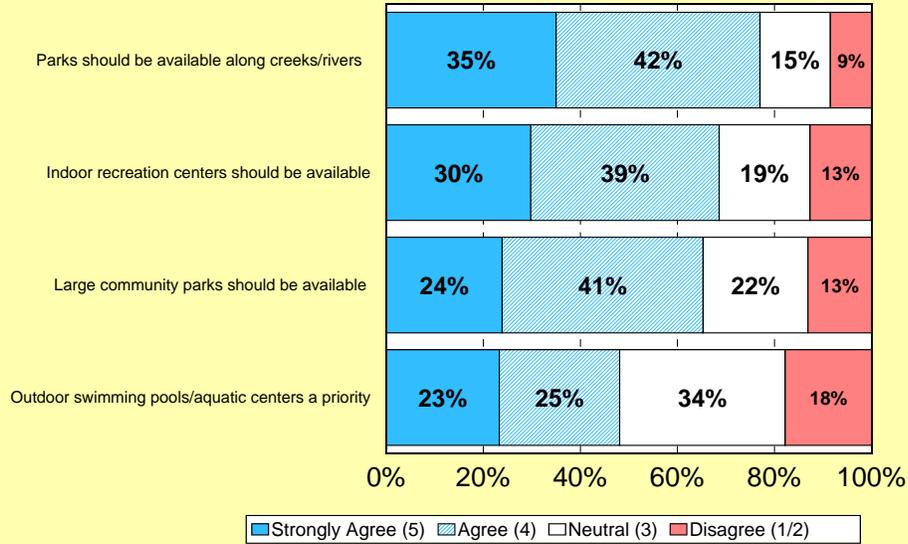
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q8. Level of Agreement with Various Statements Concerning Parks and Recreation

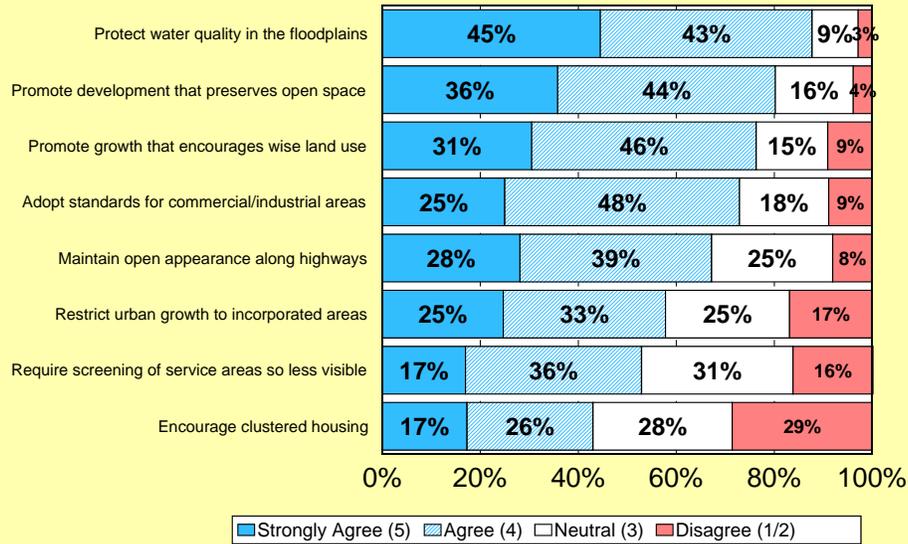
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q9. Level of Agreement with Various Statements Concerning Planning Issues/Land Use

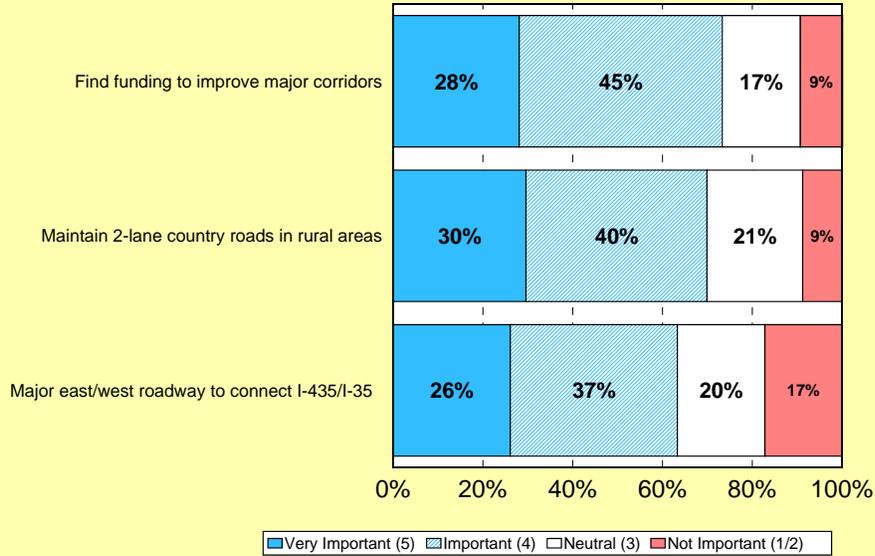
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q10. Level of Importance of Various Statements Concerning Transportation

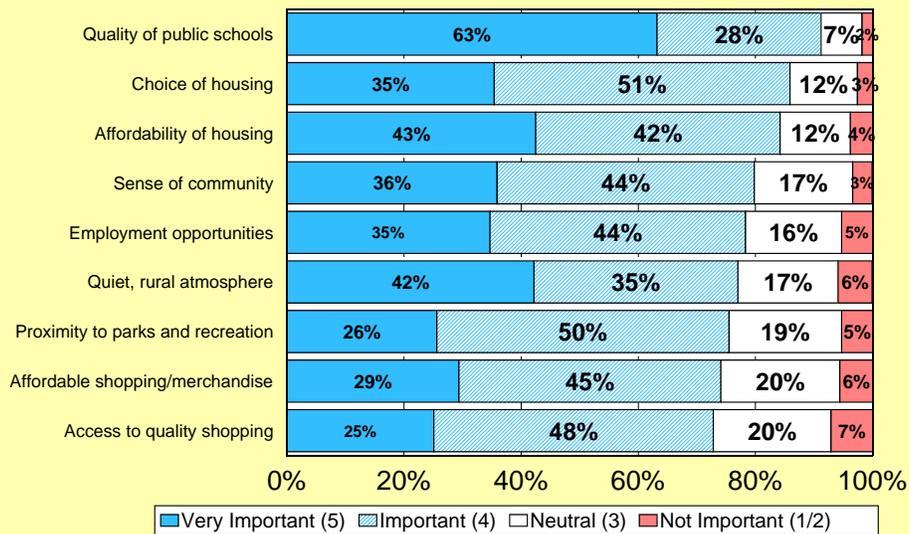
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q11. Importance of Various Reasons Residents Continue to Live in Clay County

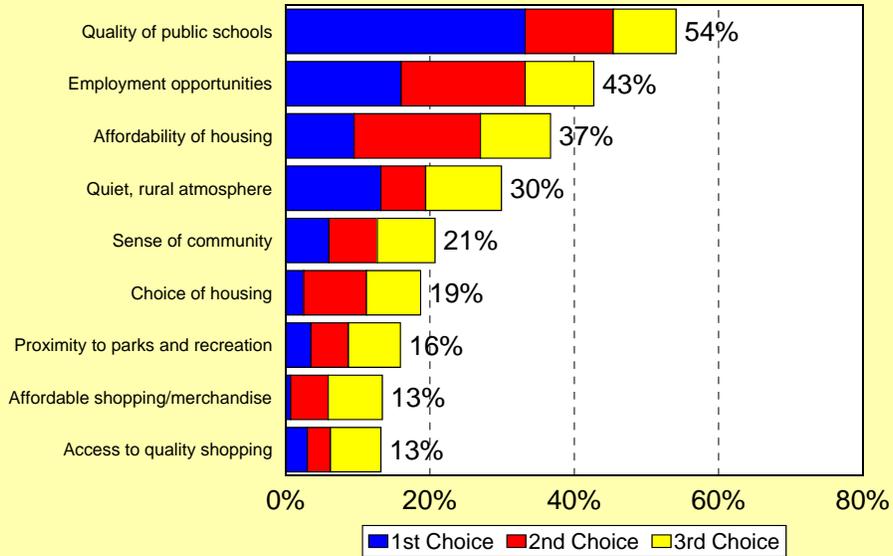
by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale (excluding don't knows)



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q12. Items That Should Receive the Most Emphasis from County Leaders Over the Next Two Years

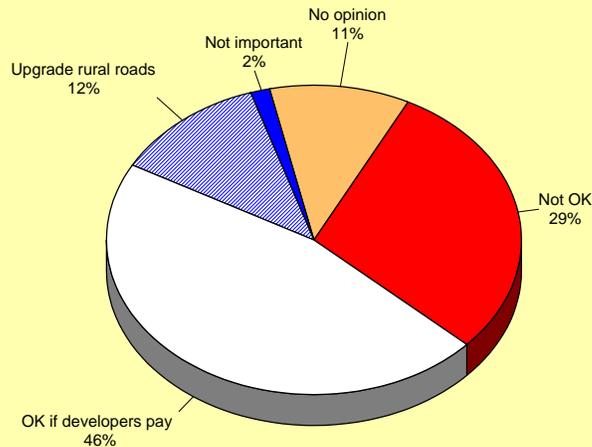
by percentage of respondents who selected the item as one of their top three choices



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q13. If Urban Development Spreads to Rural Areas, It Can Impact Rural Areas. Assuming This Is True, How Should This Influence Future County Planning?

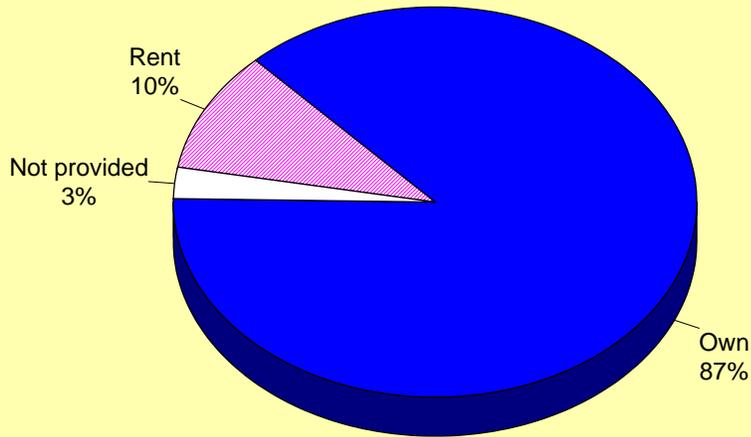
by percentage of respondents



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Q15. Do You Rent or Own Your Current Residence?

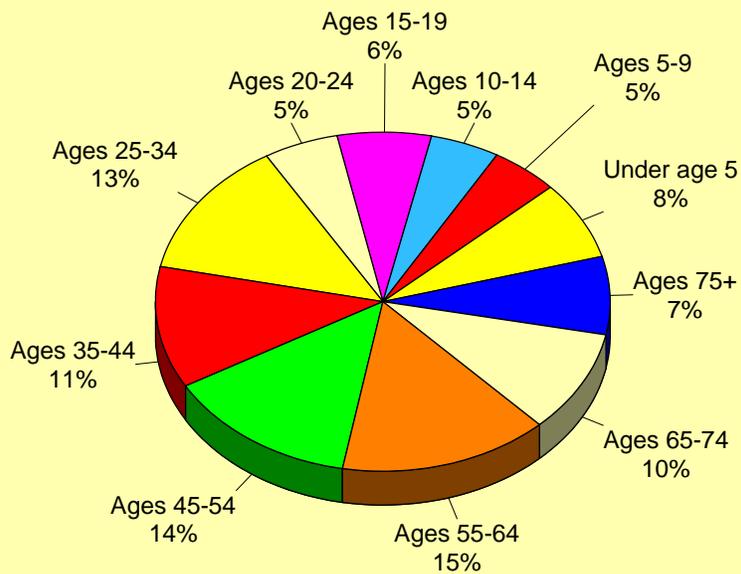
by percentage of respondents



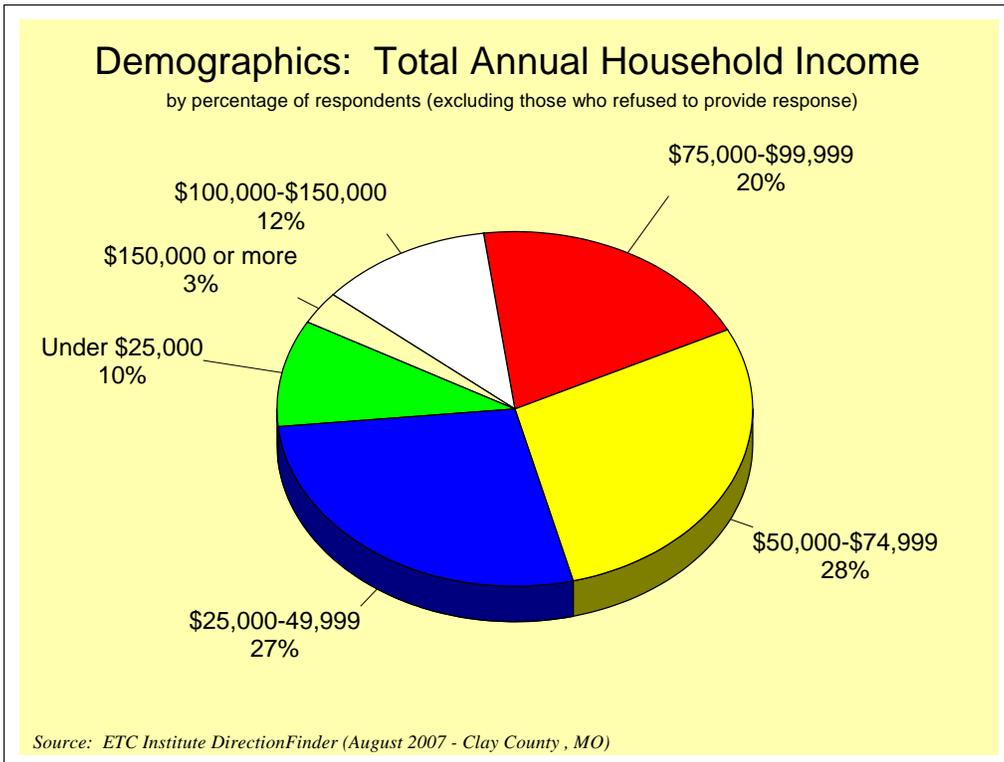
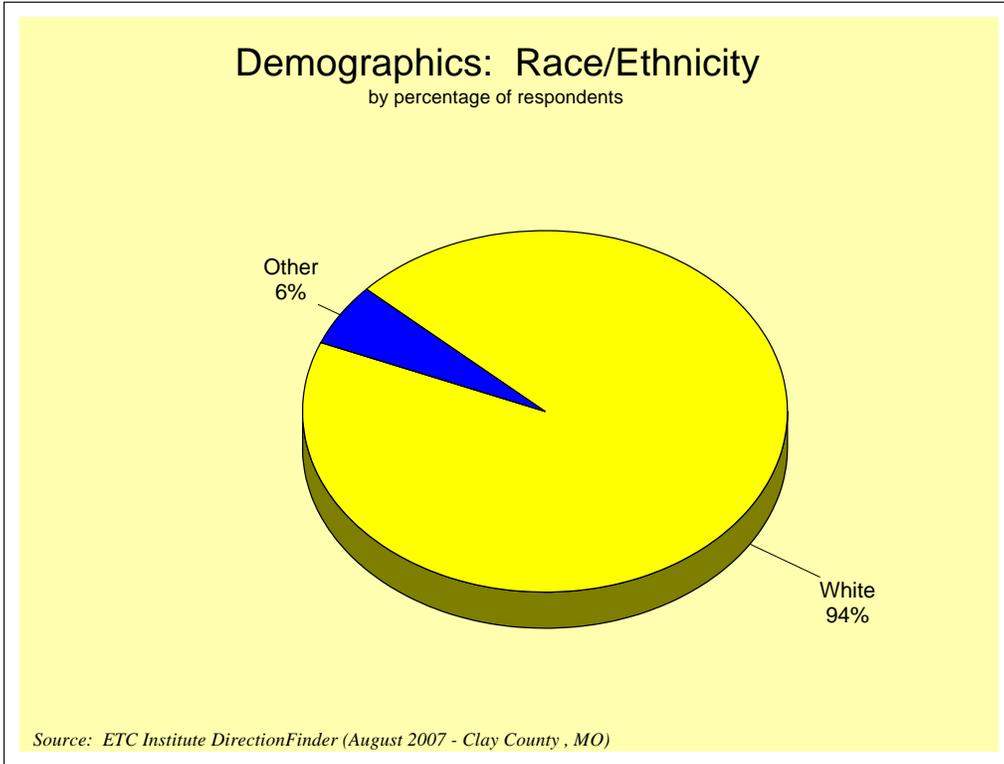
Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Demographics: Ages of People In Household

by percentage of persons in households

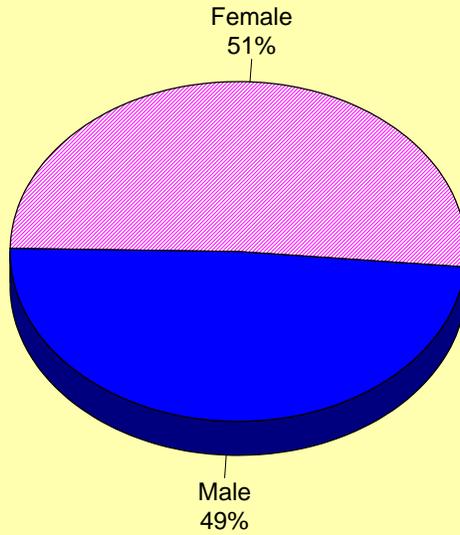


Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)



Q28. Demographics: Gender of the Respondents

by percentage of respondents



Source: ETC Institute DirectionFinder (August 2007 - Clay County, MO)

Section 2:
Tabular Data

Q1. Where do you live in Clay County?

<u>Q1 Where do you live in Clay Co</u>	<u>Number</u>	<u>Percent</u>
1=In a City	310	77.3 %
2=In Country	91	22.7 %
Total	401	100.0 %

Q1a. If in the country, do you live on a farm?

<u>Q1a Live on a farm</u>	<u>Number</u>	<u>Percent</u>
1=Yes	24	31.2 %
2=No	49	63.6 %
9=Not provided	4	5.2 %
Total	77	100.0 %

Q1b. If Yes, what is the acreage of the farm?

<u>Q1b Acreage of the farm</u>	<u>Number</u>	<u>Percent</u>
3=	2	8.7 %
4=	1	4.3 %
6=	1	4.3 %
9=	1	4.3 %
10=	8	34.8 %
20=	1	4.3 %
23=	1	4.3 %
28=	1	4.3 %
30=	1	4.3 %
38=	1	4.3 %
80=	1	4.3 %
85=	1	4.3 %
95=	1	4.3 %
100=	1	4.3 %
159=	1	4.3 %
Total	23	100.0 %

Q2. Several items that may influence your perception of life in the County are listed below. Please rate your satisfaction with each item on a scale of 1 to 5 where 5 means "excellent" and 1 means "poor."

(N=401)

	Poor 1	Below Average 2	Neutral 3	Good 4	Excellent 5	Don't Know 9
Q2a Quality of services provided by County	1.5%	4.7%	30.4%	45.6%	11.0%	6.7%
Q2b Value receive for tax dollars & fees	3.0%	13.5%	35.4%	35.7%	7.0%	5.5%
Q2c Overall image of County	1.7%	3.7%	26.2%	50.9%	15.5%	2.0%
Q2d How well planning & managing growth	5.2%	19.2%	31.9%	25.9%	9.2%	8.5%
Q2e Overall quality of life	0.2%	2.0%	18.5%	61.3%	15.7%	2.2%
Q2f Quality of new development	3.5%	8.5%	33.4%	38.9%	11.5%	4.2%
Q2g As a place to live	0.7%	3.0%	12.0%	58.6%	24.4%	1.2%
Q2h As a place to raise children	1.0%	2.5%	13.0%	51.4%	26.9%	5.2%
Q2i As a place to work	2.0%	5.5%	23.9%	40.1%	12.2%	16.2%
Q2j How well is preserving natural resources	6.0%	15.2%	33.7%	25.2%	5.7%	14.2%

Q2. Several items that may influence your perception of life in the County are listed below. Please rate your satisfaction with each item on a scale of 1 to 5 where 5 means "excellent" and 1 means "poor." (excluding don't know)

(N=401)

	Poor 1	Below Average 2	Neutral 3	Good 4	Excellent 5
Q2a Quality of services provided by County	1.6%	5.1%	32.6%	48.9%	11.8%
Q2b Value receive for tax dollars & fees	3.2%	14.2%	37.5%	37.7%	7.4%
Q2c Overall image of County	1.8%	3.8%	26.7%	51.9%	15.8%
Q2d How well planning & managing growth	5.7%	21.0%	34.9%	28.3%	10.1%
Q2e Overall quality of life	0.3%	2.0%	18.9%	62.8%	16.1%
Q2f Quality of new development	3.6%	8.9%	34.9%	40.6%	12.0%
Q2g As a place to live	0.8%	3.0%	12.1%	59.3%	24.7%
Q2h As a place to raise children	1.1%	2.6%	13.7%	54.2%	28.4%
Q2i As a place to work	2.4%	6.5%	28.6%	47.9%	14.6%
Q2j How well is preserving natural resources	7.0%	17.7%	39.2%	29.4%	6.7%

Q3. County Communication. For each of the items listed, please rate your satisfaction on a scale of 1 to 5 where 5 means "very satisfied" and 1 means "very dissatisfied."

(N=401)

	Very dissatisfied 1	Dissatisfied 2	Neutral 3	Satisfied 4	Very satisfied 5	Don't know 9
Q3a Availability of information about programs	3.5%	14.5%	34.9%	30.2%	10.5%	6.5%
Q3b Efforts to keep you informed about issues	6.2%	20.2%	40.4%	21.4%	8.0%	3.7%
Q3c How open to public involvement & input	7.0%	15.5%	36.4%	20.2%	5.7%	15.2%
Q3d Effectiveness of communication	7.2%	21.2%	39.2%	21.2%	4.7%	6.5%

Q3. County Communication. For each of the items listed, please rate your satisfaction on a scale of 1 to 5 where 5 means "very satisfied" and 1 means "very dissatisfied." (excluding don't know)

(N=401)

	Very dissatisfied 1	Dissatisfied 2	Neutral 3	Satisfied 4	Very satisfied 5
Q3a Availability of information about programs	3.7%	15.5%	37.3%	32.3%	11.2%
Q3b Efforts to keep you informed about issues	6.5%	21.0%	42.0%	22.3%	8.3%
Q3c How open to public involvement & input	8.2%	18.2%	42.9%	23.8%	6.8%
Q3d Effectiveness of communication	7.7%	22.7%	41.9%	22.7%	5.1%

Q4. What is the best way for you to receive information about Clay County services and the County Comprehensive Plan update?

<u>Q4 Best way to receive information</u>	<u>Number</u>	<u>Percent</u>
01 = Access Channel on cable television	71	17.7 %
02 = Brochures	143	35.7 %
03 = Local newspaper	209	52.1 %
04 = Newsletters	212	52.9 %
05 = Radio	60	15.0 %
06 = Television	126	31.4 %
07 = Website	146	36.4 %
08 = Word of mouth	69	17.2 %
09 = Public meetings	62	15.5 %
10 = Other	24	6.0 %
99 = Not Provided	4	1.0 %
Total	1126	

Q4. Other:

<u>Q4 Other</u>	<u>Number</u>	<u>Percent</u>
BROCHURE BY MAIL=	1	4.3 %
DIRECT MAIL=	4	17.4 %
E-MAIL=	5	21.7 %
E-MAIL NEWSLETTER=	1	4.3 %
EMAIL BULLETINS=	1	4.3 %
EMAIL UDATES=	1	4.3 %
MAIL=	4	17.4 %
MAILINGS=	2	8.7 %
MASS MAILINGS=	1	4.3 %
PERSONAL MAIL=	1	4.3 %
PHONE=	1	4.3 %
SCHOOL=	1	4.3 %
Total	23	100.0 %

Q5. OVERALL SATISFACTION WITH COUNTY SERVICES: Using a scale of 1 to 5 where 5 means "very satisfied" and 1 means "very dissatisfied," please rate your satisfaction with each of the services listed below.

(N=401)

	Very Dissatisfied 1	Dissatisfied 2	Neutral 3	Satisfied 4	Very satisfied 5	Don't know 9
Q5a Quality of public safety services	2.0%	2.5%	20.9%	52.9%	16.7%	5.0%
Q5b Quality of rec programs & facilities	1.5%	7.2%	20.7%	43.9%	15.7%	11.0%
Q5c Quality & quantity of walking & biking trails	2.5%	12.5%	27.9%	29.7%	15.0%	12.5%
Q5d Maintenance of County roads & streets	7.7%	24.7%	30.9%	27.2%	6.2%	3.2%
Q5e Maintenance of County buildings & facilities	1.5%	6.2%	34.2%	38.2%	7.7%	12.2%
Q5f Enforcement of codes & ordinances	4.2%	11.2%	30.9%	26.9%	7.2%	19.5%
Q5g Quality of customer service	2.2%	8.2%	29.4%	35.4%	14.2%	10.5%
Q5h Quality of stormwater management	3.0%	10.0%	30.2%	28.7%	7.7%	20.4%
Q5i Flow of traffic & congestion management	8.5%	22.4%	31.9%	27.9%	4.5%	4.7%
Q5j Attracting business & industry	3.7%	15.7%	35.4%	25.9%	8.7%	10.5%
Q5k Quality of public health services	2.0%	6.2%	26.9%	36.4%	15.2%	13.2%
Q5l Support of existing businesses	1.0%	10.7%	32.7%	24.9%	6.7%	23.9%

Q5. OVERALL SATISFACTION WITH COUNTY SERVICES: Using a scale of 1 to 5 where 5 means "very satisfied" and 1 means "very dissatisfied," please rate your satisfaction with each of the services listed below. (excluding don't know)

(N=401)

	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
	1	2	3	4	5
Q5a Quality of public safety services	2.1%	2.6%	22.0%	55.6%	17.6%
Q5b Quality of rec programs & facilities	1.7%	8.1%	23.2%	49.3%	17.6%
Q5c Quality & quantity of walking & biking trails	2.8%	14.2%	31.9%	33.9%	17.1%
Q5d Maintenance of County roads & streets	8.0%	25.5%	32.0%	28.1%	6.4%
Q5e Maintenance of County buildings & facilities	1.7%	7.1%	38.9%	43.5%	8.8%
Q5f Enforcement of codes & ordinances	5.3%	13.9%	38.4%	33.4%	9.0%
Q5g Quality of customer service	2.5%	9.2%	32.9%	39.6%	15.9%
Q5h Quality of stormwater management	3.8%	12.5%	37.9%	36.1%	9.7%
Q5i Flow of traffic & congestion management	8.9%	23.6%	33.5%	29.3%	4.7%
Q5j Attracting business & industry	4.2%	17.5%	39.6%	29.0%	9.7%
Q5k Quality of public health services	2.3%	7.2%	31.0%	42.0%	17.5%
Q5l Support of existing businesses	1.3%	14.1%	43.0%	32.8%	8.9%

Q6. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

<u>Q6 Most emphasis from leaders</u>	<u>Number</u>	<u>Percent</u>
A=Quality of public safety services	38	9.5 %
B=Quality of rec programs & facilities	12	3.0 %
C=Quality/quantity of trails	17	4.2 %
D=Maintenance of roads & streets	121	30.2 %
E=Maintenance of buildings & facilities	8	2.0 %
F=Enforcement of codes & ordinances	13	3.2 %
G=Quality of customer service	9	2.2 %
H=Quality of stormwater management	11	2.7 %
I=Flow of traffic & congestion management	74	18.5 %
J=Attracting business & industry	33	8.2 %
K=Quality of public health services	16	4.0 %
L=Support of existing businesses	12	3.0 %
Z=None chosen	37	9.2 %
Total	401	100.0 %

Q6. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

<u>Q6 2nd</u>	<u>Number</u>	<u>Percent</u>
A=Quality of public safety services	22	5.5 %
B=Quality of rec programs & facilities	25	6.2 %
C=Quality/quantity of trails	18	4.5 %
D=Maintenance of roads & streets	68	17.0 %
E=Maintenance of buildings & facilities	13	3.2 %
F=Enforcement of codes & ordinances	20	5.0 %
G=Quality of customer service	11	2.7 %
H=Quality of stormwater management	18	4.5 %
I=Flow of traffic & congestion management	58	14.5 %
J=Attracting business & industry	37	9.2 %
K=Quality of public health services	26	6.5 %
L=Support of existing businesses	26	6.5 %
Z=None chosen	58	14.5 %
Total	401	100.0 %

Q6. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

<u>Q6 3rd</u>	<u>Number</u>	<u>Percent</u>
A=Quality of public safety services	21	5.2 %
B=Quality of rec programs & facilities	20	5.0 %
C=Quality/quantity of trails	25	6.2 %
D=Maintenance of roads & streets	36	9.0 %
E=Maintenance of buildings & facilities	9	2.2 %
F=Enforcement of codes & ordinances	20	5.0 %
G=Quality of customer service	12	3.0 %
H=Quality of stormwater management	17	4.2 %
I=Flow of traffic & congestion management	46	11.5 %
J=Attracting business & industry	37	9.2 %
K=Quality of public health services	40	10.0 %
L=Support of existing businesses	30	7.5 %
Z=None chosen	88	21.9 %
Total	401	100.0 %

Q6. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years? (all three selections)

<u>Q6 Most emphasis from leaders</u>	<u>Number</u>	<u>Percent</u>
A = Quality of public safety services	81	20.2 %
B = Quality of rec programs & facilities	57	14.2 %
C = Quality/quantity of trails	60	15.0 %
D = Maintenance of roads & streets	225	56.1 %
E = Maintenance of buildings & facilities	30	7.5 %
F = Enforcement of codes & ordinances	53	13.2 %
G = Quality of customer service	32	8.0 %
H = Quality of stormwater management	46	11.5 %
I = Flow of traffic & congestion management	178	44.4 %
J = Attracting business & industry	107	26.7 %
K = Quality of public health services	82	20.4 %
L = Support of existing businesses	68	17.0 %
Z = None chosen	37	9.2 %
Total	1057	

Q7. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Don't know 9
Q7a Attract more large retail stores	8.0%	17.2%	26.4%	26.4%	18.5%	3.5%
Q7b More commercial & industrial development	8.2%	13.2%	20.9%	37.4%	15.5%	4.7%
Q7c Higher paying employment opportunities	1.7%	2.2%	16.2%	40.1%	32.4%	7.2%
Q7d Encourage development of office centers	4.5%	9.5%	30.2%	33.7%	16.0%	6.2%
Q7e Higher quality of design & appearance	1.5%	11.0%	27.4%	32.9%	20.9%	6.2%
Q7f Tourism should be promoted	2.5%	4.2%	20.7%	46.4%	21.9%	4.2%
Q7g Support farmland preservation	0.2%	3.7%	16.0%	37.4%	39.7%	3.0%

Q7. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas. (excluding don't know)

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Q7a Attract more large retail stores	8.3%	17.8%	27.4%	27.4%	19.1%
Q7b More commercial & industrial development	8.6%	13.9%	22.0%	39.3%	16.2%
Q7c Higher paying employment opportunities	1.9%	2.4%	17.5%	43.3%	34.9%
Q7d Encourage development of office centers	4.8%	10.1%	32.2%	35.9%	17.0%
Q7e Higher quality of design & appearance	1.6%	11.7%	29.3%	35.1%	22.3%
Q7f Tourism should be promoted	2.6%	4.4%	21.6%	48.4%	22.9%
Q7g Support farmland preservation	0.3%	3.9%	16.5%	38.6%	40.9%

Q8. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Don't know 9
Q8a Linear parks along creeks & rivers	2.7%	5.5%	14.0%	40.4%	33.7%	3.7%
Q8b Indoor recreation centers	2.5%	9.5%	17.7%	36.7%	28.2%	5.5%
Q8c Outdoor swimming pools/aquatic centers	5.7%	11.5%	32.9%	23.9%	22.4%	3.5%
Q8d Large community parks	3.5%	9.2%	20.9%	40.1%	23.2%	3.0%

Q8. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas. (excluding don't know)

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Q8a Linear parks along creeks & rivers	2.8%	5.7%	14.5%	42.0%	35.0%
Q8b Indoor recreation centers	2.6%	10.0%	18.7%	38.8%	29.8%
Q8c Outdoor swimming pools/aquatic centers	5.9%	11.9%	34.1%	24.8%	23.3%
Q8d Large community parks	3.6%	9.5%	21.6%	41.4%	23.9%

Q9. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Don't know 9
Q9a Restrict high-density urban growth	4.5%	10.7%	22.7%	29.7%	22.2%	10.2%
Q9b Encourage use of clustered housing	8.2%	18.2%	26.2%	23.7%	16.0%	7.7%
Q9c Adopt standards for attractive buildings	1.7%	6.7%	17.5%	45.9%	23.9%	4.2%
Q9d Protect water quality in floodplains	1.5%	1.2%	9.0%	41.4%	42.6%	4.2%
Q9e Preserve open space in rural areas	1.7%	2.0%	15.2%	42.4%	34.2%	4.5%
Q9f Set back buildings & parking lots from hwys	1.2%	6.5%	23.4%	37.2%	26.7%	5.0%
Q9g Require screening of service areas	4.2%	11.2%	29.4%	34.2%	16.2%	4.7%
Q9h Promote growth into rural areas	3.2%	5.5%	14.0%	43.9%	29.2%	4.2%

Q9. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas. (excluding don't know)

(N=401)

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Q9a Restrict high-density urban growth	5.0%	11.9%	25.3%	33.1%	24.7%
Q9b Encourage use of clustered housing	8.9%	19.7%	28.4%	25.7%	17.3%
Q9c Adopt standards for attractive buildings	1.8%	7.0%	18.2%	47.9%	25.0%
Q9d Protect water quality in floodplains	1.6%	1.3%	9.4%	43.2%	44.5%
Q9e Preserve open space in rural areas	1.8%	2.1%	15.9%	44.4%	35.8%
Q9f Set back buildings & parking lots from hwys	1.3%	6.8%	24.7%	39.1%	28.1%
Q9g Require screening of service areas	4.5%	11.8%	30.9%	35.9%	17.0%
Q9h Promote growth into rural areas	3.4%	5.7%	14.6%	45.8%	30.5%

Q10. Transportation.

(N=401)

	Not important at all 1	Not important 2	Neutral 3	Important 4	Very important 5	Don't know 9
Q10a Upgrade major E/W roadway connection	6.0%	10.2%	18.5%	35.2%	24.7%	5.5%
Q10b Find funding sources for corridors	2.5%	6.2%	16.2%	42.1%	26.2%	6.7%
Q10c Maintain 2-lane country roads	2.2%	6.2%	20.4%	38.7%	28.4%	4.0%

Q10. Transportation. (excluding don't know)

(N=401)

	Not important at all 1	Not important 2	Neutral 3	Important 4	Very important 5
Q10a Upgrade major E/W roadway connection	6.3%	10.8%	19.5%	37.2%	26.1%
Q10b Find funding sources for corridors	2.7%	6.7%	17.4%	45.2%	28.1%
Q10c Maintain 2-lane country roads	2.3%	6.5%	21.3%	40.3%	29.6%

Q11. Importance of Various Reasons to Live in Clay County: Using a scale of 1 to 5 where 5 means "very important" and 1 means "not important at all," please rate your level of importance with each of the services listed below.

(N=401)

	Not important at all 1	Not important 2	Neutral 3	Important 4	Very important 5	Don't know 9
Q11a Sense of community	1.0%	2.2%	16.2%	42.4%	34.7%	3.5%
Q11b Quality of public schools	0.5%	1.2%	6.7%	26.9%	60.8%	3.7%
Q11c Employment opportunities	1.5%	3.5%	15.7%	41.6%	33.2%	4.5%
Q11d Choice of housing	0.5%	2.0%	11.2%	49.1%	34.4%	2.7%
Q11e Affordability of housing	1.0%	2.7%	11.7%	40.6%	41.4%	2.5%
Q11f Access to quality shopping	1.2%	5.7%	19.7%	46.9%	24.7%	1.7%
Q11g Affordable shopping/ merchandise	1.2%	4.2%	20.0%	43.9%	28.9%	1.7%
Q11h Proximity to parks & recreation	0.7%	4.5%	18.7%	48.6%	24.9%	2.5%
Q11i Quiet rural atmosphere	1.5%	4.2%	16.7%	33.9%	41.1%	2.5%

Q11. Importance of Various Reasons to Live in Clay County: Using a scale of 1 to 5 where 5 means "very important" and 1 means "not important at all," please rate your level of importance with each of the services listed below. (excluding don't know)

(N=401)

	Not important at all 1	Not important 2	Neutral 3	Important 4	Very important 5
Q11a Sense of community	1.0%	2.3%	16.8%	43.9%	35.9%
Q11b Quality of public schools	0.5%	1.3%	7.0%	28.0%	63.2%
Q11c Employment opportunities	1.6%	3.7%	16.4%	43.6%	34.7%
Q11d Choice of housing	0.5%	2.1%	11.5%	50.5%	35.4%
Q11e Affordability of housing	1.0%	2.8%	12.0%	41.7%	42.5%
Q11f Access to quality shopping	1.3%	5.8%	20.1%	47.7%	25.1%
Q11g Affordable shopping/merchandise	1.3%	4.3%	20.3%	44.7%	29.4%
Q11h Proximity to parks & recreation	0.8%	4.6%	19.2%	49.9%	25.6%
Q11i Quiet rural atmosphere	1.5%	4.3%	17.1%	34.8%	42.2%

Q12. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

Q12 Most Emphasis	Number	Percent
A=Sense of community	24	6.0 %
B=Quality of public schools	133	33.2 %
C=Employment opportunities	64	16.0 %
D=Choice of housing	10	2.5 %
E=Affordability of housing	38	9.5 %
F=Access to quality shopping	12	3.0 %
G=Affordable shopping/merchandise	3	0.7 %
H=Proximity to parks & recreation	14	3.5 %
I=Quiet rural atmosphere	53	13.2 %
Z=None chosen	50	12.5 %
Total	401	100.0 %

Q12. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

Q12 2nd	Number	Percent
A=Sense of community	27	6.7 %
B=Quality of public schools	49	12.2 %
C=Employment opportunities	69	17.2 %
D=Choice of housing	35	8.7 %
E=Affordability of housing	70	17.5 %
F=Access to quality shopping	13	3.2 %
G=Affordable shopping/merchandise	21	5.2 %
H=Proximity to parks & recreation	21	5.2 %
I=Quiet rural atmosphere	25	6.2 %
Z=None chosen	71	17.7 %
Total	401	100.0 %

Q12. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years?

<u>Q12 3rd</u>	<u>Number</u>	<u>Percent</u>
A=Sense of community	32	8.0 %
B=Quality of public schools	35	8.7 %
C=Employment opportunities	38	9.5 %
D=Choice of housing	30	7.5 %
E=Affordability of housing	39	9.7 %
F=Access to quality shopping	28	7.0 %
G=Affordable shopping/merchandise	30	7.5 %
H=Proximity to parks & recreation	29	7.2 %
I=Quiet rural atmosphere	42	10.5 %
Z=None chosen	98	24.4 %
Total	401	100.0 %

Q12. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years? (all three selections)

<u>Q12 Most Emphasis</u>	<u>Number</u>	<u>Percent</u>
A = Sense of community	83	20.7 %
B = Quality of public schools	217	54.1 %
C = Employment opportunities	171	42.6 %
D = Choice of housing	75	18.7 %
E = Affordability of housing	147	36.7 %
F = Access to quality shopping	53	13.2 %
G = Affordable shopping/merchandise	54	13.5 %
H = Proximity to parks & recreation	64	16.0 %
I = Quiet rural atmosphere	120	29.9 %
Z = None chosen	50	12.5 %
Total	1034	

Q13. If urban development spreads out in rural areas of Clay County away from the cities, it can impact rural areas such as: county roads, utilities, and services like sheriff patrol coverage and rural fire protection. Assuming this is true, how should this influence future county planning?

Q13 Influence future county planning	Number	Percent
1=Not Important	6	1.5 %
2=Important but upgrade rural roads	49	12.2 %
3=OK if developers "pay their way"	185	46.1 %
4=Not OK	118	29.4 %
5=No Opinion	43	10.7 %
Total	401	100.0 %

Q15. Are you buying or renting your current residence?

Q15 Buying/renting current residence	Number	Percent
1=Own	350	87.3 %
2=Rent	41	10.2 %
9=Not Provided	10	2.5 %
Total	401	100.0 %

Q16. How many (counting yourself), are?

	Mean	Total	Sum
number	2.49	399	993
Q16 Under 5	0.20	399	81
Q16 5 to 9	0.13	399	53
Q16 10 to 14	0.13	399	50
Q16 15 to 19	0.17	399	66
Q16 20 to 24	0.14	399	54
Q16 25 to 34	0.35	399	139
Q16 35 to 44	0.30	399	118
Q16 45 to 54	0.37	399	148
Q16 55 to 64	0.39	399	157
Q16 65 to 74	0.26	399	102
Q16 Over 75	0.19	399	75

Q17. Which of the following best describes your race/ethnicity (check all that apply)?

<u>Q17 Race/Ethnicity</u>	<u>Number</u>	<u>Percent</u>
1 = Asian/Pacific Islander	3	0.7 %
2 = Black/African American	7	1.7 %
3 = White/Caucasian	378	94.3 %
4 = Hispanic	8	2.0 %
5 = American Indian/Eskimo	8	2.0 %
9 = Not Provided	7	1.7 %
Total	411	

Q18. What is the approximate annual income of your total household?

<u>Q18 Annual household income</u>	<u>Number</u>	<u>Percent</u>
1=Under \$25,000	34	8.5 %
2=\$25,000 to \$49,999	97	24.2 %
3=\$50,000 to \$74,999	101	25.2 %
4=\$75,000 to \$99,999	70	17.5 %
5=\$100,000 to \$150,000	42	10.5 %
6=\$150,000 or more	11	2.7 %
9=Not Provided	46	11.5 %
Total	401	100.0 %

Q19. Gender:

<u>Q19 Gender</u>	<u>Number</u>	<u>Percent</u>
1=Male	196	48.9 %
2=Female	205	51.1 %
Total	401	100.0 %

Section 3:

Survey Instrument

Clay County, Missouri Comprehensive Plan Survey

Thank you for taking time to complete this important survey. County leaders will use the input of residents of unincorporated Clay County and the cities of the County (outside the City of Kansas City) to help set priorities so that growth is managed well and tax dollars are spent wisely. When you are finished, please return your completed survey in the postage-paid envelope provided. If you have any questions, please call Dave Clements at Clay County planning department, (816) 407-3380.

1. Where do you live in Clay County?

- ___(1) In one of the cities in Clay County.
- ___(2) In the country (in a farm house, or rural residence, or in a rural subdivision) outside of the cities.
 - (a) If in the country, do you live on a farm? _____ Yes, _____ No.
 - (b) If Yes, What is the acreage of the farm? _____ acres.

2. Several items that may influence your perception of life in the County are listed below. Please rate your satisfaction with each item on a scale of 1 to 5 where 5 means "excellent" and 1 means "poor."

<i>How would you rate Clay County:</i>	<u>Excellent</u>	<u>Good</u>	<u>Neutral</u>	<u>Below Average</u>	<u>Poor</u>	<u>Don't Know</u>
A. Overall quality of services provided by the County	5	4	3	2	1	9
B. Overall value that you receive for your County tax dollars and fees	5	4	3	2	1	9
C. Overall image of the County	5	4	3	2	1	9
D. How well the County is planning and managing growth	5	4	3	2	1	9
E. Overall quality of life in the County	5	4	3	2	1	9
F. Quality of new development in the County	5	4	3	2	1	9
G. The County as a place to live	5	4	3	2	1	9
H. The County as a place to raise children	5	4	3	2	1	9
I. The County as a place to work	5	4	3	2	1	9
J. How well the County is doing when it comes to preserving "natural resources"	5	4	3	2	1	9

3. County Communication. For each of the items listed, please rate your satisfaction on a scale of 1 to 5 where 5 means "very satisfied" and 1 means "very dissatisfied."

<i>County Communication</i>	<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>	<i>Don't Know</i>
A. The availability of information about County programs and services	5	4	3	2	1	9
B. County efforts to keep you informed about county related issues	5	4	3	2	1	9
C. How open the County is to public involvement and input from residents	5	4	3	2	1	9
D. Overall effectiveness of County communication with the public	5	4	3	2	1	9

4. What is the best way for you to receive information about Clay County services and the County Comprehensive Plan update? (CHECK ALL THAT APPLY)

- | | |
|--|---|
| <input type="checkbox"/> (01) Access Channel on cable television | <input type="checkbox"/> (06) Television |
| <input type="checkbox"/> (02) Brochures | <input type="checkbox"/> (07) A website |
| <input type="checkbox"/> (03) Local newspaper | <input type="checkbox"/> (08) Word of mouth |
| <input type="checkbox"/> (04) Newsletters | <input type="checkbox"/> (09) Public meetings |
| <input type="checkbox"/> (05) Radio | <input type="checkbox"/> (10) Other: _____ |

5. OVERALL SATISFACTION WITH COUNTY SERVICES: Using a scale of 1 to 5 where 5 means “very satisfied” and 1 means “very dissatisfied,” please rate your satisfaction with each of the services listed below.

<i>County Services</i>	<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>	<i>Don't Know</i>
A. Overall quality of Clay County public safety services (e.g., sheriff’s department)	5	4	3	2	1	9
B. Overall quality of County recreation programs and facilities (Smithville Lake)	5	4	3	2	1	9
C. Quality and quantity of walking and biking trails in the County	5	4	3	2	1	9
D. Overall maintenance of County roads and streets	5	4	3	2	1	9
E. Overall maintenance of County buildings and facilities	5	4	3	2	1	9
F. Overall enforcement of County codes and ordinances for building and housing	5	4	3	2	1	9
G. Overall quality of customer service you receive from County employees	5	4	3	2	1	9
H. Overall quality of the County's storm water management	5	4	3	2	1	9
I. Overall flow of traffic and congestion management in the County	5	4	3	2	1	9
J. Attracting business & industry to Clay County	5	4	3	2	1	9
K. Overall quality of public health services in the community	5	4	3	2	1	9
L. Overall support by the County of existing businesses	5	4	3	2	1	9

6. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years? [Write in the letters below using the letters from the list in Question 5 above.]

_____ 1st _____ 2nd _____ 3rd

Economic Development

7. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

<i>Economic Development</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>Don't Know</i>
A. Clay County should attract more large retail stores	5	4	3	2	1	9
B. Clay County needs more commercial and industrial development	5	4	3	2	1	9
C. Clay County needs higher paying, employment opportunities	5	4	3	2	1	9
D. Clay County should encourage the development of office centers	5	4	3	2	1	9
E. New and revitalized commercial areas should have higher quality design & appearance than existing commercial areas	5	4	3	2	1	9
F. Tourism in Clay County should be promoted to include a variety of draws, in addition to Jesse James Farmstead	5	4	3	2	1	9
G. Clay County should support farmland preservation to foster local food production	5	4	3	2	1	9

Parks and Recreation

8. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

<i>Parks and Recreation</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>Don't Know</i>
A. Linear parks should be provided along creeks and rivers that can be used for activities such as walking, biking, and hiking	5	4	3	2	1	9
B. Indoor recreation centers should be available with gyms and fitness areas that can be used for basketball, hockey, and volleyball	5	4	3	2	1	9
C. Outdoor swimming pools/aquatic centers should be a priority	5	4	3	2	1	9
D. Large community parks with outdoor athletic fields, complexes for organized team sports, and picnic areas should be available in the County	5	4	3	2	1	9

Planning Issues/Land Use

9. Using a five-point scale where 5 means "Strongly Agree" and 1 means "Strongly Disagree", please rate the County's current pace of development in each of the following areas.

<i>Planning Issues/Land Use</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>Don't Know</i>
A. Clay County should restrict high-density urban growth to incorporated areas (cities) [lot sizes smaller than 10 acres.]	5	4	3	2	1	9
B. Clay County should encourage the use of clustered housing to preserve open space.	5	4	3	2	1	9
C. Clay County should adopt standards for attractive looking commercial & industrial buildings.	5	4	3	2	1	9
D. Clay County should protect water quality in the floodplains that flow to Smithville Lake.	5	4	3	2	1	9
E. Clay County should promote development that preserves open space in rural areas.	5	4	3	2	1	9
F. Clay County should set back buildings and parking lots from rural highways to maintain an open appearance along the highways.	5	4	3	2	1	9
G. Clay County should require screening of parking lots, storage areas and other service areas so they are less visible as you drive down Clay County highways.	5	4	3	2	1	9
H. Clay County should promote growth into rural areas that encourages wise land use and natural resource protection.	5	4	3	2	1	9

10. Transportation.

For each of the items listed, please rate your satisfaction on a scale of 1 to 5 where 5 means "very important" and 1 means "not important at all."

<i>Transportation</i>	<i>Very Important</i>	<i>Important</i>	<i>Neutral</i>	<i>Not Important</i>	<i>Not Important at all</i>	<i>Don't Know</i>
A. Upgrade a major east-west roadway connection between I-435 and I-35.	5	4	3	2	1	9
B. Find funding sources for improving major transportation corridors	5	4	3	2	1	9
C. Maintain 2-lane country roads that are shaded and help support a rural "sense of place" in rural areas of Clay County	5	4	3	2	1	9

11. Importance of Various Reasons to Live in Clay County: Using a scale of 1 to 5 where 5 means “very important” and 1 means “not important at all,” please rate your level of importance with each of the services listed below.

<i>Reasons to Live in Clay County</i>	<i>Very Important</i>	<i>Important</i>	<i>Neutra</i>	<i>Not Important</i>	<i>Not Important at all</i>	<i>Don't Know</i>
A. Sense of community	5	4	3	2	1	9
B. Quality of public schools	5	4	3	2	1	9
C. Employment opportunities in the County	5	4	3	2	1	9
D. Choice of housing	5	4	3	2	1	9
E. Affordability of housing	5	4	3	2	1	9
F. Access to quality shopping	5	4	3	2	1	9
G. Affordable shopping/merchandise	5	4	3	2	1	9
H. Proximity to parks and recreation	5	4	3	2	1	9
I. Quiet, rural atmosphere	5	4	3	2	1	9

12. Which THREE of these items do you think should receive the most emphasis from County leaders over the next TWO Years? [Write in the letters below using the letters from the list in Question 11 above.]

 1st
 2nd
 3rd

Financing Urban Development

13. If urban development spreads out in rural areas of Clay County away from the cities, it can impact rural areas: county roads and utilities, and services like sheriff patrol coverage and rural fire protection. Assuming this is true, how should this influence future county planning?
- _____ (1) Not important.
 - _____ (2) Important, but ok as long as urban developers upgrade rural roads.
 - _____ (3) Ok, but only if urban developers “pay their way” for upgrades to roads and utilities, and also for upgrades to sheriff and fire and other impacted services.
 - _____ (4) Not ok, because rural areas should be left rural, with primarily farms and large-acreage home sites (at least 10-to 20-acres per home site) allowed.
 - _____ (5) No opinion.

Optional

14. Do you have a suggestion about how to generate additional, and more diverse revenue sources, beyond sales tax, to assist with the desired improvements suggested within the survey?

Demographics

15. Are you buying or renting your current residence? ___(1)Own ___(2) Rent

16. How many (counting yourself), are?

Under age 5 ___	Ages 20-24 ___	Ages 55-64 ___
Ages 5-9 ___	Ages 25-34 ___	Ages 65-74 ___
Ages 10-14 ___	Ages 35-44 ___	Ages 75+ ___
Ages 15-19 ___	Ages 45-54 ___	

17. Which of the following best describes your race/ethnicity (check all that apply)?

- (1) Asian/Pacific Islander (2) Black/African American
- (3) White/Caucasian (4) Hispanic
- (5) American Indian/Eskimo (6) Other: _____

18. What is the approximate annual income of your total household?

- (1) Under \$25,000 (4) \$75,000 to \$99,999
- (2) \$25,000 to \$49,999 (5) \$100,000 to \$150,000
- (3) \$50,000 to \$74,999 (6) \$150,000 or more

19. Gender: (1) Male (2) Female

20. Do you have any additional comments about Clay County Services or the countywide Comprehensive Plan?

This concludes the survey. Thank you for your time!
Please Return Your Completed Survey in the Enclosed Postage Paid Envelope Addressed to:
ETC Institute, 725 W. Frontier Circle, Olathe, KS 66061

Your responses will remain Completely Confidential. The information printed on the sticker to the right will ONLY be used to help identify which areas of the community are most affected by Comprehensive Plan decisions. If your address is not correct, please provide the correct information. Thank you.

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APPENDIX C: LAND EVALUATION AND SITE ASSESSMENT (LESA)

Land Evaluation and Site Assessment (LESA) System

Developing counties are constantly faced with the pressure to allow non-agricultural development at the urban fringes and in rural areas. Without predetermined factors to be considered, the decision to approve or disapprove proposed development of this nature is arbitrary. The decision making process often is reduced to weighing the individual desires of the land owner against public “outcry” at public meetings, instead of consideration of relevant development factors.

LESA for Clay County

A Land Evaluation and Site Assessment (LESA) System provides a rational process for assisting Clay County elected and appointed officials in making farmland conversion decisions. The system allows local official to quantify the impacts of land use change through a “scoring” system. In other words, the LESA system is a way of quantifying both objective and subjective factors in order to make an informed determination in zoning, site planning and similar land use proposals.

The system for assigning points for Clay County development proposals will be set by the U.S. Department of Agriculture, *Farmland Conversion Impact Rating* system. To determine the development characteristics of the land, the system uses two (2) separate but related calculations:

- Land Evaluation (LE) - an evaluation of soil properties and their relative desirability for agricultural use; and
- Site Assessment (SA) - an assessment of other factors relating to the site that should be considered before farmland is converted to other uses.

It will be the determination of the County planning director whether to apply the USDA rating system to a project (**Ref. Appendix C**). In any case, the County’s policy will be to use the LESA evaluation system as an administrative guide, not as a required numerical score that triggers development approval or disapproval.

1. Land Evaluation

Soils within any given area of Clay County can vary drastically from site to site. These differences in soil conditions should be carefully considered when determining whether land should be retained in agricultural uses or converted to non-ag uses. For this reason, the system’s land evaluation calculation is designed to provide an average site value based on soil compatibility for farming.

As part of the calculations, soils are grouped by using a soil capability class system, productivity index and a prime or important farmland designation. Each soil group is assigned a relative value by dividing the highest productivity index of the groups found in the study area into the productivity index for each soil group. Using these given factors for each evaluation, an infinite number of sites can be easily evaluated by determining an average site value percentage. Percentage values **above 50 percent** indicate that the site is a prime location for agricultural retention. Percentage values **less than 50 percent** indicate that the site is suitable for non-agricultural related uses.

2. Site Assessment

Agricultural economic viability of a site cannot be measured in isolation from existing and impending land use needs of the overall study area. The Site Assessment (**Ref. Page C-4**) process provides a calculation for identifying important factors other than soils that affect the economic viability of a site for agricultural uses.

The LESA System's Site Assessment calculates multiple factors when a change to another land use is proposed in the regulatory jurisdiction of Clay County, which is all unincorporated portions of the county. Site Assessment factors are grouped into the following three major areas of consideration:

A. Location and Land Use Considerations. These factors can include:

- Land area in an agricultural use within one mile of the site;
- Percentage of land in agricultural use adjacent to the site; and
- Size of the site to be converted.

B. Public Policy Considerations. These factors can include:

- Land area zoned for agricultural uses within one mile of the site;
- Land area zoned for agricultural use adjacent to the site;
- Availability of development clusters at the site – to preserve land and open space;
- Environmental considerations (flood hazards, wetlands, aquifer recharge area, wild life habitat and unique community values);
- Creation of open space; and
- Protection of vistas in view sheds and view corridors.

C. Public Service and Community Facility Considerations. These factors can include:

- Access to adequate transportation;
- Availability of the public sanitary sewer system;
- Availability of a public water system
- Public protection classification (Fire Issuance Rating);
- Proximity of elementary and secondary schools/ capacity – current and planned;
- Cost/benefit of non-residential development; and
- Positive environmental effects of development.

Based on current land use data, land use regulations, site inspection and other pertinent information, a point value is determined by analyzing each site assessment factor and selecting a number value that best reflects the quality of the property in question. The higher the point value the more suitable the land is in an agricultural or farmland use.

Site Assessment—Example for Clay County: Availability of Public Sanitary Sewer

For example, a site in close proximity to a public sanitary sewer system with sufficient capacity encourages growth and reduces the long-term viability of a site for agriculture. For this

reason, the further the distance between the site and the sewer system the higher the points awarded. This factor might be calculated as follows:

Availability of a public sanitary sewer system

Sewer system not available	20 points	_____
Sewer system more than 1500 feet from site	16 points	_____
Sewer system between 750 and 1500 feet from site	12 points	_____
Sewer system less than 750 feet from site	6 points	_____
Sewer system available at site	0 points	_____

The lower the point total, the more appropriate it is for urban development. The higher the point total, the higher it rates for farmland preservation. By allowing values to be assigned to development factors the LESA System calculations for Land Evaluation and Site Assessment helps Clay County staff and officials determine:

- whether the conversion of land to non-agricultural uses is appropriate, and
- whether the proposed development is “ripe” for approval from a land use and fiscal policy perspective.

As a result, many negative aspects of premature development can be minimized, such as premature extension of utilities and infrastructure, development conflicts and loss of valuable agricultural resources. In this example above re sanitary sewer, if the sewer system was not yet extended to the site, and the developer was willing to pay for that extension, then his application would be given 0 points. Please refer to the inset text box (**Ref. Chapter 4**) for more information about farmland preservation and the purchase of agricultural conservation easement (PACE) programs. Among advocates of farmland protection efforts, agricultural easements are regarded as the most promising tool for dealing with urban conversion trends, largely because of their non-regulatory and landowner compensation features.

POINT SYSTEM

The system has been designed to provide for the assignment of a maximum of 300 points, which would indicate a strong tendency toward maintaining land for agricultural use. Zero points would indicate that a conversion to other uses would be **more** acceptable. The following breakdown should be used in evaluating land for rezoning from agriculture to other non-agriculture related uses. Point values of 225 and above indicate that the site is a prime location for agricultural retention. Point values of less than 225 indicate that the site is suitable for non-agricultural related uses.

Above 225 points	Appropriate for Agricultural Retention
Below 225 points	Suitable for Ag-land Uses

1. LAND EVALUATION

In order to evaluate land value, the following five step process should be followed.

- Step 1: Using the following table, enter into column one the soil types found in the proposed development as indicated in the Soil Survey of Clay County. *

- Step 2: The relative value for each applicable soil type as indicated in the Soil Survey of Clay County as found in the proposed development would be entered into column two.
- Step 3: The acreage for each applicable soil type within the development entered in column three.
- Step 4: The relative value for each soil type in column two should then be multiplied by the acreage for each applicable soil type as indicated in column three. The resulting number shown in column four.
- Step 5: The total of column four should be divided by the total acreage within the proposed development. The resulting number is the average site value for the proposed development.

SAMPLE of a LESA LAND EVALUATION - ILLUSTRATION OF RELATIVE VALUES

Soil Group	Relative Value	Number of Acres in Site	Product of Relative Value and Number of Acres
1	100	50	5000
2	96		
3	94	20	1880
4	89		
5	85	20	1700
6	80	10	800
7	75		
8	70		
TOTALS		100	9380

Product of Relative Value and Acres / Acres in Site = Average Site Value

$$9380 / 100 = 93.8$$

* As published by the USDA Soil Conservation Service (SCS). Land capability and yields per acre are published by the SCS for each county in Missouri. To evaluate land value of crops and pasture land it is recommended that the County planning director use Table 6 of the SDS publication, which lists the bushels per acre of crop yield for each soil type in Clay County.

Again, the County’s policy will be to use the LESA evaluation system as an administrative guide, not as a required numerical score that triggers development approval or disapproval.

2. SITE ASSESSMENT FACTORS

In order to determine a value for the site assessment factors, a point value for each of the following should be established. The total point value of all of the following criteria should then be added to the average site value established in the Land Evaluation procedure.

A. LOCATION AND LAND USE CONSIDERATION:

(1) Land Area in an Agricultural Use within one mile of site

90% to 100%	15 points	_____
75% to 89%	12 points	_____
50% to 74%	9 points	_____
25% to 49%	6 points	_____
10% to 24%	3 points	_____
0% to 9%	0 points	_____

(2) Land is an Agricultural Use adjacent to Site. (% of total Frontage)

90% to 100%	20 points	_____
75% to 89%	16 points	_____
50% to 74%	12 points	_____
25% to 49%	8 points	_____
10% to 24%	4 points	_____
0% to 9%	0 points	_____

(3) Size of the site to be converted.

80 acres or more	30 points	_____
40 to 79 acres	20 points	_____
20 to 39 acres	10 points	_____
10 to 19 acres	5 points	_____
0 to 9 acres	0 points	_____

SUB-TOTAL _____

B. PUBLIC POLICY CONSIDERATIONS

(1) Land area zoned agricultural use within one mile of site.

90% to 100%	15 points	_____
75% to 89%	12 points	_____
50% to 74%	9 points	_____
25% to 49%	6 points	_____
10% to 24%	3 points	_____
0% to 9%	0 points	_____

(2) Land area zoned for agricultural use adjacent to site. (% of site boundary)

90% to 100%	20 points	_____
75% to 89%	16 points	_____
50% to 74%	12 points	_____
25% to 49%	8 points	_____
10% to 24%	4 points	_____
0% to 9%	0 points	_____

(3) Land area outside of and not adjacent to Urban Service Tiers in the Comprehensive Plan.

90% to 100%	20 points	_____
75% to 89%	17 points	_____
50% to 74%	12 points	_____
25% to 49%	8 points	_____
10% to 24%	4 points	_____
0% to 9%	0 points	_____

(4) Amount of other developable sites in the vicinity of the site.

Other properly zoned sites available	10 points	_____
10 to 24 acres	8 points	_____
25 to 49 acres	6 points	_____
50 to 74 acres	4 points	_____
75 to 95 acres	2 points	_____
95 or more: no remainder	0 points	_____

(5) Natural Resource Evaluation (Stream Corridor Inventory, local food source, flood hazards, wetlands, aquifer recharge area, wildlife habitat and unique community values).

Compliance with the following environmental measures—as outlined in Chapter 4 of the Plan—may be considered effective ways to mitigate negative environmental impacts, in furtherance of natural resource conservation:

- Development within a Conservation District,
- Implementation of Natural Storm Water Treatment BMPs,
- Development that implements Natural Resources Inventory objectives,
- Development that implements Stream Buffer measures, and
- Preservation of Prime Farmland and/or Agricultural Production.

Major negative impact	10 points	_____
Substantial negative impact	6 points	_____
Minor negative impact	2 points	_____
Mitigated or no negative impact	0 points	_____

SUB-TOTAL _____

C. PUBLIC SERVICE AND COMMUNITY FACILITY CONSIDERATIONS

(1) Access to adequate transportation:

(A) Frontage on a county highway, a township road, or a city street built to a rural standards.

poor surface condition and a pavement width of less than 22 feet.	10 points	_____
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good surface condition on a pavement width of less than 22 feet. 8 points _____

poor surface condition on a pavement width of less than 22 feet. 6 points _____

good surface condition on a pavement width of less than 22 feet. 4 points _____

(B) Frontage on a collector street that services incorporated areas built to urban standards 2 points _____

(C) Frontage on a major street that services incorporated areas built to urban standards 0 points _____

2. Availability of a public sanitary sewer system.

Public system not available 10 points _____

System more than 1500 ft. from site. 8 points _____

System between 750 & 1500 ft. from site. 6 points _____

Sewer over 750 ft. from site. 4 points _____

Sewer less than 750 ft. from site. 2 points _____

Sewer available at site. 0 points _____

3. Availability of a public water system.

Public system not available 5 points _____

System more than 1500 ft. from site. 4 points _____

System between 750 & 1500 ft. from site. 3 points _____

Water over 750 ft. from site. 2 points _____

Water less than 750 ft. from site. 1 points _____

Water available at site. 0 points _____

4. Public Protection Classification (Fire Insurance Rating)

Classifications 9 and 10	5 points	_____
Classification 8	4 points	_____
Classification 7	3 points	_____
Classification 6	2 points	_____
Classification 5	1 point	_____
Classifications 1 through 4	0 points	_____

5. Availability of elementary school space.

Over 30 minutes from site	5 points	_____
15 to 30 minutes from site	3 points	_____
Less than 15 minutes from site	1 point	_____
Walking distance of site	0 points	_____

SUB-TOTAL _____

GRAND TOTAL SITE ASSESSMENT POINTS:

Above 225 points
Below 225 points

Appropriate for Agricultural Retention
Suitable for Ag-land Uses