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EXECUTIVE SUMMARY

The City of Eudora, Kansas has established and maintained a planning and zoning program for land use regulation. The City strives to define land use issues in the context of the community of Eudora consisting of the City and outlying areas most influenced by development within the City. The City now seeks to influence land use development—in the public interest—by preserving its strengths and implementing new community objectives:

- Defining and preserving a “Sense of Place” in Eudora;
- Accommodating development while implementing new planning policies;
- Balancing property rights with community rights; and
- Applying development review standards to implement existing and newly defined land use policies.

The values of Eudora—for example, the preservation of a “sense of place” and “small town atmosphere”—can be enhanced by the Plan. The City has the opportunity to build on these strengths as it manages land use change. Organized and sequential growth is encouraged inside of and contiguous to Eudora’s corporate boundaries. The way growth “fits” into the City—the appearance, compatibility and the provision of necessary services—can be influenced by the Plan.

The timing and phasing of growth can be paced through the planning process. This timing and phasing of growth is important so that limited financial resources can support the dual demands: maintaining what is here now, balanced with extending services to provide for growth. A key recommendation of the Plan is to provide cost effective public improvements including road and utility extensions.

The City seeks to coordinate with Douglas County when addressing growth outside the City. The City and County should continue coordinating in order to attract urban development to the areas within the corporate limits, as well as accommodate necessary rural development outside the City. In order to achieve this goal, the City needs the support of the citizens and the County in order to accommodate “urban” building and other non-agricultural construction in a cost-effective manner and allow rural development in a manner that will not stifle the future growth of the community.

Finally, the Plan calls for initiatives that must be taken by many groups and not just the City government. “Planning Objectives” are detailed for a series of planning issues in the entire Eudora community. The development objectives, for example, are challenges for the entire community. Better coordination among public and private groups will support local values articulated in the Plan.



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CHAPTER ONE: THE COMPREHENSIVE PLAN AND ITS ROLE

PLAN INTRODUCTION

The City of Eudora Comprehensive Plan is an official public document adopted by the Planning Commission and the City Council as a policy guide to decisions about the physical development of the community. It indicates in general how the citizens of the community want the City to develop in the near-term as well as in the next 10 to 20 years.

The City of Eudora Comprehensive Plan, 2001 (referenced hereafter as “the Comprehensive Plan,” “the Plan” or “this Plan”) is an official update to the City’s 1993 Long Range Physical Development Plan as amended. Long-range in nature, the Plan is intended to be a source of direction and guidance towards a desired end, rather than a static blueprint of future development of the City.

PURPOSE

The Comprehensive Plan is the official policy guide for the development of the City of Eudora. As such, the Plan:

1. Serves as a “database” for the City’s long-term planning activities. This database includes information regarding population, economic development, housing, utilities, land use, the natural environment, public facilities and transportation.
2. Delineates the City’s major planning goals.
3. Analyzes the factors that affect Eudora’s development and assesses their planning implications.
4. Recommends the future development of Eudora in policy and map formats. The policies serve as a guide for planning decisions and the Future Development Plan map is a graphic representation of those general policies.
5. Presents recommended changes to the City’s land use and development control regulations as a means to implement the Plan’s recommendations.
6. Provides a basis by which future annexation requests can be considered and evaluated.

The Plan provides a comprehensive, long-term, and general policy framework that will direct the future growth of the City. It is long-term because it represents the long-term vision of the future physical condition of the community and its socio-economic well being. It is general in order to accommodate the very dynamic nature of community planning. The Plan strives to ensure

orderly, healthy and harmonious growth that maximizes public benefit while minimizing public cost.

This Plan is intended to guide policy and outline recommendations for future land development and land preservation issues within the City of Eudora, Kansas. The Plan should be recognized and utilized as a flexible document to be interpreted within the broad spectrum of land development possibilities and changing conditions.

The Plan also has a near-term focus. It provides a foundation for land use and development control regulations. The Plan outlines the City's intentions for near-term development and outlines recommended modifications to current regulations in order to implement its recommendations. While the Plan provides regulatory direction, it should not be viewed as a zoning document or ordinance. As opposed to regulatory documents, the Comprehensive Plan should be recognized and utilized as a flexible, evolving document to be interpreted within the broad spectrum of land development possibilities and changing conditions. At the same time, proposals or actions that are not in conformity with the Plan and its intent are deemed inappropriate unless proper procedures are followed to amend the Plan.

The development of the Plan itself serves another important function or purpose: To obtain public input through a public participation process in the identification of long-term community development policies. The policies represent the community's common understanding of what growth they expect.

The Plan continues a process whereby an established community, Eudora, Kansas, is poised for continued growth, development, and renewal in partnership with residents, business owners, landowners and other community stakeholders. Its underlying purpose is to preserve and enhance investment by all citizens. It intends not only to provide the foundation for economic growth and stability, but growth in a safe and healthful environment, to nurture future generations that will take pride and invest in the City of Eudora.

The Plan will not ensure a successful future. That success will only be achieved by community leaders and caring and concerned citizens, who while using this Plan as a guideline, adhere to sound judgment, using thoughtful, intelligent, and reasonable observation, and determined fortitude. That process was clearly demonstrated by the active and positive participation of Eudora residents and community leaders in the development of the long range vision and specific recommendations outlined in this Plan.

Stagnant, dilapidated, and dying cities do not occur by accident. They appear when communities refuse to plan wisely for the long term, when special interests are vocal and pandered to, and when the rights of a few are elevated above those of the entire community.

The Comprehensive Plan forms a visionary, yet achievable basis for planning programs and development guidelines. It is intended to suggest additional areas of study and planning that are essential in moving projects forward to successful completion.

AUTHORITY

Since the landmark case of Village of Euclid vs. Amber Realty Company, decided in 1926, the U. S. Supreme Court has consistently recognized the legitimate right of government to legislate land use for the protection of the public welfare. In exercising this right, the City cannot deprive a property owner of all reasonable economic use of his property, nor can it act arbitrarily, using the law to accomplish against an individual property owner what it is otherwise unable or unwilling to do through direct compensation. However, the City has a broad ability to mitigate the public impact of private development. This is an authority that has been used to uphold laws mandating historic preservation, natural resource protection, zoning, signage restriction, aesthetic regulation, impact fees, excise taxes and required dedications. Euclid is still the law today. The government cannot single out individual property owners, nor can it act in an arbitrary manner. The ends must justify the means.

Within Kansas, state law providing cities the authority to prepare and adopt a Comprehensive Plan, Zoning Regulations and Subdivision Regulations manifests this authority. The Kansas Statutes provide cities the authority to prepare a Comprehensive Plan through KSA 12-746 (a).

A city planning commission is hereby authorized to make or cause to be made a comprehensive plan for the development of such city and any unincorporated territory lying outside of the city but within the same county in which such city is located, which in the opinion of the planning commission, forms the total community of which the city is a part.

Under current planning and zoning statutes, however, the City is under no obligation to prepare a comprehensive plan unless it wants to adopt subdivision regulations (KSA 12-748). Similarly, the City is not required by statute to follow the recommendations of the Plan unless so specified by City ordinance. In spite of this, case law within the Kansas and throughout the nation has effectively establishes that the Comprehensive Plan forms the basis for enforcing zoning regulations. Without a Comprehensive Plan determining and justifying specific zoning districts within a city is arbitrary at best.

To this extent, the Comprehensive Plan is often primarily used by the Planning Commission as a guide when presented with rezoning requests. In considering a rezoning request state statutes (KSA-756) require the City to review the application in relation to “matters to be considered” as adopted in the Zoning Regulations. These considerations should include consideration of the applications consistency with the Comprehensive Plan. Although the City is not required to follow the Plan’s recommendations regarding future land use, state statutes specifically provide that rezoning requests that are consistent with the Plan are presumed to be reasonable (KSA 12-756).

Any such (proposal for zoning) amendment, if in accordance with the land use plan or the land use element of a comprehensive plan, shall be presumed to be reasonable.

However, it must be clear that the Plan is not a set of regulations or zoning ordinance. The plan is a guide for development within the City, providing direction regarding the communities preferred future, goals, objective, priorities and policies. For this reason the Plan must be kept up to date. KSA 12-746 requires the Planning Commission to review or reconsider the Plan at least once each year in order to ensure that the Plan is still valid and relevant. During this review the Planning Commission is authorized to propose amendments, extensions or additions to the Plan following the same procedure for adoption of the original Plan.

VICINITY AND PLANNING AREA

The City of Eudora is located within Douglas County in the northeast region of the State of Kansas, approximately 10 miles east of Lawrence. Figure 1-1 shows the City's geographic location relative to other cities, highways and major physical features within a 50-mile radius.

Figure 1-1: Location Map



The area affected by the Comprehensive Plan (referenced hereafter as “the planning area”) includes all land within the incorporated boundaries of the City, as well as the unincorporated areas of Douglas County shown in Map 1, Planning Area Map. All or portions of the following sections of Eudora Township area covered:

- Township 12S, Range 21E: Sections 27, 28, and 31-34;
- Township 13 S, Range 21E: Sections 3-10, 15-22, and 27-34;
- Township 12S, Range 20E: Sections 24, 25, 35, and 36; and
- Township 13S, Range 20E: Sections 1-2, 10-12, 13-15, 23-26, and 36.

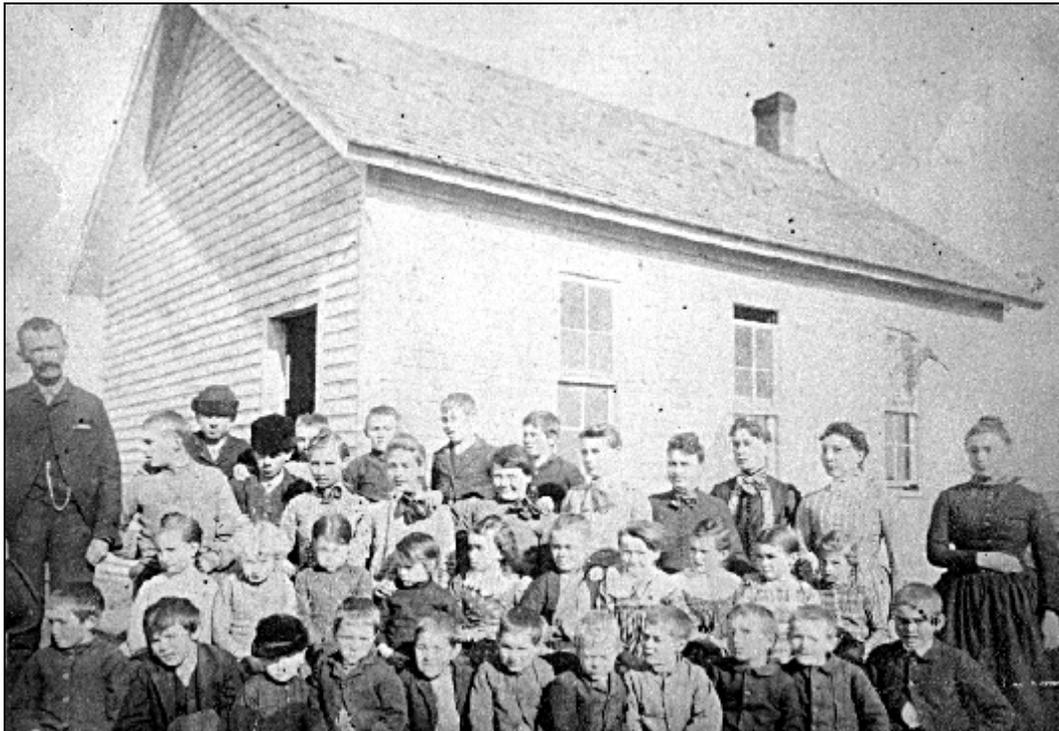
The City currently exercises limited extraterritorial zoning and subdivision regulation control over that part of the unincorporated area of Douglas County. This control is manifested in joint resolutions passed by the City and County, requiring joint City/County review of all development proposals within three miles of the Eudora corporate limits. This three-mile boundary has been represented in **Map 1** as the City of Eudora Planning Area. Similarly, the both jurisdictions have adopted joint subdivision regulations for portions of the designated planning area.

HISTORY OF EUDORA AND ITS PLANNING

From the first settlers seeking prosperity in the West to the families of today eagerly entering the 21st century, the promise of opportunity and the chance for a better life has drawn people to the City of Eudora.

Its rich history goes back to the days when Shawnee Indians shared this thickly wooded fertile, unspoiled land along the banks of the Kansas or Kaw River and Wakarusa with abundant wildlife. As word spread to the east about this beautiful land, Eudora grew and flourished.

The United Tribe of the Shawnee Indians first settled the Eudora area in the 1840's. Their reservation included all of Douglas and Johnson Counties and parts of five other counties. Shawnee Chief Pascal Fish sold 774.5 acres to the Chicago Settlement Company in 1857 for development by German immigrants. The Germans named the city after Chief Fish's daughter, Eudora whose name meant beautiful. The City became incorporated in 1858 and the first public building (the Town Hall and schoolhouse) was built in 1860.



Eudora's first public building (circa 1860).

As part of his book History of the State of Kansas published in 1883, A. T. Andreas recorded this early history of the City.

The City of Eudora is pleasantly located on a gradually ascending slope, stretching back on the south bank of the Kansas or Kaw River, near the junction of the Wakarusa. Situated as it is, seven miles east of Lawrence, twenty-eight miles southwest of Leavenworth, and thirty-three miles west of Kansas City, Mo., on the line of the A., T. & St. Fe Ry., its location as a trading point is excellent, which is proven by its being the second city in the county in point of population and trade. Eudora was settled and is surrounded by that class of citizens, who are known the world over for their thrift and capacity in promoting a substantial growth in a new country—the Germans.

Early in the summer of 1856, an association, composed of prominent Germans, was organized at Chicago, Ill., under the name of the “Neuer Ansiedlungs Verein,” with the prime object of making a settlement at some point in the great West. Organizing with fifty members, the association rapidly grew until it numbered over 600 stockholders. In March 1857, a location committee, consisting of H. Heimann, F. Barteldes and C. Schleifer, were appointed to go West and look up a location, preparatory to the location of a town site. After looking through various parts of Missouri and Kansas, the present town site of Eudora was decided upon. A tract of 800 acres was secured from the Shawnee Indians through Pascel Fish, their chief, who was to receive every alternate lot. The town site of 800 acres was laid off, and named “Eudora,” in honor of the chief’s daughter.

On the return of the committee, it was decided to at once colonize the place. Sixteen members, who represented different trades and professions, were elected by the association and sent out under the leadership of P. Hartig, for that purpose. Following are the names of this hardy band of pioneers: P. Hartig, J. Fischer, J. Schiesgroohl, J. Leoterle, A. Herling, J. Schoartz, G. Buttner, A. Schirner, M. Marthey, Fred Deirhmann, A. Veroh, C. Epple and wife, G. Kerg, C. Maxilius, Anton Goethhes, H. Baserman. The expenses of the party were paid by the association. Seven other members came out with the party, but paid their own expenses. The party left Chicago April 11, 1857, and arrived at their destination. April 18, 1857, commenced erecting rude log buildings and making other crude improvements. Thus was formed the first settlement of Eudora.

The first house on the town site was built by Pascel Fish, the Shawnee Indian, long before the advent of the white man as a settler. It was built of hewn logs, with a thatched straw roof, and was used as a hotel, known as the “Fish House.” The first building erected by the colony was a one-story log cabin, eighteen by twenty feet, which for awhile was used by all parities. During the summer of 1857, A Summerfield opened and established the first store.

The first birth that occurred was that of Eudora, a daughter of C. Epple, a member of the town company, born in 1857, soon after the arrival of the colony. The girl received her name in honor of the place. In the summer of 1857 occurred the death of J. Leoterle, a member of the “band of sixteen.” One of the

first marriages was that of F. Dischmann and Mrs. George Harbolt, who were married in 1857 or 1858.

In May, 1857, the association at Chicago sent C. Durr to St. Louis, where he purchased, at an expense of \$2,200, machinery for a circular saw mill and "corn cracker." The mill arrived at Eudora during the same month, and was put into operation for the company by C. Durr in the summer of the same year.

In order to secure a perfect title to their land, the association authorized L. W. Pfeif and C. Durr to purchase it from Pascel Fish, which was done at a cost of \$110,000, February 17, 1860, and approved on the 7th day of May.

Eudora was incorporated as a city, under Territorial laws, February 8, 1859, and still retains that charter and is governed accordingly. In 1869, for municipal purposed, the city was divided into two wards. Three councilmen were elected from each ward.

The Oregon Trail, which guided homesteaders from Independence, Missouri to Oregon from 1843 until the 1870's, passed directly through Eudora. Also during this time Eudora served as a stopover on the Underground Railroad for blacks fleeing bondage in the South. This exposure led to a diverse and colorful heritage, which is manifested in the many different styles of architecture evident in the community.



Main Street in Downtown Eudora demonstrates a variety of architectural styles (circa 1900)

Through out the history of the City, Eudora has been a diverse community united by a civic spirit, cooperation and planning. In 1957, Eudora Centennial Magazine noted the City's diversity:

In the Fiftieth Anniversary edition of the Eudora News in 1936 there appeared this sentence: "The [the early settlers] offered every inducement at their

command to have people establish themselves and locate as citizens.” This statement is borne out by a survey of the diversity of races, religious denominations, organizations and businesses in the town. With the coming of peace, the small community enjoyed an era of growth and expansion. A number of English families migrated from Missouri and Illinois and settled in the town; Germans arrived from Germany; Negroes from Missouri and Arkansas who had been freed by the Emancipation Proclamation found a welcome in the community; several Irish families appeared and settled on farms south and west of the town; friendly relations were established with the nearby Quaker community at Hesper; and a few members of the Jewish race had selected Eudora as their home town.

Since its inception the City has worked to improve the diverse community and protect the common interest of its residents through planning and land use regulation. These efforts are evident in the City’s early history as recorded in minutes of the City Council’s meetings.

Translations of early council minutes were summarized for the Eudora Centennial Magazine. The following excerpts from these summaries illustrate the City’s planning efforts.

As early as 1859 the City required private improvements to be made based upon land use.

Later, March 21 (1859) it was decreed that every house or lot owner who planned to grow something on his lot, had to have a fence, at least five feet high, strong enough and close enough to fend off cattle and hogs. Somebody tried to reduce the height to four and a half feet, but it didn’t pass the council.

Continued improvement and investment in the community have marked the City’s history. The community’s foresight was illustrated with improvements such as bridges over the Wakarusa and Kaw Rivers built to replace the ferries that had once served the town so well. Similarly, the community’s dedication was illustrated by the replacement of these bridges with better bridges following flooding.

Likewise, the summaries of City Council minutes further illustrate planning efforts to provide for improved transportation, infrastructure and community facilities.

Much of the council’s time during this period (1859 – 1860) was devoted to the problem of a trestle bridge across the Wakarusa. This caused endless debate and bickering but finally the bridge was completed. Mr. Harterscheidt of Leavenworth being the architect and final cost about \$2,000.

There is debate on the establishment of the first public school and where it should be located, of the beginning of a short road, cut through the forest, to Lawrence, of the digging of a public well with boards around it so live stock could not fall in.

Throughout the City's history planning has played a key role in growth and expansion. In its early history the City was sustainable, providing the goods and services the community could support. The Eudora Centennial Magazine noted the diversity of commercial development in the City's early history.

In the early days the towns were isolated one from the other and the communities had to be, to a large extent, self-supporting. So we find a diversity of businesses and enterprises appearing just before and after the war (Civil War). Charles Lothholz was responsible for the first shipment of merchandise to reach the town. He made his purchase in St. Louis, the shipment was sent by steamboat to Kansas City, then up the Kaw, and was unloaded at the landing just below the mouth of the Wakarusa in 1859. For several years it was thought that the Kaw would prove navigable; when this method of transportation was found to be impracticable, harness stores and wagon-making shops began to appear in the town. John Brender opened the first blacksmith and wagon making shop at the S.W. corner of 8th & Main Streets; later he added a line of heavy hardware and agricultural implements.

As with most cities of the time, major growth spurts followed major changes in technology, infrastructure and world changing events. Highlights of Eudora's growth revolved around major events including as the expansion of the railroad, the provision of telephone services and electricity and World War II. Excerpts from the Eudora Centennial Magazine highlight some these most notable events and the population changes that followed.

The first of these major events came with the expansion of the railroad through Eudora.

Grade work was started at De Soto in 1869 on the tracks for the St. Louis, Lawrence and Denver Railroad. The tracks reached Lawrence in 1871 and the first train ran through Eudora on the first day of January 1872. (Some accounts call it the St. Louis, Lawrence and western and state that it began at Pleasant Hill, Missouri and ended at Carbondale, Kansas. The line was sold to the St. Louis, Kansas City, Topeka and Western Railroad in 1877 and later was purchased by the Atchison, Topeka and Santa Fe.)

The coming of the railroad gave the town a new stimulus and a modest boom. The overland stagecoaches were abandoned and the community lost a sense of isolation. A person could get on the cars and ride in comfort most anywhere! A telegram sent from the Eudora depot could reach Chicago or St. Louis in a matter of minutes.

For a few years there was a noticeable increase in population.

Following the increase in population, the City changed little before progress was made in providing rural communities with utilities and improved infrastructure. Again the Eudora Centennial Magazine recorded this progress.

Eudora made its entrance into the twentieth century as a small town, which was not very different in facilities, conveniences and living habits from the small town it had been in 1860. With the exception of the railroad it was using the same transportation means the original settlers had used. There was no mechanization of farm implements. There were no telephones, no gas or electric lights, no paved streets, no municipal water system, and there had been but little improvement in the schools. With the coming of the new century there began an evolution from small country town to small modern city.

One of the first evidences of progress was the coming of the telephone. In 1902 the Eudora Mutual Telephone Company was formed.

Natural gas wells surrounded the town and for a time gas was used for cooking and for home and street lighting. Electricity was brought to the community in 1917. With the advent and growing popularity of the automobile, graded streets gave way to hard surfaced streets. The first paving was done in 1936.



Above ground utilities are visible in this photo of Downtown Eudora (circa 1900).

Since the advent of the automobile, Eudora has grown steadily. Located between Lawrence and Kansas City, Eudora offered a small town atmosphere with access to the goods, services and

cultural activities of the larger City's. Because of its location alone, Eudora was destined to continue to experience moderate growth for years to come, but in 1942 the City was catapulted into one of the largest growth spurts in its history. The World War II period changed Eudora dramatically. The town's population doubled, and then tripled, as nearby Sunflower Ordinance Works commenced operation.

In 1942, a headline in a Lawrence paper read, "Townfolk of Eudora and De Soto Await Boom." The boom was brought about by the location of the Sunflower Ordinance Works a few miles east of town. In the fall of 1942, it was estimated that the population had doubled in three months; 153 trailers and four trailer camps were in the town and three grocery stores reported that their volume of business had increased four fold.

Lack of housing was critical and so many new students overburdened schools. However, as always, Eudorans rose to the challenge. The City allowed attics and garages to be turned into living spaces and classes were held in a church and a theater.

Since its inception, the City of Eudora has grown from a handful of determined settlers to a population of over 4,300 residents in the year 2000. Today Eudora boasts a progressive mayor-council form of government, including an empowered City Administrator and department heads, which encourage positive economic development and a high quality of life for all residents. Just as in the early days of Eudora's history, planning continues to be a focus of the City. This comprehensive plan serves as a testament to these ongoing planning efforts.

CURRENT PLANNING PROCESS AND PUBLIC BENEFITS

Within the planning process, the public has a right to expect that the public benefits of non-development, or of development with conditions, may often outweigh individual economic interests. Preservation of historic structures, and natural resources and habitats such as wooded areas, agricultural uses, the riverfront and floodplains, may supersede an individual interest in their destruction. Inclusion of landscaping, lighting, drainage, buffering, sidewalks, and public spaces may be necessary to minimize negative impacts of a specific development proposal and help ensure the development will function within the greater community.

The public also has the right to know what is projected for the future of the Eudora and what improvements are planned to support this vision. Likewise, the public has a right to expect that development decisions will be orderly, compatible and withstand the test of time. Will the development serve not only present but also future public needs?

The Comprehensive Plan addresses these rights and expectations by serving as a guide for development within the City and planning area, outlining community interests as a means of "saying yes" to proposed development that is consistent with the Plan. The Plan is a tool to be utilized by the City to help ensure that Eudora reaches its preferred future in an orderly and equitable manner.

This Comprehensive Plan marks an important step in an on-going process of comprehensive community planning. It is the result of the joint efforts of the Governing Body, the Planning Commission, the City Staff, other government and non-government agencies, interested groups and citizens. The Plan started with a survey of the perceptions of City Staff about existing city services and programs. This base of information was used in a public meeting where focus groups of volunteer citizens are charged with identifying the issues most critical to the growth of Eudora through the next 20 years. The process continued with a “policy charrette” to study the issues and evaluate proposals regarding the City’s future growth areas, land development pattern, and strategies for adequate public infrastructure and services. Finally, a series of workshops were held, culminating in a public hearing, to continue citizen input meeting the requirements of KSA 12-746 which authorizes the City to adopt the Plan.

Although adopted, the development of the Comprehensive Plan is on going. Annual reviews of the Plan must be conducted following its adoption and updates made as needed to reflect the changing values and characteristics of the community.

*“Even if you are on the right track,
you’ll get run over if you just set there.”
Will Rogers*

MAJOR COMPONENTS

The Comprehensive Plan is a multi-faceted document that contains many components, each of which serves an intended function. These components and their major functions are summarized below:

1. Comprehensive Plan- Role of the Plan and of the participants responsible for implementing the Plan.
2. Demographics- Analysis of demographics containing projections of population, households, and land use based on the analysis of the historic trends and the anticipated future growth pattern in a regional context. These projections help in the formulation of strategies to effectively adapt the community to the future possibilities.
3. Existing Conditions- Analysis of development trends and existing conditions containing analytical information that promotes an understanding of the existing services and opportunities that should be appreciated and taken advantage of and the constraints and problems that should be resolved.
4. Planning Issues and Objectives- Summary of community input and statement of community vision and policies outlining the type of living, working and business environment the community desires in the years to come and will devote its resources to achieve.

5. Future Land Use- Future development plan containing specific strategies related to land use pattern, public infrastructure improvements, and public service provision. These policies establish the foundation for the development proposals that follow. The future development proposals outlined in these sections represent the desired strategies for accomplishing the established goals and policies. Some plan elements also include development standards and requirements to prevent undesirable design and construction of public facilities.
6. Implementation- Plan Implementation overview summarizing the strategies that will help ensure the principles, objectives and policies of the Plan get implemented. The section includes a Capital Improvements Program (CIP) process.

PLAN IMPLEMENTATION

The healthy and orderly growth of a community relies on the successful implementation of a set of well-defined development policies that serve as guidelines for all development decisions at present and in the future. These development policies should be formulated around a well-structured scope of planning that looks ahead and even beyond a pre-set time horizon.

At the same time, near-term implementation is important. Regulation of land development is one way the Plan is implemented. The City's Capital Improvements Program (CIP) is another means of implementing the Plan. Following are the roles played by key policy makers and officials, and the relationship of the Plan to Eudora's regulations. Note that these relationships are discussed beyond their role in implementing the Comprehensive Plan. Rather the relationships are discussed in a broader context to illustrate the interrelation between the Comprehensive Plan and the City's other ordinances.

THE PUBLIC'S ROLE - CIVIC RESPONSIBILITY

Civic responsibility is critical to the strength of community. Citizens who spend hours of their free time trying to make their community a better place to live view themselves as part of a whole. They understand that their neighborhoods and community will survive only with their participation and they know that participation cannot be left to others. At the same time they recognize that the well being of the community is in their individual interest.

A community's strength builds from the bottom up. Where there is a sense of responsibility towards the neighborhood, there is a sense of responsibility toward the larger community. Communities cannot be strong without strong neighborhoods.

As such the citizens of Eudora should be embraced - their leadership welcomed and dedication, enthusiasm and talents directed toward community betterment. The Plan is developed based upon this principal. Likewise, as the community progresses and the Plan evolves citizen input

and support will be critical to the Plan's implementation and reaching the preferred future of Eudora.

Role of the Planning Commission

1. Adopt a Comprehensive Plan for the physical development of the incorporated areas of Eudora.
 - Before adopting or amending the Comprehensive Plan hold a public hearing.
 - After adoption, certify a copy of the adopted plan to the City Council and City Clerk.
 - Record a copy in the Office of the County Register of Deeds office.
2. Act as Advisory body to the City Council.
 - Hold public hearings to obtain public opinion regarding each rezoning application, conditional use permit application and proposed text amendment.
 - Forward a recommendation to the City Council on each rezoning application, conditional use permit application and proposed text amendment.
 - Approve or disapprove preliminary plats and final plats.

Role of the City Council

1. Adopt the Comprehensive Plan after considering the Planning Commission's recommendation.
2. Enact and amend the zoning ordinance and zoning district map after considering the Planning Commission's recommendation.
3. Amend the subdivision regulations after considering the Planning Commission's recommendation. This responsibility does not include approving subdivision plats.
4. Act on proposed zoning district changes, preliminary development plans, final development plans (in specific cases) and uses permitted upon review after considering the Planning Commission's recommendation.
5. Consider proposed appeals to Planning Commission actions as authorized by State Statute and the City of Eudora Zoning Regulations.
6. Accept or reject dedications of easements, rights-of-way and public lands on subdivision final plats after having been approved by the Planning Commission.

7. Approve engineering plans for construction of public improvements.
8. Approve financial guarantees or financing mechanisms to ensure construction of all public improvements within subdivision plats.

Role of the Zoning Ordinance

A zoning ordinance is a legislative tool used for implementing the Comprehensive Plan. It delineates the boundaries for land use districts to regulate:

- use;
- density of population;
- lot coverage; and
- bulk of structures.
-

The purpose of the zoning ordinance is to:

- encourage appropriate uses of land;
- maintain and stabilize the value of property;
- reduce fire hazards and improve public safety and safeguard the public health;
- decrease traffic congestion and its accompanying hazards;
- prevent undue concentration of population;
- create a comprehensive and stable pattern of land uses upon which to plan for transportation, water supply, sewerage, schools, parks, public utilities, and other facilities;
- protect and promote the public health, safety, convenience, comfort and general welfare.

Role of the Subdivision Regulations

Subdivision regulations are another legislative tool to implement the Comprehensive Plan by guiding the subdivision and development of land. Subdivision regulations provide coordination of otherwise unrelated plans as well as internal design of individual sites. The City of Eudora needs to assess elements of the subdivision regulations for amendment in response to planning issues and the goals, objectives and strategies of the Plan.

The general purposes of the subdivision regulations are to:

- protect and promote the public health, safety, convenience, comfort and general welfare;
- guide the future growth and development;
- provide for the proper location and width of streets, roads, building lines, open space and recreation and to avoid congestion of population;
- protect and conserve the value of land, buildings and improvements and to minimize conflicts among the uses of land and buildings;

- establish reasonable standards of design for subdivision in order to further the orderly layout and use of land;
- ensure that public facilities, including roads, water, sewer and drainage facilities, are adequate to serve the needs of proposed subdivisions.

The Basis of Decision-Making

The Comprehensive Plan forms a basis for enforcing zoning and subdivision regulations. As with other "police powers", the exercise of zoning and subdivision regulations is subject to certain legal limitations. One of the most important of these limitations requires that zoning and subdivision regulations cannot be applied in an "arbitrary or capricious" manner. Decisions regarding zoning and subdivision issues cannot be fixed or arrived at through an exercise of will or by caprice, without consideration or adjustment with reference to principles, circumstances, or significance.

The Comprehensive Plan serves as a foundation for making educated and logical decisions regarding application of the City's regulations. Consistency with the Comprehensive Plan should be one of the matters considered when reviewing regulatory applications including proposed zoning district changes (rezoning), annexations, development plans (site plans), subdivisions (plats), special use permits, text amendments and ordinance updates.

Ethical Principles

In implementing the Comprehensive Plan and land use regulations and conducting general business, the following principles should guide the conduct of the Governing Body, Planning Commission, Board of Zoning Appeals, City Staff, City Officials and other public servants (referenced hereafter as "the City's public servants," "City servants" or "public servants". These principles should be considered as advisory rather than mandatory. To that extent, should any questions arise about the interpretation and application of any of these principles, the City Attorney should be consulted for clarification and direction.

1. Serve the Public Interest. The primary obligation of the City's public servants is to serve the public interest. The greater public interest must be considered as opposed to only that of the individual, and may often outweigh individual benefits and economic interests. In serving the public interest it is important to remember that the vocal majority is not always in the best interest of the public. Public servants are called upon to distinguish between fact, emotional response and mere opinion in making decisions that benefit the public.
2. Support Citizen Participation in Planning. Because the definition of the public interest is modified continuously, the City's public servants must recognize the rights of citizens to seek to influence planning decisions that affect their well being. The City 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. The City's public servants should recognize and give special consideration to the comprehensive and long-range nature of planning decisions. City servants 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. Effort to gather all relevant facts, consider responsible alternative approaches, and evaluate the means of accomplishing them must be made. Foreseeable consequences should be evaluated before making a recommendation or decision.
4. Expand Choice and Opportunity for All Persons. The City' public servants should strive to make decisions that 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. The City's public servants 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. The City's public servants should strive to ensure that individuals and public and private agencies likely to be affected by a prospective planning decision receive adequate information far enough in advance of the decision to allow their meaningful participation.
6. Render Thorough and Diligent Planning Service The City's public servants must render thorough and diligent planning service. Should a public servant believe they can no longer render such service in a thorough and diligent manner, they should resign from the position. If a public servant has not sufficiently reviewed relevant facts and advice affecting a public planning decision, the member is encouraged not to render an uninformed decision and not to participate in that decision.
7. Not Seek or Offer Favors. The City's public servants must seek no favor and must not directly or indirectly solicit any gift or accept or receive any gift (whether in money, services, loans, travel, entertainment, hospitality, promises, or in some other form) under circumstances in which it could be reasonably inferred that the gift was intended or could reasonably be expected to be intended to influence them in the performance of their duties; or that it was intended or could reasonably be construed to be intended as a reward for any recommendation or decision on their part. Individuals must not offer any gifts or favors intended to influence the recommendation or decision of the City's public servants.

8. Not Disclose or Improperly Use Confidential Information for Financial Gain. The City's public servants must not disclose or use confidential information obtained in the course of their planning duties for financial or other gain. They 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 public servant has made reasonable efforts to verify the facts and issues involved, obtain reconsideration of the matter, and obtain separate opinions on the issue from others.
9. Ensure Access to Public Planning Reports and Studies on an Equal Basis. The City's public servants must ensure that reports and records of public planning efforts are open equally to all members of the public. All non-confidential information available to public servant must be made available in the same form to the public in a timely manner at reasonable or no cost.
10. Ensure Full Disclosure at Public Hearings. The City's public servants 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 public servant must make partisan information regarding the question (received in the mail, by telephone or other communication) part of the public record. The presiding official at the commencement of each public hearing should ask if any public servant acting on the issue has received any ex-parte communication. If ex-parte communication concerning the application at hand has taken place, that public servant must describe the nature of the information received.
11. Maintain Public Confidence. A public servant must conduct himself/herself publicly so as to maintain public confidence in the City, its public servants and the individual's performance. In administering the zoning and subdivision regulations and other City codes and regulations, it is crucial that the decisions be made fairly and that they have the appearance of fairness. The credibility of the Governing Body, Planning Commission, the Board of Zoning Appeals, City Staff, City Officials and public support for Comprehensive Plan and zoning and subdivision regulations in general, will erode quickly if there is an appearance of unfairness or impropriety in members of these public bodies. For this reason, it is important that a code of conduct be established and followed as closely as possible.
12. Avoid Conflict of Interest. To avoid conflict of interest and even the appearance of impropriety, public servants 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. Conflicts of interest and the appropriate actions to resolve or negate the conflict are discussed in the following section.

Conflicts of Interest

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

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

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

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

When a conflict of interest does occur, however, the following steps are recommended:

1. The member should declare, and the record should show, that a conflict of interest exists with respect to a particular issue, and that the member will not participate in any discussion or action as a member of the commission. Rather if the member does have to represent his/her private interest it should be clear that the member is not representing the City or views thereof;

2. The member should step down from his or her regular seat or excuse or reassign their responsibility and should not speak with any other members during the discussion of the issue at hand nor discuss the matter privately prior to the public discussion; and
3. Generally, the member should not represent or speak on behalf of the applicant, and should generally abstain from the discussion unless directly affected and speaking on his or her own behalf as a private citizen, property owner or business owner.

Acknowledgment of Outside Information

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

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

Informed Participation

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

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

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

CHAPTER TWO: DEMOGRAPHICS

POPULATION

The US 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 in American history. The previous record increase was 28.0 million people between 1950 and 1960, a gain fueled primarily by the post-World War II baby boom (1946 to 1964). Total decennial population growth declined steadily in the three decades following the 1950s peak before rising again in the 1990s. Population growth varied significantly by region in the 1990s, 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%). Meanwhile, despite overall population growth in each of the past five decades, the Midwest's share of total population fell from 29 to 23%.

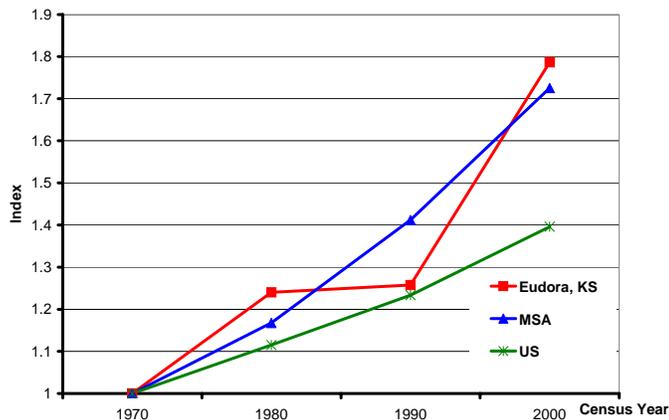
According to the 2000 census, the City of Eudora's population is 4,307, an increase of 1,275 people (about 42 %) from the 1990 census (**Ref. Table 2-1, Fig. 2-1**). In comparison, the State of Kansas grew by only 0.84% (Source: US Census). The Lawrence Metropolitan Statistical Area (MSA) that comprises of Douglas County registered a population increase of 22.2% (18,164 people). These are significant increases compared to the average rate of growth for the Midwest and the Nation as a whole.

Table 2-1: Population Growth (1970-2000)

	1970	1980	1990	2000	%change 90-00	%change 70-00
Eudora, KS	2,411	2,990	3,032	4,307	42.05%	78.64%
MSA	57,937	67,642	81,798	99,962	22.21%	72.54%
US	201,606,786	224,810,186	248,709,166	281,421,906	13.15%	39.59%

Source: US Census Bureau, BWR Corp.

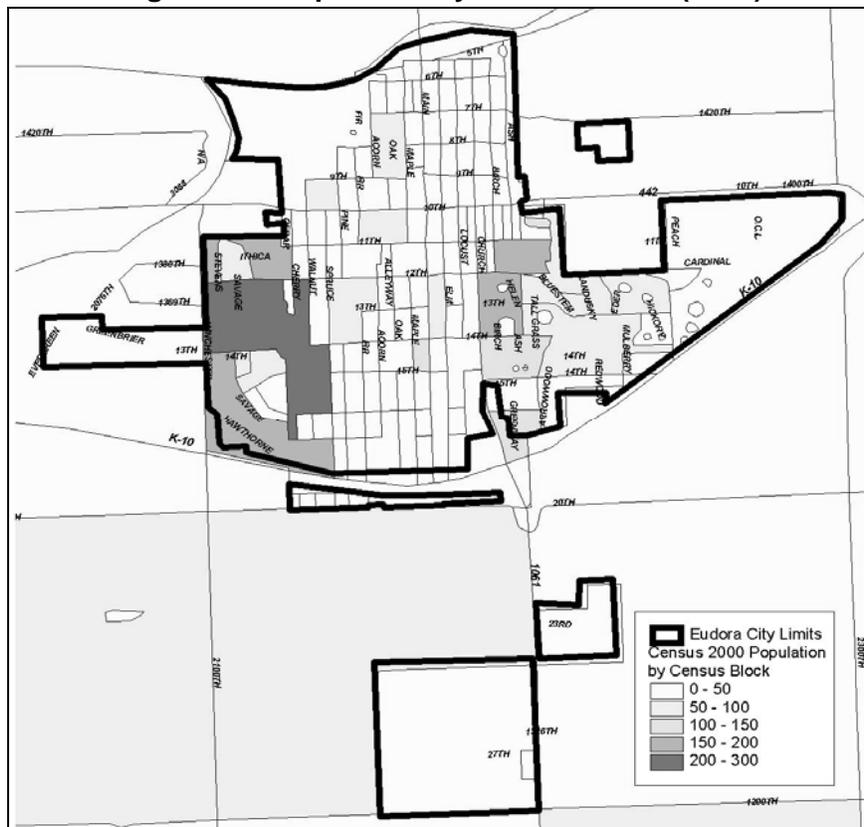
Figure 2-1: Population Growth Index (1970-2000)



Source: US Census, BWR Corp

In the last 40 years, the City of Eudora has increased by about 78.6 %. Figure 2-2 shows the 2000 population by Census Block. Most of this growth is attributed to major increases in the 1970s and the 1990s. In contrast, the population of Eudora in the 1980s was quite stagnant (**Ref. Fig 1-1**). During this same 40-year period, the population of Douglas County increased by 72.5 %. These statistics show that the region as a whole is very dynamic, has grown very fast in the last forty years and is likely to experience even more growth in the near future.

Figure 2-2: Population by Census Block (2000)



Source: US Census Bureau, BWR

POPULATION PROJECTIONS

Two population projection scenarios have been presented here (**Ref. Table 2-2**). The first method uses the linear regression method to project population increases between 2000 and 2020. This method closely replicates the pattern of growth that has occurred in Eudora in the last thirty years. The method predicts a 40% growth rate between 2000 and 2010 and another 50% growth rate between 2010 and 2020. It yields an increase in the population by 4,744 people by 2020. This growth rate is also substantiated by the continued high level of building permits being issued by the City in the last three years (**Ref. Table 2-3**).

The second method uses the Kansas Water Office's population projections. The projection for the City of Eudora for 2000 fell short by 68 people and the County total overshot by about 500

people. Assuming a similar growth rate as predicted by the Kansas Water Office Eudora’s population will increase by 2,056 persons by 2020 and will almost double in size by 2040. This rate is almost half that projected using linear regression techniques. It is important to note that the growth rates predicted decline as the City gets bigger.

Table 2-2: Population Projections by Decade (2000-2020)

SCENARIO	1970	1980	1990	2000	2010	2020
I Using Linear Regression for population 1970 to 2000						
Eudora	2,411	2990	3032	4307	6,052	9,051
Growth Rate		24.01%	1.40%	42.05%	40.53%	49.55%
II Kansas Water Office Projections						
Eudora	2,411	2,990	3,032	4,307	5,301	6,363
Growth Rate		24.01%	1.40%	42.05%	23.08%	20.03%

Source: Kansas Water Office, US Census, BWR.

Note: Data from Kansas Water Office is based on 1990 Census and has not yet been adjusted for Census 2000 numbers.

A review of residential building permits issued since 1991 also helps provide insight into Eudora’s anticipated growth rate and population projection (**Ref. Table 2-3**). Since 2000, the City’s residential building permit rate has nearly doubled. Single family building permit rates have increased by 183% since 2000. This staggering building activity will result in a substantial increase in population, at least in the short term—to 2010—following the linear projection numbers presented in Scenario I. Assuming a rate consistent with the average permits for new single family units since 2001, there is potential for the development of 730 addition single family units by 2010.

Based on an average household size of 2.63 persons in 2000 (**Ref. Table 2-11**), the resulting 10-year population increase would be 1,920 persons. This rate is most consistent with the projections from Scenario I in **Table 2-2**. Growth in the decade after that will be largely affected by the availability of developable land, capacity to serve development, the economy, annexation, etc. However, based on these recent growth rates, and the likelihood that similar growth rates can be accommodated in the future, the City should plan for the population projected by Scenario I.



Although not quite as large as projected by the City’s welcome signs, the City of Eudora is projected to reach over 6,000 persons in the next decade.

Table 2-3: New Residential Building Permits (1991-2002)

Year	Single Family Units	Duplex Units	Multi-family Units	Total Units
1991	38	7	0	45
1992	55	3	0	58
1993	19	8	0	27
1994	17	7	0	24
1995	23	7	5	35
1996	20	3	2	25
1997	16	4	0	20
1998	32	3	5	40
1999	61	15	0	76
2000	58	4	0	62
2001	78	3	4	85
2002	68	3	0	71
1991-2000 (pre-Census 2000)				
Total	339	61	12	412
Average	33.9	6.1	1.2	41.2
2001-2002 (post-Census 2000)				
Total	146	6	4	156
Average	73.0	3.0	2.0	78

Note: As of April 2003, 30 single-family, and 1 multi-family permits have been issued. It is anticipated that the City will continue to develop at a similar rate throughout the year, exceeding the average units per year for 2001-2002.

Source: City of Eudora Building Inspection Department

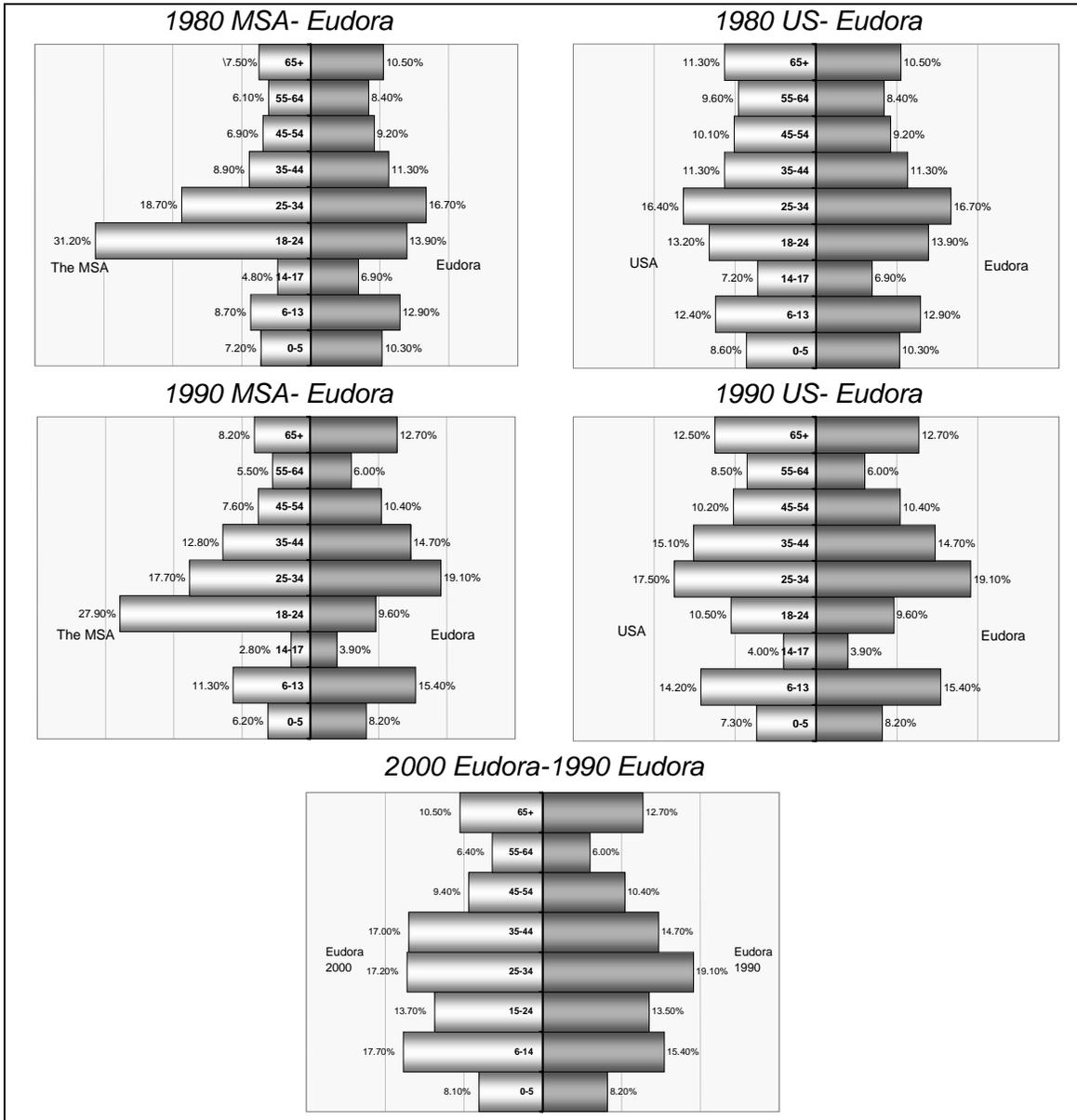
AGE CHARACTERISTICS

The MSA and the City of Eudora show a very unusual demographic pattern characterized by a very young population. Not surprisingly, about 45% of the population in the MSA is in the age group 18-34 (**Ref. Fig 2-3**). About 28% of the MSA's population is college-going 18-24 year olds. The location of Baker University, Haskell Indian Notions University and the University of Kansas within the County contribute to both statistics. In comparison, the National average for 18-24 year olds is about 10.5%. Eudora's number of 18-24 year olds follows the National average indicating that not many of the college-goers prefer to live in Eudora and commute to Lawrence. In fact the percentage of 18-24 year olds decreased from 14% in 1980 to 10% in 1990, indicating that college going kids are moving out of Eudora to pursue their education.

The case is different for a slightly older age group of 24-35 year olds. Their share of the total population has increased steadily over the years to 19% in 1990 and over 17% in 2000, higher than the MSA and the national average. Correspondingly there is a higher percentage of 6-13 year olds too, indicating that families with children prefer to live in Eudora.

Among the elderly population, Eudora has a higher percentage of 65+ year olds (12.5% in 2000) than the MSA average (7.9%), indicating that the elderly in the MSA also prefer to live in Eudora.

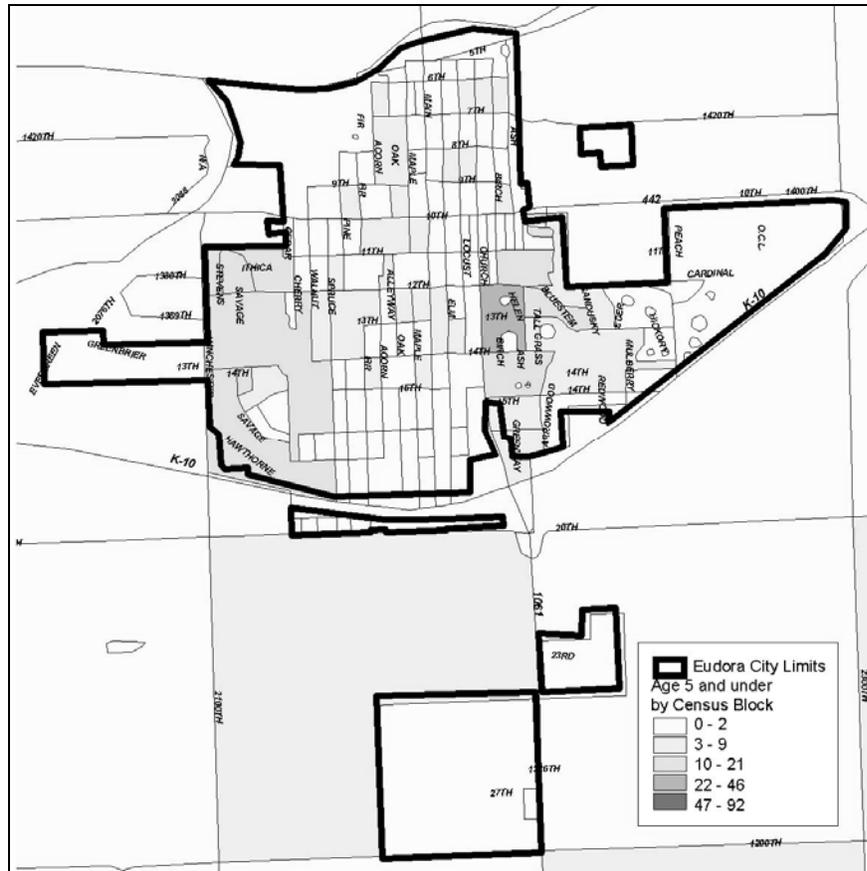
Figure 2-3: Population Pyramids (1980-2000)



Source: US Census, BWR

Figures 2-4, 2-5, and, 2-6 show the population distribution by various age groups. These graphics are useful in determining areas of the City that are attractive to different age groups. For example, distribution of age group 0-5 shows the location of young, starter families. Similarly, age group 5-17 shows the location of established families; these are the least mobile group of people. Also, age group 65 and above shows the housing preferences of the elderly.

Figure 2-4: 2000 Population Distribution by Age (5 years and younger)

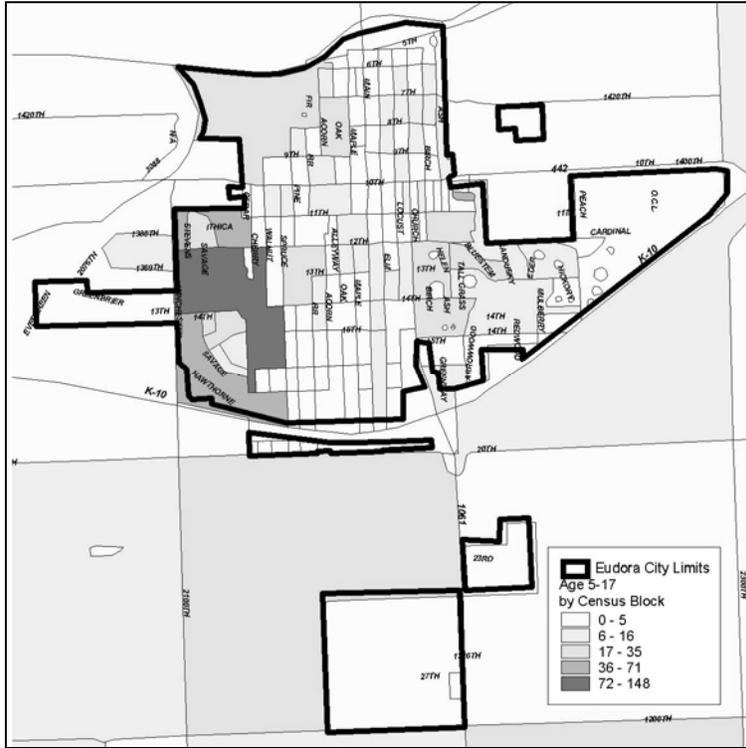


Source: US Census, BWR

In Eudora, the three groups show different tendencies; while the starter families are concentrated towards the east and somewhat to the west of the City, the established families are concentrated towards the western parts of the City. The elderly, however, are more centrally located in the City.

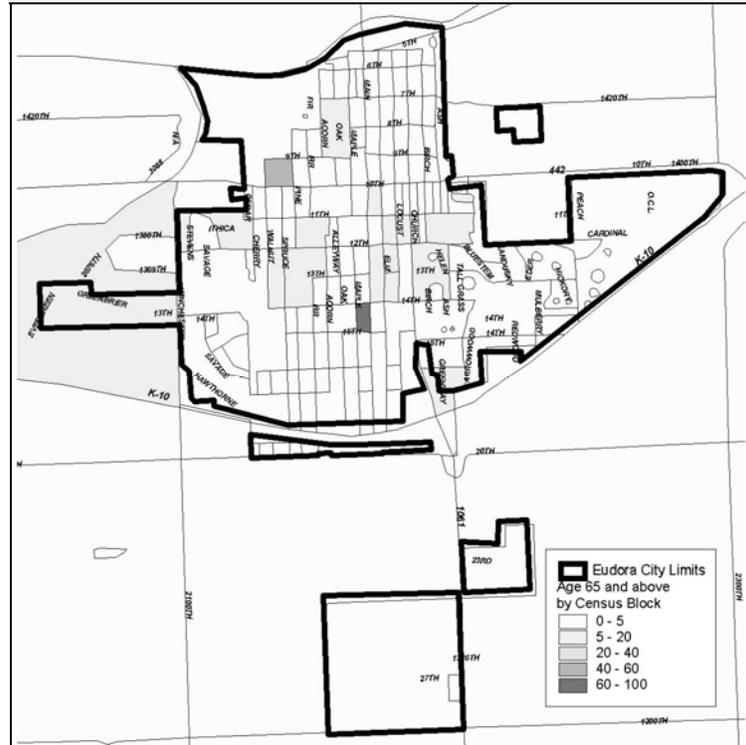
In summary, the data and graphics indicate that there are good living conditions, schools and housing choices for different age groups and income groups.

Figure 2-5: 2000 Population Distribution by Age (5-17)



Source: US Census, BWR

Figure 2-6: 2000 Population Distribution by Age (65 and above)



Source: US Census, BWR

MALE-FEMALE RATIO

The Male-Female ratio in Eudora varies slightly from the MSA ratio. There are proportionately more women in Eudora than in the MSA. While the Male-Female ratio is usually in favor of women as women live longer than men, in Eudora that is accentuated by the fact that the elderly population is larger in proportion to the MSA.

Table 2-4: Male-Female Ratio (1980-2000)

		1980		1990		2000	
		Numbers	% of Total	Numbers	% of Total	Numbers	% of Total
Eudora	Male	1,442	48.20%	1,445	47.70%	2,018	46.85%
	Female	1,548	51.80%	1,587	52.30%	2,289	53.15%
MSA	Male	33,941	50.20%	40,502	49.50%	49,651	49.67%
	Female	33,700	49.80%	41,296	50.50%	50,311	50.33%

Source: US Census Bureau, BWR Corp.

EDUCATION

Analysis of the education statistics for people over the age of 25 shows that the City of Eudora has a slightly lower level of education in comparison to the MSA. In 1990, about 23% of the adult population (25 and over) had not graduated from high school (**Ref. Table 2-5**). During the 1990's the gap was significantly closed when the percentage decreased to 14.1%, slightly higher than the MSA average of about 7.6%.

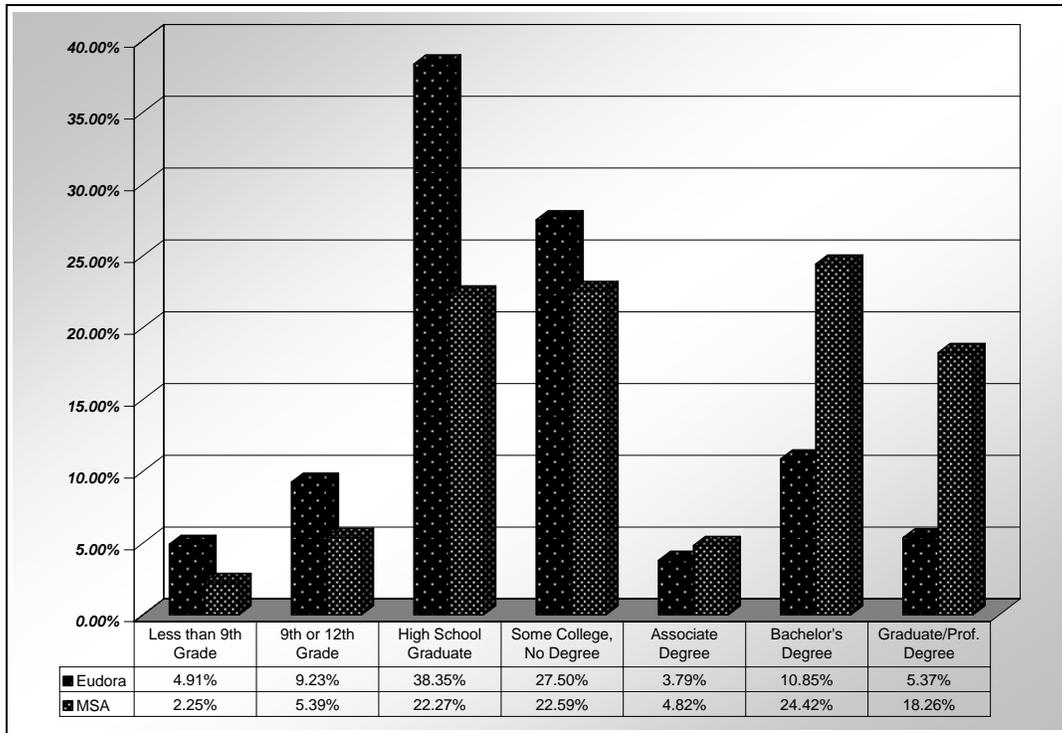
Table 2-5: Education Summary (1970-2000)

		Eudora		MSA	
Did Not Graduate	1970	No Data	31.8%	No Data	31.8%
	1980	33.0%	17.7%	33.0%	17.7%
High School Graduate	1990	23.2%	11.2%	23.2%	11.2%
	2000	14.1%	7.6%	14.1%	7.6%
High School Graduate	1970	No Data	29.5%	No Data	29.5%
	1980	45.3%	29.7%	45.3%	29.7%
Some College or Associate Degree	1990	43.6%	25.2%	43.6%	25.2%
	2000	38.4%	22.3%	38.4%	22.3%
Some College or Associate Degree	1970	No Data	13.8%	No Data	13.8%
	1980	11.5%	17.5%	11.5%	17.5%
College Graduate or Advanced Degree	1990	23.4%	25.2%	23.4%	25.2%
	2000	31.3%	27.4%	31.3%	27.4%
College Graduate or Advanced Degree	1970	No Data	24.8%	No Data	24.8%
	1980	10.2%	35.1%	10.2%	35.1%
College Graduate or Advanced Degree	1990	9.8%	38.4%	9.8%	38.4%
	2000	16.2%	42.7%	16.2%	42.7%

Source: HUD

In 2000, the percentage of population with only a high school diploma is also higher than the MSA average by about 13 percentage points and college graduates are about 4 percentage points lower. Advanced degree holders are 26.5 percentage points lower than the MSA average. These statistics show that the education levels in Eudora are lower than MSA averages. Trends show that the education levels are slowly rising and the gap is slowly decreasing. A significant portion of this gap can be explained by the number of Universities located in the MSA and the substantially higher percentage of students located in the MSA as compared to Eudora and the US.

Figure 2-7: Educational Attainment of People aged 25 or more (2000)



Source: US Census

INCOME CHARACTERISTICS

In the 1970s, Eudora experienced an increase of median household income by 14.6% and per capita income by about 32%. The MSA and the County experienced lower increases (**Ref. Table 2-6**). This trend reversed in the 1980s and real incomes Eudora decreased. In the 1990s however, Eudora and the MSA saw healthy growth rates at about 10% for the Median household income and about 30% in per capita incomes. In 2000, median household incomes in Eudora were about \$4,500 more than the MSA and per capita incomes were about \$1,500 lower than the MSA. Data therefore indicates, that the city has a good balance of low, middle and high-income households, has a higher labor participation rate, and, in general, a healthy economic background.

Table 2-6: Income Summary (1970-2000)-in 2001 dollars

		1970	1980	1990	2000	%change 70-80	%change 80-90	%change 90-00
Median Hhld Income	Eudora	\$35,133	\$40,264	\$39,939	\$44,328	14.60%	-0.81%	10.99%
	MSA	\$33,179	\$32,318	\$36,477	\$39,901	-2.59%	12.87%	9.39%
Per Capita Income	Eudora	\$11,354	\$14,973	\$15,060	\$19,865	31.87%	0.58%	31.91%
	MSA	\$11,604	\$14,707	\$16,184	\$21,203	26.74%	10.05%	31.01%

Source: UC Census Bureau, BWR

Table 2-7: Percent of Households in National Income Brackets (1969-1999)

		Eudora, KS	Lawrence, KS MSA
Low Income (National Lowest 20%)	1969	No Data	46.80%
	1979	16.50%	25.50%
	1989	18.40%	27.70%
	1999	16.4%	23.5%
Middle Income (National Middle 60%)	1969	No Data	42.50%
	1979	72.60%	59.20%
	1989	73.60%	58%
	1999	73.40%	60.60%
High Income (National Top 20%)	1969	No Data	10.60%
	1979	10.80%	15.30%
	1989	8%	14.30%
	1999	10.2%	15.9%

source: HUD

Table 2-8: Poverty Rate (1969-1997)

	Eudora	MSA
1969	No Data	13.5%
1979	10.7%	16.5%
1989	9.9%	20.6%
1993 Estimated*	6.4%	13.6%
1995 Estimated*	6.0%	12.7%
1997 Estimated*	5.6%	11.9%
1998 Estimated*	5.4%	11.4%
1999	6.4%	15.9%

*Estimated poverty rates for 1993, 1995, and 1997 are derived from the Census Bureau's Small Area Income and Poverty Estimates

The strong middle-income household bracket is also reinforced by Table 2-7, which shows the percent of households in national income brackets (defined by low-income—lower 20% of households, middle-income—middle 60% of households and high-income—top 20% of households).

In 1979, 16.5% of the City's population was in the national low-income bracket and the poverty rate was 10.7% (**Ref. Table 2-7 and 2-8**). That increased to 18.4% in the national low-income bracket and 9.9% by 1989. Correspondingly at the high-income end, 10.8% of the City's population was in the top national bracket in 1979, while in 1989 that figure dropped to 8% and by 1999 it was back to around 10%. Estimates show that the poverty rate has stabilized to around 6% in the 1990s. This reinforces the strong middle-income character of the City of Eudora.

HOUSING

The average household size in the City of Eudora in 1990 was 2.7 compared to 2.43 for the MSA (**Ref. Table 2-9**). The median household size was 3 (source: US Census). This reaffirms that there are a lot of young families with children in Eudora.

Table 2-9: Housing Shares (1990-2000)

	1990		2000	
	Eudora	MSA	Eudora	MSA
Total Housing Units	1,093	30,126	1,664	40,250
Eudora share of MSA	3.63%		4.13%	
Total Population	3,032	81,798	4,307	99,962
Eudora share of MSA	3.71%		4.31%	

Source: US Census Bureau

Between 1990 and 2000, the number of housing units in Eudora increased by about 52.2%, a higher rate than the MSA, which increased by about 42.1% (Ref. Table 2-10, Fig 2-8). The rate increase of household in Eudora was also much higher than the MSA and the US rates. A vacancy rate of 4.67% in 1990 and 3.4% in

2000, much lower than the MSA averages, indicates that there is possibly a market for more housing units (Ref. Table 2-11).

Table 2-10: Households (1980-2000)

	1980	1990	2000	%change 80-90	%change 90-00
Eudora, KS	1021	1,090	1,607	6.76%	47.43%
MSA	23,818	30,093	38,486	26.35%	27.89%
US	79,887,108	91,993,439	105,480,101	15.15%	14.66%

Source: US Census Bureau, BWR Corp.

Figure 2-8: Household Index (1980-2000)

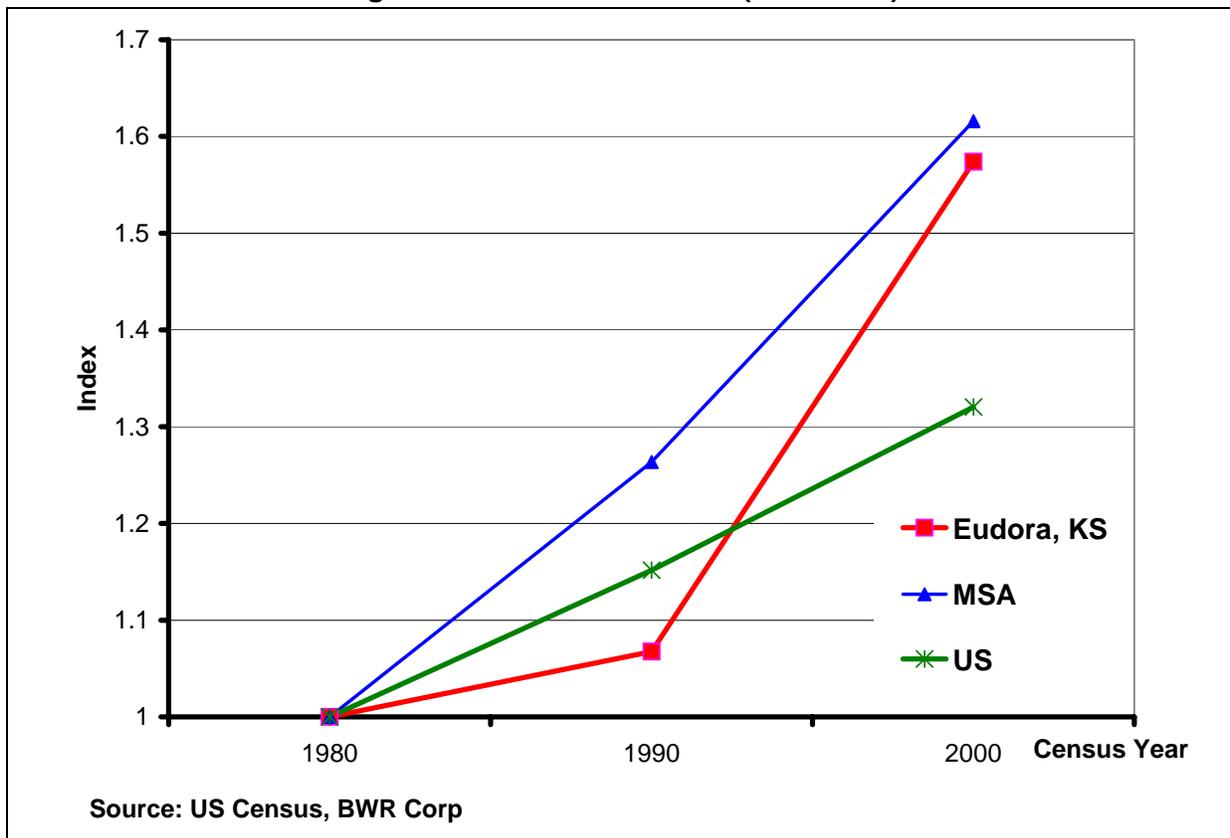


Table 2-12 shows that owner occupancy rates are much higher in Eudora than the MSA average. Vacancy rates are lower than those of the MSA. This rate was 3.4% in 2000 compared to MSA's vacancy rate of 4.4%.

Data between 1980 and 1990 shows that owner occupancy decreased by about 5%. This, coupled with an increase in renter occupancy by almost the same amount indicates a shift in choice towards rental housing. This is an indication of an increase of student and starter families, who might be commuting to Lawrence. This trend continued through to 2000.

Table 2-11: Household Summary (1990-2000)

	1990		2000	
	Eudora	MSA	Eudora	MSA
Total Households	1,090	30,093	1,607	38,486
Average HH Size	2.7	2.43	2.63	2.37

Source: US Census Bureau

There was a 5.8% increase in rental housing in Eudora in the last decade, while the MSA saw an increase of less than 1%. A low vacancy rate indicates that there might be a market for more rental units.

Table 2-12: Housing Trends (1980-2000)

		Eudora	MSA
Total Units	1980	1,040	25,491
	1990	1,136	31,710
	2000	1,664	40,250
Excluding Seasonal and Migrant Housing	1980	94.8%	93.4%
	1990	95.3%	95.0%
	2000	96.6%	95.6%
Occupied Units	1980	68.6%	50.9%
	1990	63.5%	49.9%
	2000	58.9%	49.6%
Owner Occupied	1980	26.3%	42.5%
	1990	31.9%	45.1%
	2000	37.7%	46.0%
Renter Occupied	1980	5.19%	6.6%
	1990	4.67%	5.0%
	2000	3.4%	4.4%

Source: HUD, US Census Bureau

Median housing value and monthly mortgage for the City of Eudora are much lower than the MSA values (**Ref. Table 2-13**). Median home values are about \$18,000 less than the MSA. The median monthly mortgage is about \$127 less. This indicates a lack of high-end housing. This fact is reinforced by analysis of the percentage of home values in national brackets (**Ref. Table 2-14**). The MSA as a whole has a much lower percentage (only 4.8% in 1990) compared to the Nation's top 20%. Eudora's top bracket share decreased from 2.3% in 1980 to 0% in 1990, indicating a loss of that niche in the market. Correspondingly there has been a 15% increase in the low-income bracket. 38% of the housing in Eudora is in the low-income National bracket, which is a concern.

Trends between 1970 and 1990 show that there has been a significant shift of the MSA region and housing values are less than the national averages. Most of those changes can be attributed to major increases in home values in the fastest growing areas of the Nation. However, there should still be a bigger market than what currently exist for high end housing in Eudora.

Eudora's housing stock is, in general, younger than the MSA stock. About 31% of the housing stock in Eudora was built in the 1970s (**Ref. Table 2-15**). The MSA saw a greater increase in the 1980s than Eudora. Further analysis of the existing stock is needed to determine the quality of housing and possible unmet demand in the existing housing market.

Table 2-13: Occupied Housing (1990-2000)

	1990		2000	
	Eudora	MSA	Eudora	MSA
Renter Occupied Housing				
Total Housing Units	348	14,313	627	18,511
Median Monthly Rent	\$407	\$416		
Owner Occupied Housing				
Total Housing Units	745	15,813	980	19,975
Median Housing Value	\$50,860	\$69,297		
Median Monthly Mortgage	\$533	\$657		

Source: US Census Bureau

Table 2-14: Percent of Household Owner's Value in National Brackets*(1970-2000)

		Eudora	MSA
Low Income (National Lowest 20%)	1970	No Data	20.4%
	1980	23.1%	12.8%
	1990	37.9%	17.1%
	2000	19.7%	14.1%
Middle Income (National Middle 60%)	1970	No Data	63.4%
	1980	74.7%	73.3%
	1990	62.1%	78.1%
	2000	77.6%	72.3%
High Income (National Top 20%)	1970	No Data	16.2%
	1980	2.3%	13.9%
	1990	0.0%	4.8%
	2000	2.7%	13.6%

Source: HUD

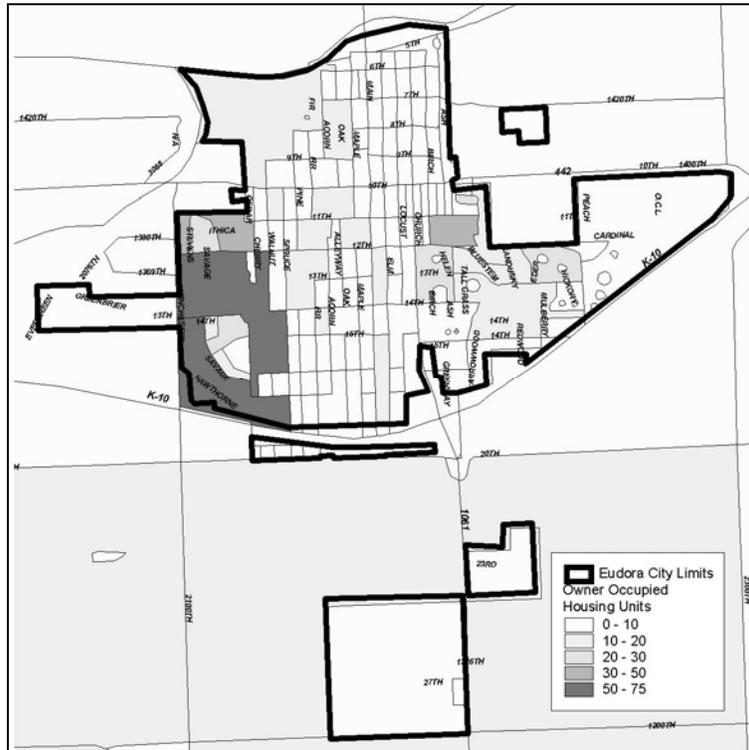
* Household owner's value calculations exclude housing units on 10 acres or more of land, housing units with a business or medical office on premises, housing units in multifamily buildings (i.e. condos), and mobile homes. Single family condo houses, however, are included only for 1990.

Table 2-15 Year Structure Built (1990)

	Eudora	MSA
Total Structures	1,140	31,770
1939 or Earlier	13.10%	17.60%
1940 to 1949	6.10%	3.80%
1950 to 1959	9.40%	11.50%
1960 to 1969	16.70%	15.10%
1970 to 1979	31.20%	24.40%
1980 to 1984	10.80%	10.50%
1985 to 1988	10.40%	13.90%
1989 to March 1990	2.30%	3.20%
Median Year Built	1969	1966

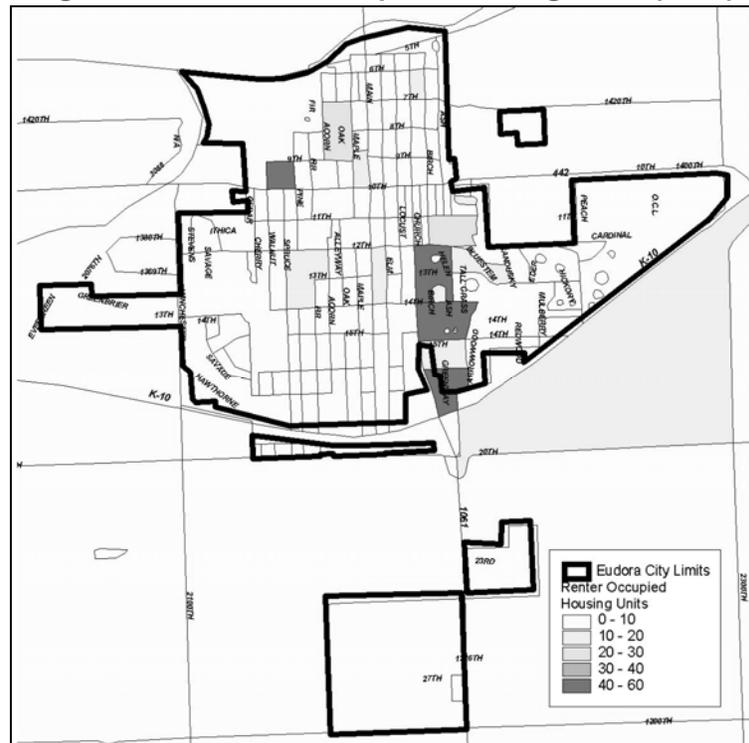
Source: US Census Bureau

Figure 2-9: Owner Occupied Housing Units (2000)



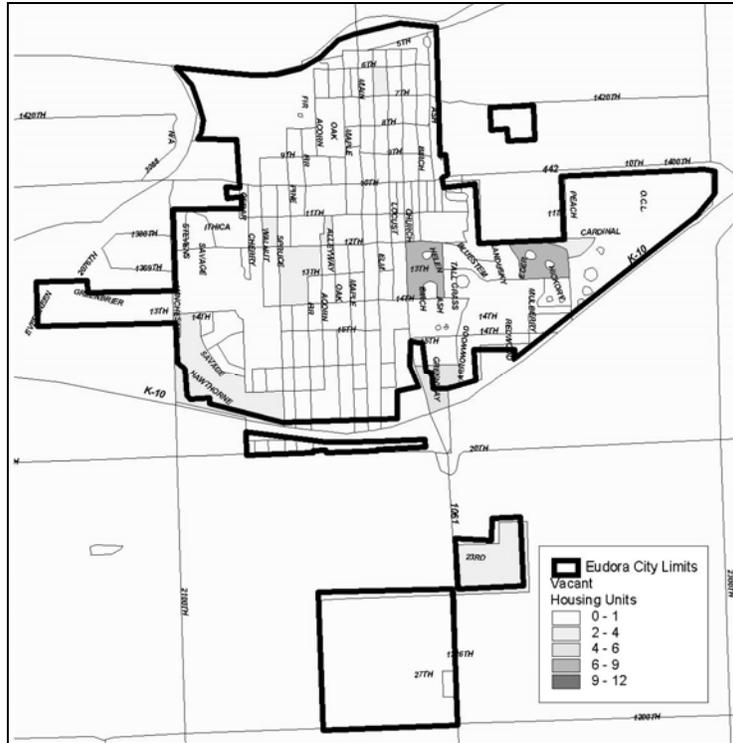
Source: Us Census Bureau, BWR

Figure 2-10: Renter Occupied Housing Units (2000)



Source: Us Census Bureau, BWR

Figure 2-11: Vacant Housing Units (2000)



Source: Us Census Bureau, BWR

EMPLOYMENT

A quick glance at the employment summary table shows that the percentage of population not in the labor force is much lower than the MSA average (by about two- percent). The percentage of unemployed civilians and the unemployment rate is also lower than the MSA average.

Table 2-16: Employment Summary (1990)

	Eudora, KS	MSA
In Armed Forces	0.00%	0.21%
Employed Civilians	64.43%	61.64%
Unemployed Civilians	2.69%	3.47%
Not in Labor Force	32.89%	34.68%

Source: HUD

Table 2-17: Unemployment rate (%)

	Eudora, KS	MSA
1970	No Data	3.4
1980	11	4.9
1990	4.3	5.3

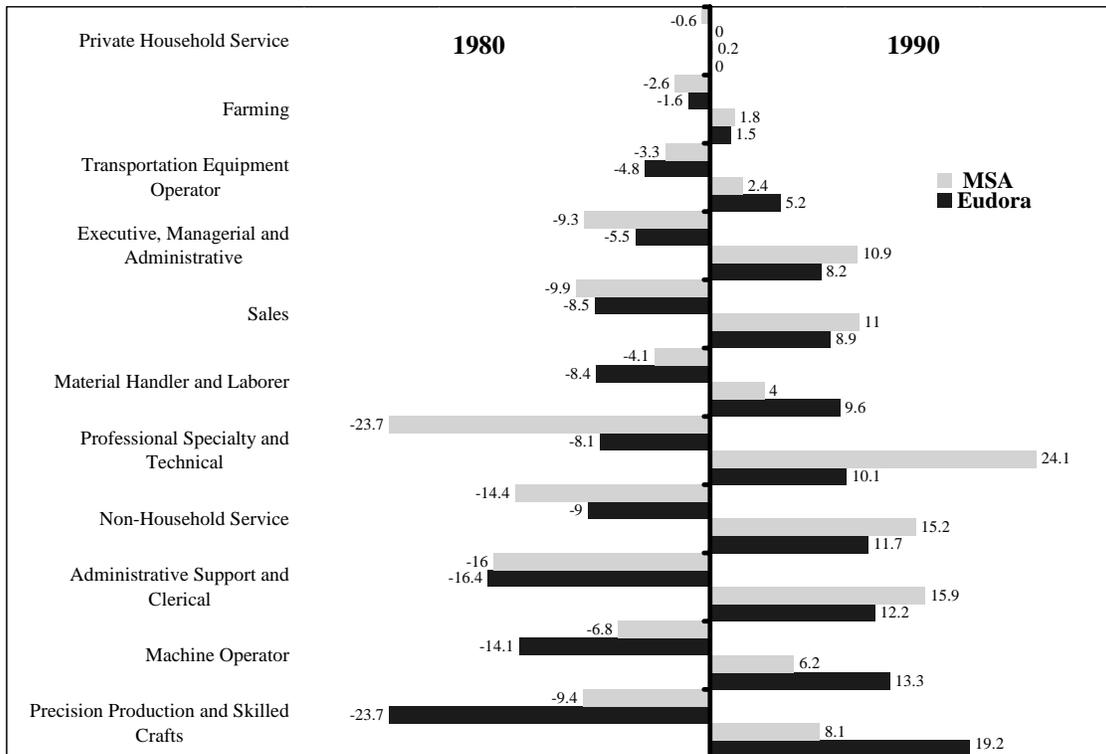
Source: HUD

Table 2-18: Labor force participation rate (%)

	Eudora, KS	MSA
1970	No Data	53.8
1980	63.8	61.9
1990	67.1	65.3

Source: HUD

Figure 2-12: Percentage of employed residents by occupation



Source: HUD

The Occupational structure of Eudora differs from the MSA. About 24% of the MSA population is employed in the Professional Specialty and Technical Occupations, compared to only 10% for Eudora (Ref. Fig 2-12). Most of Eudora's population is employed in Precision Production and Skilled Crafts (about 24% in 1980 and 19% in 1990). Machine Operators come in second (13% in 1990).

Figure 2-13 indicates that most of the jobs in Eudora are for Professional Services (35.5%). Manufacturing jobs are the next largest sector (22% of jobs). Figure 2-14 on the other hand indicates that about 30% of the residents are employed in the manufacturing sector. This confirms that Eudora is a manufacturing based town, with some portion of the population commuting to other places in the County for their jobs. More emphasis must be placed on employee skill levels so that with a decline in the manufacturing jobs people can be absorbed into the professional services sector (which has the largest number of jobs in Eudora). Also emphasis is needed on attracting residents with professional skills to live in the city.

Jobs in the retail trade sector also fall short in Eudora compared to the MSA. While the retail sector is a major source of jobs, it is not a common focus of economic development efforts, because retail jobs often are low paying, and retail businesses usually are small. Nevertheless, a healthy retail sector is an important component of a vibrant local economy. Some kinds of retail businesses, such as outlet centers, tourism- or convention-related businesses, draw income into a region. However, most retail businesses depend upon spending by local

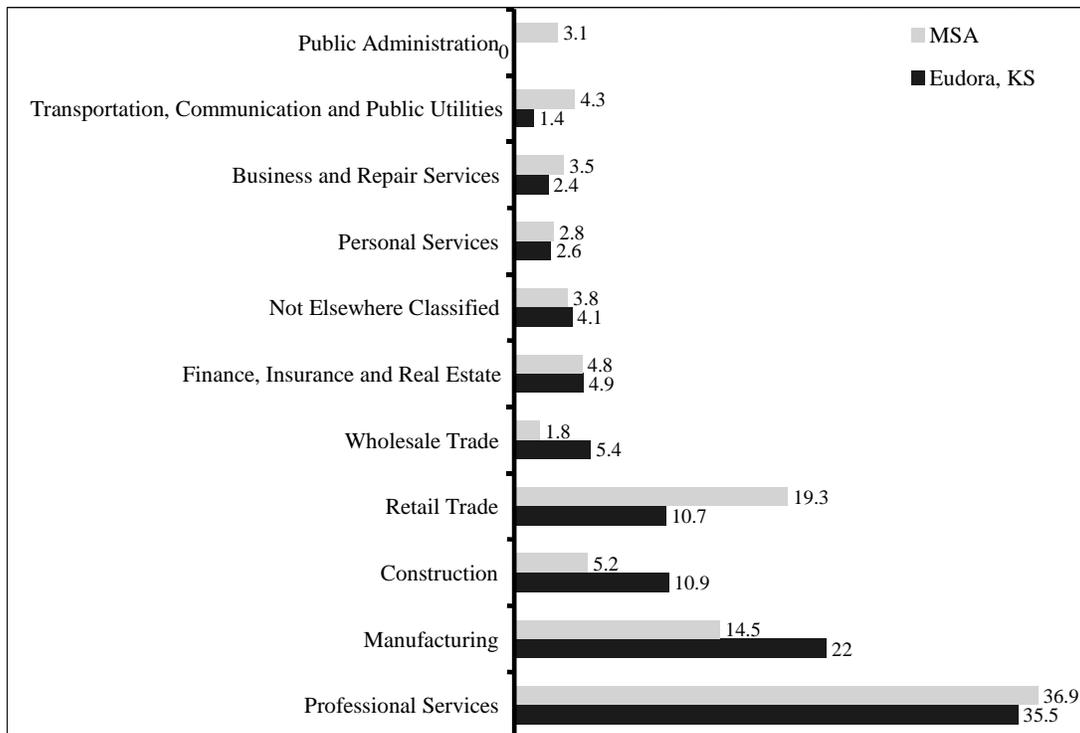
residents. As retail dollars are spent and respent in a local community, a "multiplier effect" magnifies the local impact of those dollars. The absence of retail businesses in many small communities means the community misses out on the multiplier effect, suggesting a lack of economic vitality.

Residents of suburban communities often shop at larger towns where retail businesses cluster, offering a wider selection and lower prices than the local stores. Leakage of retail trade from small communities to larger towns creates interdependence between small rural communities and large towns where rural residents shop. Research shows that rural residents do much of their shopping in trade centers and secondary towns. Pull factors for trade center towns equal about 2.0, meaning that they serve about twice the number of persons in their town. Lawrence experiences such a pull. Much of Eudora's expendable income is likely spent in Lawrence.

When income flows into small rural communities in the form of new jobs, transfer payments, or farm income, much of that income quickly flows back to larger towns and cities where rural residents make more than half of their retail purchases.

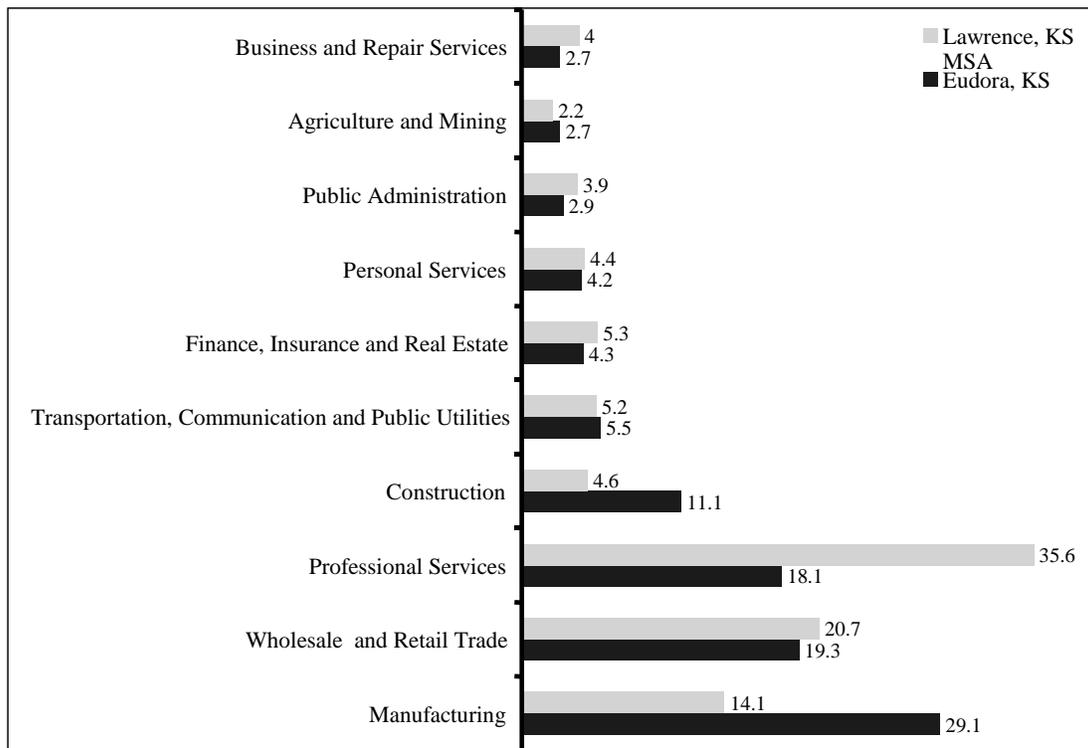
Policy makers should, therefore, carefully weigh decisions about job creation programs in small towns because the tangible benefits of job creation can be small and much of the income creation will spill over into neighboring trade centers. Policy makers should also be aware of the importance of trade area capture and institute policies to retain local dollars. Certain businesses such as restaurants and retail businesses should be encouraged in the city.

Figure 2-13: Percent of Jobs by Industry in Place of Work



Source: HUD

Figure 2-14: Percent of Employed Residents by Industry



Source: HUD

CHAPTER THREE: EXISTING CONDITIONS

INTRODUCTION

Even though the Comprehensive Plan addresses the social and economic development issues facing Eudora, its primary concern is the physical development of the City. Among the more important factors affecting Eudora's physical development are its environmental and locational characteristics and existing services and facilities.

GEOGRAPHIC AND ENVIRONMENTAL CHARACTERISTICS

Regional Location and Access

Eudora is located in the midst of a triangular-shaped highway network that includes 1-70 to the north, 1-35 to the south and west, and U.S. 75 to the west. Eudora's primary vehicular access is provided by Kansas Highway 10. The City of Eudora has historically been located north of the current highway alignment. However, new access to the community provided by the construction of the current K-10 Highway alignment in the 1970's has since help spur limited growth to the south.

K-10 Highway provides excellent linkages to Lawrence on the west and Kansas City on the east. Direct north-south highway access from Eudora is provided primarily by Douglas County Road 1061, with access to Leavenworth County on the north and Baldwin on the south.

Although Eudora is easily accessible within the region, limited interchanges with K-10 Highway focus access primarily at the intersection of K-10 Highway and County Road 1061. The significance of this interchange is compounded since County Road 1061 provides the primary access to the existing development north of K-10 Highway and existing and future development south of the highway.

In addition to the K-10/1061 interchange, Eudora has access via an interchange between K-10 Highway and Douglas County Road 442 or 10th Street. This eastern interchange provides a primary access point to the existing industrial park and to many of the homes in the north and central portions of Eudora. The interchange also provides access to rural development south of K-10 from 2300th Street. With the exception of these two interchanges, no other direct access is provided to the community from K-10 Highway.

Although much desired, no interchange provides direct access from K-10 Highway to the west. The next closest interchange to the west exists at 1900th Street, nearly three miles away. Although the interchange provides access to the Eudora via Douglas Country Road 442 to the north of K-10, the use of this interchange for significant regional access is greatly limited. The

interchange is separated from the community by the Wakarusa River and is located entirely within the 100-year floodplain minimizing any development potential.

Based on existing and projected development patterns, the community desires an interchange at Winchester Road. However, limited separation from the interchange with 1061 to the east inhibits the development of an interchange in this location. Although the community acknowledges this limitation, an improvement to provide full or limited access is desired to relieve congestion on the existing street network and increase development opportunities west of Church Street as well as south of K-10 Highway.



*The Community desires an interchange at Winchester Road and K-10 to improve access to the west side of Eudora and better connect north and south Eudora.
(Winchester Road Bridge – January 2002)*

Topography

Eudora is sited on a terrain of gently rolling slopes. Most slopes have a grade of less than 6%, though some drainage areas have slopes exceeding 6%. Major ridgelines within the City and surrounding growth area are shown in **Map 2, Natural Features Map**. These ridgelines help define area tributaries south of the Kansas River.

Hydrography and Floodplain

The City of Eudora is located south of the Kansas or Kaw River and Wakarusa River banks. All of Eudora is contained in three watersheds of the Wakarusa River; the Eastern Tributary, the Middle Tributary and the Western Tributary. Although the area is relatively flat and creates few development limitations, scattered floodplains exist along the tributaries of the Wakarusa River, particularly the Middle Tributary. In addition, the many creeks and streams that feed these

tributaries create obstacles to efficient development and opportunities for creative development solutions.

Map 2, Natural Feature Map, illustrates the approximate location of the existing streams, rivers and other hydrological features. **Map 2** also shows the approximate locations of the 100- and 500-year floodplain boundaries. A substantial portion of the land located north of the Wakarusa River (located in the northern and northeastern portions of the City) are located in the 100- and 500 year floodplain and are subject to periodic flooding. These areas are considered undesirable for development.

Both Douglas County and Eudora are part of the regular program of flood insurance as operated by the Federal Emergency Management Agency (FEMA). Because the floodplain is defined as the area having a one percent chance of flooding in any given year (the 100 year floodplain), appropriate development controls have been implemented to protect the public health, safety and welfare. In addition, floods larger than the 100-year flood do occur and the City should exercise care in evaluating new development which could aggravate or create flood problems in the community or in the adjacent unincorporated territory.

Soils

Soils within Eudora and the surrounding planning area provide a several limitations to existing and future development. **Map 3, Soils Map**, shows soil limitations to for septic systems and residential and non-residential building as defined by the USDA Soil Conservation Service 1976 Soil Survey of Douglas County (compiled in 1976, issued in 1977). These limitations have been represented by the following categories:

- Floods and Wetness;
- Severe Shrink-Swell and Slow Percolation;
- Shallow Depth to Rock; and
- Stony.

Soils shown in these categories may include a variety of soil types, but in each case the soils shown were identified as having moderate to severe limitations to shallow excavations, development of dwellings (with and without basements) and small commercial buildings, or sanitary facilities. Per the Soil Survey, moderate limitations are defined as soil properties and site features that are unfavorable, but which may be overcome with specific design and planning. Severe limitations are defined as soil properties or site features that are so unfavorable or difficult to overcome that a major increase in construction effort, special design, or intensive maintenance is required. Some soils rated as severe may be considered cost prohibitive to development.

Soils which were rated as moderate to severe included the following general soil types:

- Basehor
- Judson
- Marin
- Reading
- Sibleyville
- Vinland
- Eudora
- Kennebec
- Morril
- Riverwash
- Sogn
- Wabash
- Gravelly land
- Kimo
- Oska
- Sarpy
- Stony steep land
- Woodson
- Gymer
- Leanna
- Pawnee
- Sharpsburg
- Thruman

Following are more detailed descriptions of the limitations of these soils.

Building / Site Development Limitations

In general soils for residential dwellings and small commercial buildings, soils should be sufficiently stable that cracking, severe settling and failure of the foundation do not occur, and that soils are not overly wet to cause drainage issues or flooding. In determining the soils suitability for building site development the Soil Survey considered, soil texture, plasticity, in place density, potential frost action, soil wetness, and depth to a seasonal high water table. Depth to bedrock, slope, and large stones in or on the soil are also important considerations and were considered in determining the soil ratings.

Soil wetness and depth to a seasonal high water table indicate potential difficulty in providing adequate drainage for basements, and lawns. Susceptibility to flooding is also serious development limitation. Soils with these limitations have been graphically shown in the *Floods and Wetness* category of **Map 3**.

Shallow excavations are necessary when extending and developing utilities such as sewer and water lines, and building improvements including locating basements. The ability to dig shallow excavations to accommodate these improvements is primarily affected by soil wetness of a seasonal high water table, the depth to bedrock and the presents of large stones. Soils with characteristics that hamper shallow excavations are graphically shown in the *Floods and Wetness, Shallow Dept to Rock, and Stony* soil categories of **Map 3**.

Lastly, the shrink-swell characteristics of soils greatly affect the stability of foundations and basements. Soils that pose these limitations are graphically shown in the *Severe Shrink-Swell and Slow Percolation* category of **Map 3**.

Sanitary Facility Limitations

Rural development and development beyond the sanitary sewer service is likely to develop on individual septic tank systems, whether temporarily or permanently. Septic tank absorption fields are subsurface systems of tile or perforated pipe that distribute effluent from a septic tank into the natural soil. When considering these improvements, favorable soil properties and site features are needed for the proper functioning of septic tank absorption fields. For example,

soils must be stable, able to percolate, and able to adequately filter effluent from the systems. For these reasons, the soil properties and site features considered when determining the suitability of soils for septic systems are those that affect the absorption of the effluent and those that affect the construction of the system.

Primary properties and features that affect the absorption of the effluent are permeability, depth to a seasonal high water table, depth to bedrock, and susceptibility to flooding. Soils that pose limitations due to high water tables, wetness and susceptibility to flooding are graphically shown in **Map 3** in the *Floods and Wetness* category.

In addition to affecting the soils, absorption capabilities, stones, boulders and a shallow depth to bedrock also interfere with installation of septic systems. Excavations for septic tanks and lateral fields are greatly influence by these characteristics. Soils that pose limitations to excavation are represented in **Map 3** by the *Stony*, and *Shallow Depth to Bedrock* categories

Percolation tests are performed to determine the absorptive capacity of the soil and its suitability for septic tank absorption fields. Soils which do not adequately percolate are graphically shown in the *Severe Shrink-Swell and Slow Percolation* category of **Map 3**.

EXISTING DEVELOPMENT PATTERNS

Existing Land Use and Zoning Patterns

This Section examines Eudora's existing land use and zoning pattern jointly as the current zoning district distribution within the city limits was clearly based on existing land use as well as on prior zoning ordinances. This section evaluates existing land use and zoning in two parts: land use and zoning within the corporate limits; and land use and zoning within the growth boundaries (for a depiction of the planning area **Ref. Map 1, Planning Area Map**).

Reviewing existing zoning provides insight in to the immediate development potential of Eudora and the surrounding planning area. **Map 4, Existing Zoning Map**, shows existing City zoning and County zoning within the planning area, as of 2002. The vast majority of the area within the current city limits is zoned for low-density residential uses as part of an "RS" – Low Density Residential district. This zoning pattern is varied primarily in the historic core of the community where a mix of higher-density residential, non-residential, public and semi-public zoning is concentrated in and around the Central Business District. Higher-intensity zoning also exists in clusters around the two interchanges with K-10 Highway.

As opposed to Eudora, the land outside the current city limits, within the City's planning area, is zoned almost entirely for rural residential and agricultural uses. The most dominate zoning is "A" - Agriculture which provides for a full range of agricultural activities. The remaining land is predominantly zoned "A-1" - Suburban Home. This zoning designation is intended to provide for

single-family residential development of a suburban character, with limited public and semi-public facilities, and related accessory uses. However, the district provides for low-density residential development not served by public sewer facilities. As opposed to agricultural development which has a high potential for future redevelopment, low-density rural development poses a substantial threat to future expansion of urban development and provision of urban services. This is particularly important as it relates to the City's ability to continue to grow to the south of K-10 Highway.

Following is a more detailed description of the land use and zoning within the Eudora and the surrounding planning area.

Land Use and Zoning within the Corporate Boundaries

Single-family residential development is the most prevalent land use within the city limits of Eudora. As of the beginning of 2003, approximately 65 percent of the total land area within the City was zoned for single-family uses in three single-family residential districts: RA – Agriculture, ER – Estate Residential, and RS – Low Density Residential.

The predominant pattern of this single family residential development has taken place north of K-10 Highway from Church Street west to Winchester Road and north to the Wakarusa River. This pattern has been greatly influenced by the City's ability to provide public services including sanitary sewer, as almost the entire area falls within a single drainage basin which drains north to the Wakarusa River (**Ref. Map 2 Natural Features**). Since the 1980's the City has realized more pressure to develop beyond this historic boundary. During that period, urban density single-family subdivisions served by public utilities developed east of Church Street, west of Winchester Road and south of K-10 Highway. This was in part greatly influenced by the City's expansion of the sewer treatment facilities in the late 1990's. While vacant land planned for single-family residential development exists within the current corporate limits, these areas comprise less than 10 percent of the total land area of the City and have an approximated capacity to serve only four to six years of single-family growth assuming the land is readily available for development.

The other predominant residential pattern includes moderate to high density two-family, multifamily, and senior housing development in three zoning districts: RE – Elderly, RT – Two-Family Residential, and RM – Multifamily Residential. These uses are primarily concentrated around the Central Business District and northeast of the Church Street/K-10 Highway interchange.

Eudora also has a significant amount of public/semi-public land, which includes such uses as churches, parks, schools, cemeteries and public utilities. These public/semi-public uses are second only to single-family land uses comprising approximately 15 to 20 percent of the City's total land area.

As no zoning district exist exclusively for these uses, they are currently spread across several zoning districts, primarily consisting of residential districts.

The City of Eudora has six developed non-residential development concentrations. These concentrations include four commercial districts: the Central Business District; 10th Street; Church Street south of 14th Street to K-10 Highway; and 20th Street west of County Road 1061. Two industrial concentrations exist along the railroad tracts at the northern edge of the City and in the Intech Business Park.

Historically, commercial development occurred in the vicinity of the central business district located on Main Street between 7th and 9th Streets. This historical function was in great part supported by the function of Main Street as the City's most utilized north-south arterial street. As traffic patterns and businesses have gravitated toward Church Street and K-10 Highway, the function of the central business district has changed from a retail commercial center to a mix of office and service commercial uses with limited retail uses. As in many small towns, the viability of the downtown has suffered as businesses have moved seeking better access to highways and arterials, updated retail space, and improved parking among other motivating factors. Because of the inability to provide these needs, the role of downtown Eudora has irreversibly changed. Today downtown must seek to provide a unique environment and specialty services to attract users to an experience, atmosphere and services that can't be provided in modern strip center and big box type retail settings. This district has a high capacity for accommodating additional non-residential uses through redevelopment and revitalization due to the amount of available space.

Commercial uses have also been built along 10th Street, the City's main east-west arterial. This arterial (which is Old Kansas Highway 10) has a variety of highway commercial uses such as gasoline service stations, restaurants, convenience stores, and automobile parts stores. While Main Street has the classic elements of an historic central business district, 10th Street has the classic elements of the modern strip commercial district. 10th Street functions almost exclusively for vehicular access, and its design is marked by numerous curb cuts, lack of consistent streetscape, and uncoordinated facade and signage treatments. Despite these characteristics, 10th Street seems much less intrusive than most strip commercial areas, in part due to the fact that there is an intermixture with a variety of other uses particularly residential and public (e.g. the Eudora School District offices and former High School). However, due to the limited lots sizes (particularly lot depth), and location in relation to residential development, the future potential for commercial development or expansion is greatly limited.

A third commercial area has developed off of Church Street north of K-10 Highway. This area is currently home to the community's only full-size grocery store. Other uses include sit down and fast-food restaurant chains, a gas station and other convenience commercial uses in a strip commercial center and pad sites along the east side of Church Street. Limited additional commercial development opportunities exist at this location due to the restricted access and

lack of available land on the west side of Church Street due to the location of the Nottingham Elementary School.

An additional commercial development district is developing south of K-10 Highway west of Count Road 1061 on 20th Street. Currently this area houses a mix of service commercial uses including repair shops and veterinary services. As Eudora continues to grow, this area will provide one of the City's primary commercial growth opportunities due to the availability of land, visibility and access to K-10 Highway. However, this growth will in great part be dependent on the improvement of 20th Street. Both the configuration of the access to Church Street and the current state of improvement of 20th Street are limiting factors.

Industrial development is concentrated in two areas. The first location is around the railroad right-of-way that runs east-west through the northern portion of the planning area, and along Ash Street. This area is home to some of Eudora's older more intense industrial development much of which requires rail access.

Intech Business Park provides the City's second industrial concentration. This business park, located in the eastern portion of the City, accommodates a mix of light-industrial uses on approximately 85 acres, of which only approximately 20 percent remains undeveloped as of 2003. A primary benefit of the park is regional identity, close proximity to the K-10 Highway with access via the County Road 442 interchange with K-10 Highway. Although the park as originally planned will likely be built out in the near term, room for expansion or construction of a new park exists on vacant land in the immediate area.

Because of the limited opportunities for development of new non-residential development within areas currently zoned for commercial or industrial uses, one economic development focus of the community should be promoting revitalization, such as in the Central Business District. Another primary focus should include development of new business concentrations south of K-10 Highway.

Land Use within the Planning Area

Zoning in the extraterritorial area of the City is overwhelmingly agricultural. This category includes not only farms but also single family homes. Obviously this zoning reflects the current land use and is appropriately used as a holding zone awaiting future developments. The Planning area also includes large land areas which are located within the floodplain much of which is zoned "VC" Valley Channel by the County.

Single family housing locations are the third most common land use. There are four major rural residential subdivisions in the planning area located south and west of the current corporate limits. Scattered residential sites are also prevalent along Douglas County Roads, particularly E2100 and N1200.

With the exception of agricultural-related businesses, non-residential development is very limited in the area. There is a small amount southeast of the County Road 1061/K-10 Highway interchange beyond the current city boundaries.



*Looking north from North 1100th toward the growing Eudora community
(January 2003)*

Existing Urban Framework

To a great extent, Eudora's general city form is defined by its existing street network. That network primarily consists of narrow streets and alleys laid out in a right-angled grid pattern. This grid pattern gives much of the City its traditional "urban village" design, which includes a central business district, smaller residential lots, lack of street hierarchy, and limited focus on strict separation between land uses.

Recent developments in the City have signaled a shift away from a more traditional urban framework. Newer streets have been developed in subdivisions located in the south, east and west sections of the City, and while the older areas of town were designed around a grid street system, these newer neighborhoods are characterized by curvilinear streets and slightly larger lots. Also, as the City has developed from its core, more attention has been paid to more recent city planning values, such as separation of land uses, and residential enclaves as opposed to neighborhoods.

Existing Street Network

The original City of Eudora was platted with uniform street locations as part of "grid" street network pattern. Within a grid pattern each street may provide a variety of functions, such as neighborhood access to residential properties, local access to businesses and public facilities, and regional access within and throughout the community. As was typical with many grid

systems, almost all streets were initially improved to the same standards as opposed to modern hierarchal systems where the street is improved based on its function and corresponding traffic volumes.

Hierarchies often include local, collector, arterial, and thoroughfare streets, and each has a special purpose. For example, local streets are carry low volumes of traffic and primarily function to provide access to low intensity uses like single-family residential lots. Local street traffic is "collected" by collector streets, whose purpose is to move that traffic from local streets to arterial streets. Collector streets typically provide limited access to residential lots. Access to arterials is even more restricted with a primary function of efficiently moving large amounts of traffic throughout the community. Arterials are designed to carry traffic to high-intensity uses such as commercial centers, industrial parks and other non-residential uses. Thoroughfares function as inter-regional streets, providing high speed, efficient travel with little or no property access.

As a result of its grid system and uniform street improvements, Eudora does not have a clearly defined street hierarchy. However, certain roads nonetheless function as arterials, collectors, or local streets. For example, 10th Street, Main Street north of 10th Street, Church Street south of 10th Street, Winchester Road and County Road 1061 functions as the City's primary arterial streets, with concentrated commercial or industrial development and/or higher traffic volumes, higher travel speeds and the ability to move large amounts of traffic. The City's collector streets include many of the east-west roadways, including 12th Street, 14th Street, 20th Street and 28th Street. Although not designed like collector streets with wider pavement widths and limited access, these Roads help move traffic to the arterials.

As mentioned in ***Geographic and Environmental Characteristics*** of this Chapter, K-10 Highway provides the City's connection to the surrounding region including Lawrence and Kansas City. Two primary points of access exist to Eudora from K-10: the interchange with Church Street/Douglas County Road 1061; and the interchange with 10th Street/County Road 442. Because of this limited access to K-10 Highway, the community's primary means of access, increased pressure is places on the Church Street/County Road 1061, 10th Street/County Road 442, Winchester Road, Main Street, Elm Street and 12th Street which are designed to standards below their current function as collector and arterial streets. As Eudora grows, these existing roads will need to be improved and new collectors and arterials will be required.

Parcel Acreage

Map 5, Parcel Acreage Map, illustrates the acreage of existing parcels within the City and County. Parcel size is used as an indicator of future development potential. The smaller the parcel the less likely that redevelopment is a potential. In particular, small lots indicate a high probability that parcels would have to be assembled from multiple owners, and that existing development and site improvement will hamper redevelopment. In older established

communities, small parcels are not particularly relevant except in areas in need of revitalization, or redevelopment due to deterioration or lack of a market for existing development. Rather, small residential lots and their corresponding density are indicators of the likelihood that urban services can be provided cost effectively.

In the 1990s, Eudora experienced growth in the fringe areas of the City. This development was predominantly urban in nature with an average parcel size of well under ¼ acre. However, growth in the unincorporated areas surrounding Eudora was generally rural in nature. The predominant lot size ranged from two to 20 acres. **Map 5** shows that this growth pattern was well dispersed throughout the City's planning area. With few exceptions, this development was stripped off the existing County road network. This development pattern is notable as it generally indicates rural residential development.

As opposed to agricultural parcels of 40 acres or more, these parcels can provide limitations to future provision of urban services. These limitations often stem from an opposition to urban development and the limited ability to redevelop in order to make provision of urban services feasible and cost effective.

Although much of the land within the planning area is 40 acres or greater and provides ample opportunity for future urban expansion, the City should be aware of the impact of rural residential development within the City's planning area. In order to minimize future limitations to cost-effective provision of urban services, and future hardship on rural residential property owners, the City should work closely with rural property owners and Douglas County staff and officials to ensure that proposed rural development is adequately considered. This is particularly important in regard to the ability to accommodate future urban development and improvements planned for Eudora and the surrounding growth areas.

COMMUNITY FACILITIES AND SERVICES

This section deals with public facilities in Eudora. Public facilities for the purpose of this plan include all publicly owned lands and municipal operations and services pertaining to land use and development within the City of Eudora. Municipal services include the fire and police departments, public utilities, public streets, solid waste, and parks. The Eudora School District and Eudora Public Library are described separately in this Chapter.

Law Enforcement

The City provides law enforcement service for all areas within the Eudora corporate limits. Law enforcement service outside the corporate limits is provided by the Douglas County Sheriff's Office with support service provided by the City of Eudora by request.

City of Eudora Police Department

The Police Department in Eudora consists of eight full time officers, two part time officers and one part time administrative assistant. The Department staff includes a school resource officer who provides service to the Eudora School District. The Department anticipates providing an additional school resource officer beginning in 2004. Funding for the additional officer will be provided through the Department of Justice Office of Community Oriented Policing Services "COPS in Schools" grant program. In addition, the Eudora Police Department has projected a need for additional officers to maintain adequate service as the City continues to grow. Initial projections by the Department indicate the need for five additional officers by the year 2010.

The Police Department currently shares a facility with the Eudora Fire Department. As both departments continue to grow, it is clear that the additional space is needed. Officers and staff currently share office space and the addition of more staff will require additional overlap. As a result of the growth of both departments, non-essential space including conference areas will likely have to be converted to office space.

As a result of existing and projected population increases and the continued growth south of K-10 Highway, the Police Department anticipates the need to relocate along with the Fire Department to new facilities near K-10 Highway. Relocation to new facilities would allow for construction of much needed updated offices, showers, lockers, conference space, garages and storage space. If such a facility is constructed it is not likely that the current facility would continue to be operated.

The City does not operate a jail. Rather, prisoners are currently housed at the Douglas County Jail located approximately four miles west of Eudora. Because of the close proximity to the Douglas County Jail, the City does not have any future plans for construction of a City Jail.



City of Eudora Joint Police and Fire Department Facilities (July 2003)

Douglas County Sheriff's Office

The Douglas County Sheriff's Office provides law enforcement service and protection to all areas outside the City of Eudora. The Sheriff's Office is divided into two main administrative areas:

- **Corrections:** The Corrections division has the primary responsibility for the jail and the inmates housed therein. Corrections division staff serve in a variety of capacities including direct supervision of inmates, booking/intake, escort, transportation, and administrative functions.
- **Operations:** The Operations division is comprised of a number of areas including patrol, civil process/warrants, investigations, courtroom/building security, community relations, and administration.

Sheriff's Office personnel also serve in the following specialized units: drug enforcement, training and development, information technology, underwater search and recovery, and traffic accident reconstruction.

Fire Protection

The planning area is served by two fire departments. The Eudora City Fire Department provides service to all areas within the city limits. The Eudora Township Fire Department serves the unincorporated area surrounding the City. The City of Eudora also provides additional aid to the township department on certain calls.

City of Eudora Fire Protection

The City of Eudora Fire Department is located off Main Street in downtown Eudora. The existing facilities are shared with the City of Eudora Police Department. As of 2003, the Fire Department roster contained 18 members, including a full time fire chief – a position created in 2003. The remaining members are volunteer firefighters. Currently, the Fire Department handles approximately 450 to 500 calls per year.

Since the last major Comprehensive Update in 1993, the Fire Department has undertaken an active process of updating equipment and facilities. Currently the Department operates the following trucks:

- 2000 E-One Engine – 1,250 gallon per minute pump with capacity for 750 gallons on truck. Enclosed six-person cab.
- 1985 E-One Engine (rural pumper) – 1,000 gallons per minute pump with capacity for 1,000 gallons onboard. Two person commercial cab.
- Squad Truck, F-150, 4x4 Crew Cab – 150 gallons per minute pump with capacity for 250 gallons onboard. This “skid unit” is primarily for fighting grass and brush fires.

Although the vehicles have been updated, replacing older equipment including a 1968 truck, the Department feels additional equipment is necessary to provide adequate fire service. Among the equipment needed is a 1,500 gallon per minute Quint pumper truck with a 75-foot aerial device for responding to second story and roof fires within the City. However, acquisition of new vehicles would require an addition to the existing fire station or a new building.

The existing facilities were expanded with an addition completed in 1999, but even the additional space is no longer sufficient according to the Department. The current facilities are inadequate based on the need for additional administrative, conference, training and storage space. As a result, the Department has identified the need for new facilities as their top priority. As described for Law Enforcement, the Eudora Fire and Police Departments have projected a need for new facilities located closer to K-10 Highway near Church Street. This location provides for more equitable distribution of services within the community, particularly as the City continues to grow to the south.

In addition to the need for equipment and facilities, the Fire Department also projects the need for additional staff. The 1993 Comprehensive Plan described the staff as deficient. According to staff, the Department is "still playing catch-up," and needs as many as 12 additional fire fighters. The Department's goal is to employ enough full-time firefighters to provide coverage 24 hour per day, seven days. According to the National Fire Protection Agencies standards, this would require 12 full-time employees working in three shifts. This arrangement would allow a four-person crew to provide initial fire attack and prepare for volunteer support.

Staff training is another high priority for the Department. Currently, the Department is lacking in some technical areas of fire prevention, training and technical programs. Training efforts are currently hampered by lack of training space and lack of full-time firefighters.

Other limitations on the existing fire protection services include existing road conditions in many portions of the City. As described in the Existing Street Network section of this Chapter, many road are not improved to current standards. Particularly, arterial roads that lack curb and gutter, such as sections of Church Street and County Road 1061, hamper response as cars have limited ability to move over, out of the way of fire trucks responding to emergencies.

One common measure used by communities to assess their fire protection capacity is insurance ratings. The "Fire Suppression Rating Schedule" published by the Insurance Services Office (ISO) is used throughout the United States to establish base rates for fire insurance purposes. Using this schedule, fire protection services are rated on a scale between 1 and 10, 1 being the best possible rating, 10 being the worst (also known as unprotected). ISO then publishes these ratings for the insurance industry to use. The insurance industry uses these ratings to determine insurance rates.

As noted by the National Fire Protection Association:

(The ISO rating schedule) has had a profound influence upon the level of municipal fire protection provided in many communities. While ISO never assumes to dictate the level of fire protection services provided by a municipality...it is generally appreciated that removal of deficiencies can result in a more favorable fire insurance classification which has certain economic rewards as well as a general satisfaction that the community is providing its citizens with an improved level of service, or is holding a favorable classification where already obtained." (Fire Protection Handbook. Fourth Edition, National Fire Protection Association)

Despite shortcomings, the Department has maintained an ISO fire suppression rating of Class 6 for commercial property in the City. The ISO rating is based on three primary factors: fire alarms, fire department, and water supply. The vast majority (90 percent) of the grade is based on the fire department and area water supply. Fifty percent of the overall grading is based on the number of engine companies and the amount of water a community needs to fight a fire. ISO reviews the distribution of fire companies throughout the area and checks that the fire department tests its pumps regularly and inventories each engine company's nozzles, hoses, breathing apparatus, and other equipment. ISO also reviews the fire-company records to determine:

- type and extent of training provided to fire-company personnel
- number of people who participate in training
- firefighter response to emergencies
- maintenance and testing of the fire department's equipment

Forty percent of the grading is based on the community's water supply. This is in part determined by whether the community has sufficient water supply for fire suppression beyond daily maximum consumption. ISO surveys all components of the water supply system, including pumps, storage, and filtration. Fire-flow tests at representative locations in the community are obtained to determine the rate of flow the water mains provide. Last, the distribution of fire hydrants no more than 1,000 feet from the representative locations are counted.

In regard to water supply, the City is near to resolving problem areas within the City in 2003. These areas are primarily located in older portions of the City at the edge of developing areas. Increased line sizes, updated pipes and additional loops in the system have helped alleviate much of the service limitations. However, water infrastructure improvements are still needed in some neighborhoods in the northeast portion of the City.

The remaining portion of the overall grading is based on how well the fire department receives and dispatches fire alarms. 911 dispatches are described later in this Chapter.

It should be noted that the ISO rating schedule relates only to property protection, and that there are no nationally accepted standards for the protection of lives. Because the standards are for insurance purposes only, they cannot and should not be used as a guide for designing fire protection services. The ISO ratings are mentioned only to illustrate that fire protection services in the city, although limited, are suited for urban densities. As densities increase, and new areas are annexed into the City, additional fire protection must be provided. As a result of existing shortcomings and rate of projected development, expansion of fire protection services should be a high priority within the community.

Eudora Township Fire Protection

Fire protection outside the City limits is provided by the Eudora Township Fire Department. The Department provides fire protection only. Emergency medical service (EMS), rescue, hazardous material response, water rescue, high angle rescue and other responses which require specialty training and services are not provided by the Township Department. Rather these services are provided through Lawrence-Douglas County Fire and Medical and other aid agreements.

The Eudora Township Fire Station is located on 20th Street (also referred to as "White Dog Road") west of County Road 1061. The Eudora Township Fire Department is comprised of a roster of 20 volunteer firefighters, including a fire chief, assistant chief, captain and lieutenant. The Department provides service for an approximately 48.5 square mile area within the Township, including the City's entire planning area.

The Department makes approximately 80 to 90 runs per year, only two or three of which involve structure fires. The Department currently operates four trucks which can provide approximately 4,500 gallons of water on scene. These trucks include:

- 1996 Class A Pumper – 1,000 gallon per minute pump with 500 gallon per minute dump tanks.
- 2002 Tanker – 2,000 gallon tanker with pumps and 500 gallon per minute dump tanks.
- 4x4, 2-ton, "Off Road Tanker" – 1,250 gallon per minute tanker.
- 1973 4x4, mini pumper – 1,250 gallon per minute pumper, with capacity for 250 gallons on board.

In addition, the Department receives automatic aid from Wakarusa and Palmyra Townships and Mutual Aid from Johnson County District 3. According to department staff, the most common aid needed is water from additional tankers. Because of the limited calls, limited funding, and availability of aid, the Department has no current plans for new equipment, expansion of the department roster, hiring of full-time staff, or addition of services.

The Department cited the limitations of rural water service and infrastructure, and low water pressure and flow as the primary limitations to rural fire suppression. Although recent construction of 12-inch water transmission lines by the rural water district has helped, the lack of

hydrants and small distribution lines greatly inhibit the ability to provide adequate water for fire suppression. According to department staff, rural water service limitations and department response times limit the ability to fight structure fires. Responses to structure fires are generally limited to ensuring that the fire doesn't spread, rather than being able to save the structure.

As a result of the fire suppression limitations, the ISO rating for the township is significantly higher than that for the City of Eudora. Those areas within a five-mile driving distance of the Township Station currently have an ISO rating of 9B. Areas beyond the five-mile driving distance have an ISO rating of 10, the worst possible rating, also known as unprotected.

According to ISO officials, these ratings are indications that although the extraterritorial area is serviced by a trained and competent fire department, the rural water distribution system is insufficient for fire protection services. Needed fire flow for adequate suppression is the rate of flow required to confine a major fire to the buildings within a block or group. A minimum recognized water supply for grading purposes must be able to deliver at least 250 gallons per minute for two hours, or 500 gallons per minute for one hour, plus consumption of water at the maximum daily rate. The rural water system is not capable of generating fire flows of this level.

Although rural residents may be aware of the low ISO rating, department staff felt many residents have a false sense of security based on installation of what appear to be hydrants in areas of new development. In many cases, these "hydrants" have been installed in the rural water system as flushing assemblies allowing the periodic flushing of the lines to remove sediment. Because of limited water flow and pressure, these hydrants cannot be used for fire suppression.

Ambulance Services

First-responder ambulance services are provided by a "First Response Unit" or local Emergency Medical Service (EMS) squad which serves the entire City of Eudora and surrounding planning area. The unit is staffed by 12-person, on-call, volunteer crew. Each member is trained to provide basic life support and has first responder certification, with some members trained as an Emergency Medical Technician (EMT), Emergency Medical Technician Intermediate (EMTI) or Emergency Medical Technician Paramedic (EMTP). The crew works in rotating shifts. Each shift consists of a three-member team which is on call for a one week period. Each team is on call once every four weeks.

Because many of the volunteers work outside of Eudora, weekday calls are routed through the Eudora Fire Department and the City Fire Chief responds to all weekday calls. The First Response Unit responds with a locally stationed 1999 Chevy Suburban EMS truck which carries equipment necessary for basic life support including a spine board, diagnostic equipment, AED (Automatic External Defibrillator) and medical supplies. In addition, each member of the unit carries "jump kits" containing basic EMS equipment.

The First Response Unit is currently supported by a cooperative agreement between the City of Eudora, Eudora Township and the Lawrence-Douglas County Fire & Medical Department (LDCF&MD). The City currently provides gas for the EMS truck, buys basic equipment and uniforms, and provides routine truck maintenance. The Township currently provides insurance for the EMS truck. LDCF&MD provides pay for the volunteers, provides technical equipment for the unit and coordinates non-routine maintenance for the EMS truck.

Advanced life support is provided by the LDCF&MD (a division of Lawrence City Government) providing medical response throughout Douglas County (approximately 465 sq. miles). Service is provided from four stations in Lawrence and one EMS house in Baldwin City. The combined call volume of the Department runs around 7,500 per year with approximately 130 field staff working three 24-hour shifts. The Department merged fire and medical services in 1997 and has since been aggressively cross-training.

The typical response time is approximately 10 to 15 minutes. Upon arrival the advanced life support services response units can administer medication, and provide other advanced life support services. Advanced life support services also provide transportation to the local hospitals. According to Eudora Fire Department Staff, the vast majority (approximately 95%) of calls are routed to Lawrence Memorial Hospital. Critical cases often are routed to KU Medical in Kansas City, Missouri. In some cases calls in the southern part of the township may be routed to the Olathe Medical Center.

In response to future demand for services, the Eudora Fire Department has staff trained to teach first responders certification and provide continuing education. The City's vision for emergency service response is to hire full-time personnel capable of providing an improved level of service, and better training and continued education. The Eudora Fire Department staff identified the need for a four-person company that can provide 24-hour, seven day a week on-call service. If this service is to be provided, the City must plan additional space for staff, equipment and truck storage and training facilities. Current facilities cannot provide the additional space required. However, as identified in the Law Enforcement and Fire Protection sections of this Chapter, the City has identified a need to relocate the existing Police/Fire Department. Based on the needs identified above, the design of any new facilities should include space for the provision of ambulance services.

911 Services

Area 911 dispatches are run by Douglas County Emergency Communication Department. Established in 1995, the Douglas County Emergency Communication Department has a primary mission to serve the citizens of Douglas County, including the cities of Baldwin, Eudora and Lawrence, by acting as a communications link between the citizen who needs an emergency service response and those law enforcement, fire, and medical response agencies who provide such services.

As of 2003, the Department was staffed by a director and three supervisors. The Department provides enhanced 911 telephone services for the entire county (except the University of Kansas Campus) and radio dispatching personnel and equipment for the 23 police, fire, and medical response agencies serving the cities, townships, and rural areas of Douglas County, including the City of Eudora.

As part of the Eudora Police and Fire Departments plans to develop new facilities, a new Emergency Operation Center (EOC) is envisioned. The EOC would serve as a branch to the 911 dispatch in case of a major catastrophe. This branch center would allow the system to be operated remotely in Eudora.

Water Service

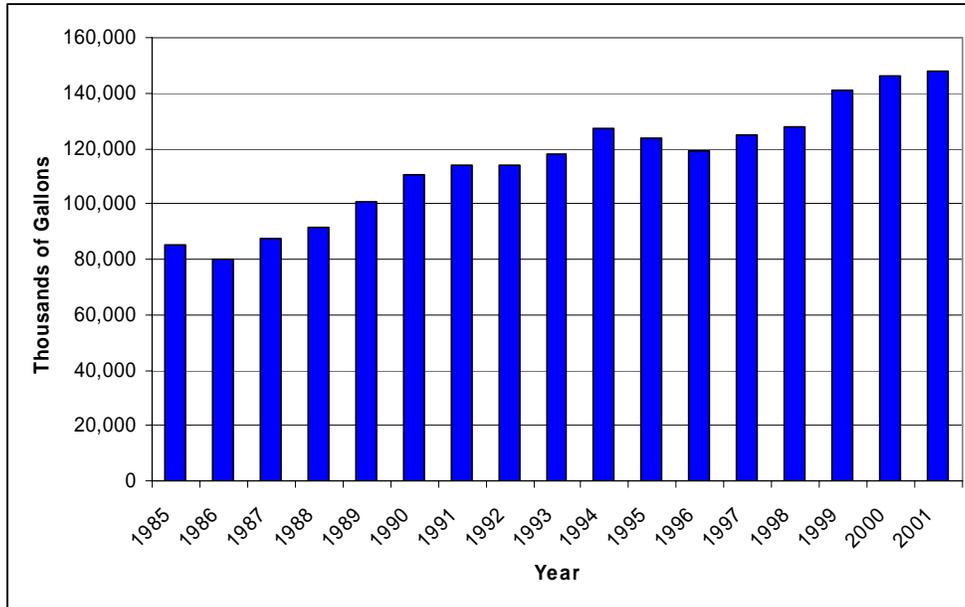
The City of Eudora owns and maintains its own water and distribution system (**Ref. Map 7, Existing Water Supply**). The City currently draws subsurface water from three active wells located in the Wakarusa River Valley located northwest of the City between the Wakarusa River and the Kansas River. Additional wells also exist, but are reserved for emergency use or are inoperable. Because the water is not under the influence of the Kansas or Wakarusa rivers, it is not regulated as water from a ground water source. As such, the water is treated as a subsurface source, including addition of chlorine prior to distribution. Water is distributed to residents of Eudora via an urban water system that includes above ground storage, water towers, transmission and distribution lines, fire hydrants for fire protection and other necessary improvements.

Demand for City water has steadily increased with increase in the City's population. Since 1985, the total gallons used per year has risen by approximately 80%. **Figure 3-1** illustrates the increase in annual water usage between 1985 and 2001. Similarly, peak monthly water usage has increased. **Figure 3-2** illustrates the peak water usage for the period from 1985 to 2002.

In order to accommodate the increase in water demand, major improvements were made to the City's water system during the 1990's including increasing the water plant's designed capacity to approximately 1.7 million gallons per day. In addition, two wells were also added to provide adequate water for distribution. The new wells allowed the City to retire some of the existing wells, one which now is reserved for emergency purposes (some retired wells have been retained to preserve the City's existing water rights). The City's three active wells each currently have the ability to provide approximately 300,000 to 350,000 gallons per day and the "emergency" well can provide an additional approximately 290,000 gallons per day (**Ref. Table 3-1**).

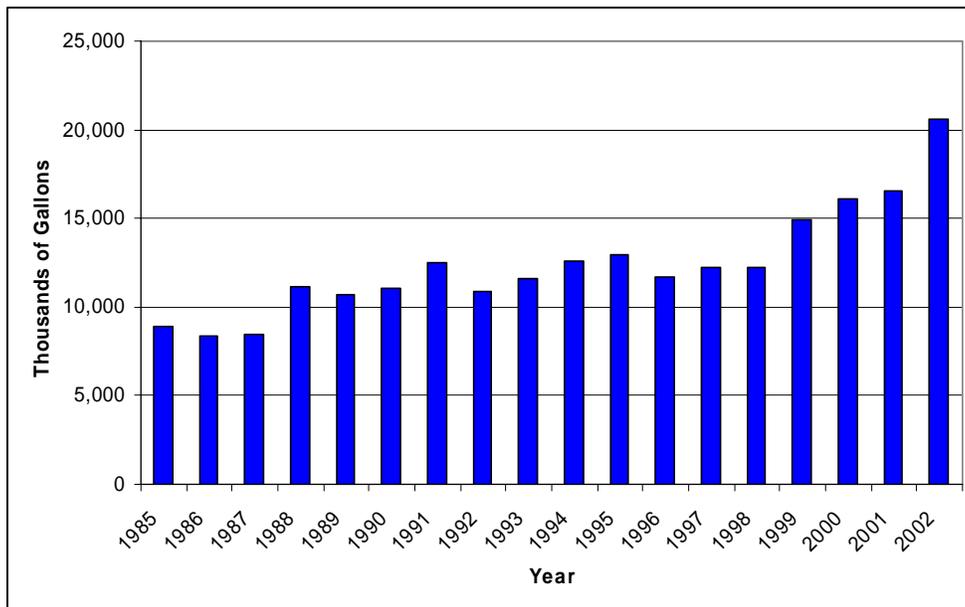
Although this total capacity is approximately 1.3 million gallons per day, the actual capacity is reduced by existing line sizes, tuberculation associated with cast iron lines, friction and other factors. As a result, less than 1.3 million gallons of water can be drawn during any given 24-hour period.

Figure 3-1: Total Annual Water Used from 1985 to 2001



Source: City of Eudora Public Works Department

Figure 3-2: Peak Month Water Usage from 1985 to 2002



Source: City of Eudora Public Works Department

Table 3-1: Water Well Production Rate

Well #	Capacity (thousands of gallons per day)
5*	288*
6	316.8
7	345.6
8	345.6
Total Capacity	1,296

**Back-up/emergency service only*

Source: City of Eudora Public Works

In addition to allowing the City to retire existing wells, the new wells were also intended to minimize wear and tear on any one well by allowing operation to alternate. However, additional growth and demand have resulted in the need to operate all three wells continuously. As a result, the City is exploring options for adding additional wells to the system. According to City staff, the construction of new wells will likely require acquisition of additional water rights. It is anticipated that a new well could provide approximately 350,000 to 400,000 additional gallons per day, reaching the water plant’s designed capacity.

Once treated, water is stored in the “clear well,” above ground storage or one of three water towers which provide a total storage capacity of approximately 900,000 gallons (see Map 7). Although adequate storage capacity currently exists, the City has identified a need for altitude valves at existing towers to allow for filling of the south tower. These additions would also increase system pressure south of K-10 Highway. Other improvements identified as needed south of K-10 include the looping of the transmission lines, and the potential need for a booster station to further increase pressure.



City water towers located throughout Eudora.

In addition to major improvements, the City also continues to work to replace existing 2" water lines with 4" and 6" lines to improve water pressure for fire protection. The City currently spends approximately \$10,000 to \$15,000 per year on this program from existing revenues. According to the City's public works department, approximately one third of the City's existing lines are less than 6" in diameter, which is typically considered large enough to provide adequate fire protection while remaining small enough to avoid low velocity standing water.

As the City continues to grow, continued provision of potable water and water for fire protection is crucial. Without adequate water, development and public safety are threatened. To that extend the City must plan for provision of water service to areas within the existing City limits as well as future development within the planning areas. Currently areas outside the City limits (with few exceptions) are served by Rural Water District 4. As growth areas are annexed, the City must negotiate water service rights with the rural water district and plan for additional service capacity. As a result, a water master plan will be required in the near future.

Sanitary Sewer Service

The City of Eudora operates its own sanitary sewer systems (**Ref. Map 8, Existing Sewer System**). The prior plan identified the City's inability to meet federal water quality standards prior to 1992. In 1992 improvements to the systems were completed to stop the premature release of sewage into the Wakarusa River. In order to accomplish the improvement the City's existing lagoon was upgraded with increased aeration equipment. The improvement allowed the City to meet the water pollution standards administered by the Kansas Department of Health and Environment. During that same period the City spent \$15,000 to \$20,000 per year on upgrading of sewer mains and distribution lines. Service was also extended south of K-10 in conjunction with the construction of a new high school in 1995.

In the late 1990's the City also improved the sewer treatment facility, increasing capacity to 1,000,000 gallons per day. At that time the sewage lagoons were retired from sewage treatment and reserved for emergency use. However, one lagoon continues to provide storage of lime sludge which is a byproduct of water treatment. The City's existing system includes the treatment facility, sludge pump, lagoons, collector and trunk sewer lines, several lift stations and force mains, and other infrastructure necessary to complete the urban sewer system.

Primary service issues identified by the City include inflow and infiltration of stormwater which increases the amount of effluent to be treated and decreases the City's ability to accommodate future growth. Other issues include the ability to serve development outside the City's primary drainage basin which encompasses the majority of the development between Church Street (CR 1061) and Winchester Road north of the High School and gravity flows back to the City's treatment facilities. To provide for development outside this basin, the City has allowed the use of lift stations and force mains to pump sewage across ridge lines into the gravity flow system. As additional development takes place, these lift stations are replaced or relocated along with the force mains to serve larger areas.

To determine the long-term impact of projected development and proactively identify needed system improvements, the City should prepare a sewer master plan. Meanwhile, the City has identified short-term solutions, including those identified above, for accommodating future growth.

Storm Sewer

Stormwater drainage improvements are necessary, especially when new development occurs that will change the natural environment on-site and off-site. It ensures the safety of the physical establishments and residents. Through the years, the City has managed to improve the stormwater drainage system across the City by means of correcting stormwater problems as they occur and establishing a development plan review process to ensure proper stormwater management from the onset of new projects. This proactive approach follows the City's adopted stormwater management plan and policies.

The City has incorporated several "best management practices" following direction from the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) standards. Policies such as above ground conveyance of stormwater and use of detention and retention ponds improve the filtration of water through natural means and minimize infiltration of pollutants. In achieving the desired stormwater management objectives, new and creative solutions must be considered by the City. For example, the City should consider well-planned street improvements that combine the necessary function of moving traffic with the desired stormwater management improvements such as grass swale behind a flat curb used to contain the pavement rather than direct the flow of runoff.

As the City continues to grow, the need to improve existing stormwater facilities will be accelerated and the need for a city-wide drainage basin/stormwater management program will likely be realized. As a result, stormwater management will not only be a responsibility of each new development, but rather all areas may be required to contribute to stormwater management; and the construction of detention basins and erosion protection, as well as large drainage facilities may be necessary.

Electrical Service

The City of Eudora operates and maintains its own electric distribution system within the Eudora corporate limits (**Ref. Map 9, Existing Electrical Service**). As of the beginning of 2003, the City has approximately 10 industrial customers, 40 commercial customers and 1,750 residential customers.

Service outside the existing city limits is provided by Westar Energy. As unincorporated land is voluntarily annexed into Eudora, the City expands its service area to provide electricity to the property as provided through a mutual agreement between the City and Westar Energy.

In order to provide electrical service, the City purchases power wholesale from Westar Energy. Until 1993, power was distributed from a single 2.4 KV (kilo-volt) substation located adjacent to the intersection of 7th and Ash Streets in northeast Eudora. As the City continued to grow, additional demand and need for greater system performance required the additional of a second substation.

In 1993 Westar Energy planned and built a new substation on Winchester Road south of K-10 Highway (approximately ½ mile south of 20th Street) to provide additional capacity and serve Eudora's projected near-term growth. This new 12.5 KV substation added three additional circuits and substantially increased power distribution capability. In 2003, the 2.4 KV substation provides power to approximately 20% of the City's customers and the 12.5 KV substation provides power to the remaining customers.



The Westar Energy substation built in 1993 provides the ability to expand electrical service in order to accommodate new growth and development. (July 2003)

Population projections for Eudora indicate that the City may double in size within the next 20 years. To accommodate anticipated growth, the substation was designed with eight circuits and a capacity of 25 mega-watts. Currently, the existing three circuits are being utilized at a total load of 9 mega-watts and is operating at approximately 36% capacity. A fourth circuit is being added in 2003 to serve a southeast part of the City.

The existing electrical distribution system is in very good condition and well maintained. A priority of the City has been preventive maintenance through an aggressive tree trimming program to prevent outages from fallen limbs and policies for relocating existing aboveground service as part of new development plans. Because the system is in good operating condition, has adequate capacity to serve existing development and operates at a profit to the City, Eudora has no current or future plans to sell the system or contract out its operation.

Based on the City's staff assessment of current operations, the existing electrical distribution system appears to have additional capacity for short-term customer growth through the additional of up to four more circuits and an increase of 16 mega-watts or approximately 64% capacity. However, the City recognizes the need to continue addressing demand for electrical service through ongoing evaluation and planning for future expansions.

Solid Waste Management

A private contractor provides solid waste management services for development in the City of Eudora, the surrounding planning area and many other area communities. The contractor has been in operation for approximately 25 years, during which time the contractor has shared city facilities at the Eudora City Shop at 5th and Oak Streets. An arrangement between the City and contractor allows for operation of the business, including storage of vehicles from this location, in exchange for reduced cost of service to the City.

Service for low to moderate density residential uses including single-family uses is currently provided on a weekly basis. Within the City limits customers are billed by the City in conjunction with City water bills. Service for high-density residential uses, including apartments and elder housing, and non-residential uses, including commercial and industrial uses, is provided on an as-needed basis, currently up to five times a week. Services to non-residential uses are billed by the contractor directly.

The City does not provide recycling services. These services have been previously considered but determined to be cost prohibitive and unfeasible. Currently no plans exist for future recycling services.

Materials collected are disposed of at the Hamm Sanitary Landfill (also commonly referred to as the Douglas/Jefferson County Sanitary Landfill) located northeast of Lawrence, Kansas. The landfill comprises some 400 acres, of which 360 acres are dedicated to active disposal. The landfill currently serves the City of Eudora, Douglas County, and 11 other counties, as well as the cities of Emporia and Olathe. As of 2003 the projected life of the landfill is approximately 125 years based on the current demand and projected growth, providing more than adequate storage for the City of Eudora.

Parks and Recreation

One of the most visible measures of the quality of life in a community is the park system. Parks and recreational facilities provide opportunities for exercise and relaxation as well as a visual and physical break from the routine of daily life.

Eudora has a long history of parks and recreation planning and programming. The first recorded picnic in Eudora was held in 1901.



Early images record the existence of parkland near City Hall (circa 1900).

In 1927 City Picnic Association (CPA) was founded and sponsored an annual picnic held the third weekend of July. This community gathering has become a Eudora tradition. This parks and recreation heritage is represented in Eudora's parks, many of which have existed since the early 1900's.



Carnival activities which are part of the annual CPA Picnic in Downtown Eudora. (July 2003)

National Parks Standards

In order to perpetuate the City's commitment to parks and recreation facilities and programs, the City must consider how these parks serve the current and project populations. Currently, five parks exist within the City. In order to determine how effectively these public parks serve the City, a benchmark or standard needs to be applied for comparison. This standard helps, along

with public input, to identify the existing deficiencies and/or surplus of available facilities and programs.

To analyze the City’s inventory of parks and determine if the acreage is sufficient and/or if they are properly positioned in the community, the minimum standards of the National Recreation and Park Association (NRPA) were used. NRPA standards provide baseline information by which Eudora’s population can be compared to the number of facilities available. It should be noted that NRPA standards are only a guideline and that the level of service (LOS) provided by the City must be developed in concert with the citizens to meet those standards, which they feel are reasonable and affordable for the City of Eudora.

The first step in analyzing the adequacy of a park system is to review the type, size and location of existing parkland. Different types of parks serve different functions in the community and each type has its own requirement for size, location and equipment. Parks are classified in several ways: mini-parks, community parks, neighborhood parks, regional parks, special use parks, linear parks/greenways, natural resource areas and undeveloped areas.

Table 3-2: Parks and Open Space Classifications and Guidelines

Park Category	Function	Service Area	Desirable Size	Acre / 1,000 Pop.	Desirable Site Characteristics
Mini-Park/ Play Lot	Specialized facilities that serve a concentrated or limited population; or specific group such as tots or senior citizens.	Less than ¼-mile radius.	1.0 acre or less	3.0 acres	Within neighborhoods and in close proximity to apartment complexes, townhouse developments or housing for the elderly.
Neighborhood Park/ Playground	Area for intense recreational activities, such as field games, court games, crafts playground apparatus area, skating, picnicking, wading pools, etc.	¼ to ½-mile radius to serve a population up to 5,000, such as in a neighborhood	3.0 to 12.0 acres	7.0 acres	Suited for intense development. Easily accessible to neighborhood population, geographically centered with safe walking and bike access. May be developed as a school-park facility.

CITY OF EUDORA, KANSAS - COMPREHENSIVE PLAN

Park Category	Function	Service Area	Desirable Size	Acres / 1,000 Pop.	Desirable Site Characteristics
Community Park	Area of diverse environmental qualities. May include areas suited for intense recreational facilities, such as athletic complexes or large swimming pools. May be an area of natural quality for outdoor recreation, such as walking, viewing, sitting, picnicking. May be any combination of the above, depending upon site suitability and community need.	Several neighborhoods. 1 to 2 mile radius	25+ acres	8.0 to 10.0 acres	May include natural features, such as water bodies and areas suited for intense development. Easily accessible to the community served.
Regional/ Metropolitan Park	Area of natural or ornamental qualities for outdoor recreation, such as picnicking, boating, fishing, swimming, camping and trail uses; may include play areas.	Communities within 1 hour driving time.	200+ acres	12.0 to 18.0 acres	Contiguous to or encompassing natural resources.
Linear Park	Area developed for one or more varying modes of recreational travel, such as hiking, biking, horseback riding, cross-country skiing, canoeing and pleasure driving. May include active play areas and can link one or more of the above categories of parks.	No applicable standard	Sufficient width to protect the resource and provide maximum use.	Variable	Built or natural corridors, such as utility rights-of-way, bluff liens, vegetation patterns, and roads that link other components of the recreation system or community facilities, such as school, libraries, commercial areas, and other park areas.

Park Category	Function	Service Area	Desirable Size	Acres / 1,000 Pop.	Desirable Site Characteristics
Special Use	Areas for specialized or single purpose recreational activities, such as golf courses, nature centers, marinas, zoos, conservatories, arboreta, display gardens, arenas, outdoor theaters, gun ranges, or downhill ski areas, or areas that preserve, maintain, and interpret buildings, sites, and objects of archeological significance. Also plazas or squares in or near commercial centers, boulevards, parkways.	No applicable standard	Sufficient size to protect the resource and provide maximum use.	Variable depending on desired size.	Accessible to communities and/or tourists and tourist amenities.

Eudora Park Facilities

The City of Eudora Parks and Recreation Department currently maintains approximately 88 acres of public space, including five city parks. In addition to these city parks, much of the City’s parks and recreation needs are met in conjunction with the Eudora School District, USD 491. Although not part of the Eudora parks and recreation system, school facilities and programs contribute greatly to the Eudora quality of life. **Map 6, Existing Parks and Service Areas,** shows the City’s existing parks and school locations.

As demonstrated in **Table 3-2,** park service is in part determined by each park’s size and amenities. Based on these guidelines, the existing city parks are classified as follows.

1. Mini Parks. Specialized facilities that serve a concentrated or limited population, isolated development area or unique recreational opportunity. Mini Parks provided in Eudora are:

Pilla East and West Park.....2.8 acres



Pilla West Park

2. Neighborhood Parks. The neighborhood park is the basic unit of the park system and serves as the recreational and social focus of the neighborhood. Focus is on informal active and passive recreation. Neighborhood parks provided in Eudora are:

Pascal Fish Park.....1.0 acres
Lucy Kaegi Park0.6 acres



Pascal Fish Park



Lucy Kaegi Park

- 3.

Community Parks. Serves broader purpose than a neighborhood park. Focus is on meeting community-based recreation needs, as well as preserving unique landscapes and open spaces. Community parks provided in Eudora are:

Blue Jacket Park6.0 acres



Blue Jacket Park

4. Undeveloped Parks. Undeveloped parkland owned by the City that provides future opportunities to meet the City's parks and recreation needs. Undeveloped park areas provided in Eudora are:

CPA Park.....1.9 acres



CPA Park

Table 3-3 compares the standards identified in **Table 3-2** to the City's existing public parks and open spaces. Compared to the NRPA benchmarks, the City's provision of public parks and open space is currently deficient. The need for future park land and open space will be compounded as the City continues to grow. Based on the project population growth by 2020, the City will need to acquire a substantial amount of additional park land and open space to meet the community's needs.

Table 3-3: Parks and Open Space Guidelines

Classification	Existing Acres	Recommended Standards ¹	Acres Currently Needed to Meet Standards ²	Additional Acreage Currently Needed ³	Acreage Needed by 2020 ⁴
Mini Park • Pilla East & West	2.8 ac.	3.0 ac./ 1,000 pop.	12.9 ac.	10.1 ac.	24.4 ac.
Neighborhood Park • Pascal Fish Park • Lucy Kaegi Park	1.6 ac.	7.0 ac./ 1,000 pop	30.2 ac.	28.6 ac.	61.8 ac.
Community Park • Blue Jacket Park	6.0 ac	8-10 ac./ 1,000 pop.	34.5 – 43.1 ac.	28.5-37.1 ac.	66.4-84.5 ac.

- 1 National Recreation and Park Association standards.
- 2 Based upon 2000 population on 4,307.
- 3 Does not take into account access to facilities made available to the public by the Eudora School District.
- 4 Based upon 2020 population projection of 9,051.

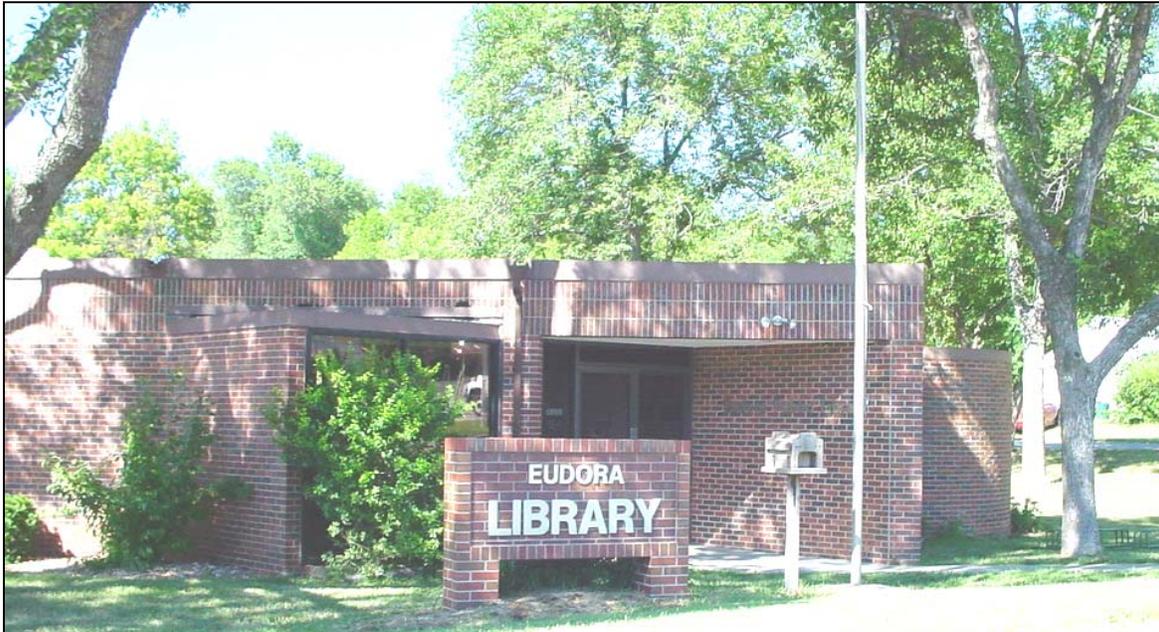
Although not part of the City owned and maintained parks and recreation facilities, much of the parks and recreation demand is met by Eudora School District facilities. Play equipment at the elementary schools, ball fields at the Middle School and High School, and Laws Sports Complex next to the Nottingham Elementary School are used to meet community demand for parks and recreation facilities and often serve as neighborhood parks.



School District play equipment and fields are used by the community to help meet parks and recreation demands. (July 2003).

Eudora Library

The City of Eudora and the entire Eudora Township are served by the Eudora Public Library located near downtown Eudora. The Library is governed by a library board consisting of five members from Eudora Township. As of 2003, the majority of members on the board were Eudora residents. The Library is operated for 44 hours per week by five part-time librarians, including a library director. The Library is funded through a property tax levied by Eudora Township, which includes the City. The revenue is relatively stable since the tax rate has been maintained at a lid of 2.5 mils for many years.



Eudora Library located in Downtown Eudora (May 2003)

As of 2003, the Library's collection included approximately 10,000 volumes – its maximum capacity. The Eudora Library is part of the Northeastern Kansas Library System which allows access to volumes from over 30 other libraries in Douglas County and over 130 other member libraries in Northeast Kansas through interlibrary loans. Although access is available to outside volumes via interlibrary loans, the Eudora Library collection is substantially deficient according to the Public Library Standards for Kansas as set by the Kansas Library Association. According to these standards, the Eudora Library has less than one quarter the volumes needed to serve the current population.

The Library also provides access to three public computers. As of 2003, the computers were loaded with current software and provided internet access to the community. According to Library staff, the computers are in high demand and used for a variety of functions including internet access and word processing. One of the three computers is provided for use by children and includes an internet filter. The public computers also provide access to the Eudora and interlibrary card catalogs.

Usage of these “patron” computers is determined by a schedule maintained by the Library. If not scheduled for use, the computers are available on a first-come, first-served basis. As with the volume collection, the availability of computers is deficient according to the Public Library Standards for Kansas as set by the Kansas Library Association. However, the existing library does not have room for additional public computers.

As mentioned above, the Library is substantially under-sized, and deficient in available materials and services. The existing library building was constructed in 1976. Although the building has been well maintained, no major improvements have been made. As part of any major improvements, the Library would be required to improve the public bathrooms to ADA standards. Plans for these improvements have been developed as part of a growth plan required for American with Disabilities Act (ADA) compliance; however, there are no expectations that the Library can or will expand in its current location. Rather, a new facility will need to be planned and developed in the near future if adequate library facilities are to be made available to Eudora residents. Although previously discussed, the library board has not identified a location for construction of a new library or a targeted time frame for completion.

In considering construction of a new library, the board and staff have identified a preference for a location north of K-10 Highway. This preference is based on the desire to provide safe pedestrian access to the library for the majority of existing children within Eudora. Although projections indicate that substantial growth will take place to the south, short-term access is considered a priority. A long-term desire is for improved pedestrian access from residential development south of K-10 via an improved pedestrian circulation system.

Eudora School District

The availability of quality education is always considered a significant advantage for a community. Easy access to quality education enhances the quality of life and stimulates the growth of the local economy. The quality of education provided within a community is a major factor which influences families and businesses in their decisions to relocate and settle within a community.

The Eudora School District recognizes the importance of its role in the community and is dedicated to excellence as is reflected in the District’s Mission Statement:

With the fundamental belief that all students can learn, the primary purpose of this school district is to provide students with an educational foundation which enhances the creative intellectual, physical and social development necessary for a responsible and enriched life.

With the exception of a small area to the west, the Eudora Unified School District, USD 491, serves the City and surrounding growth area. Of this area to the west, the potential for residential development is greatly limited as the vast majority is located within the floodplain.

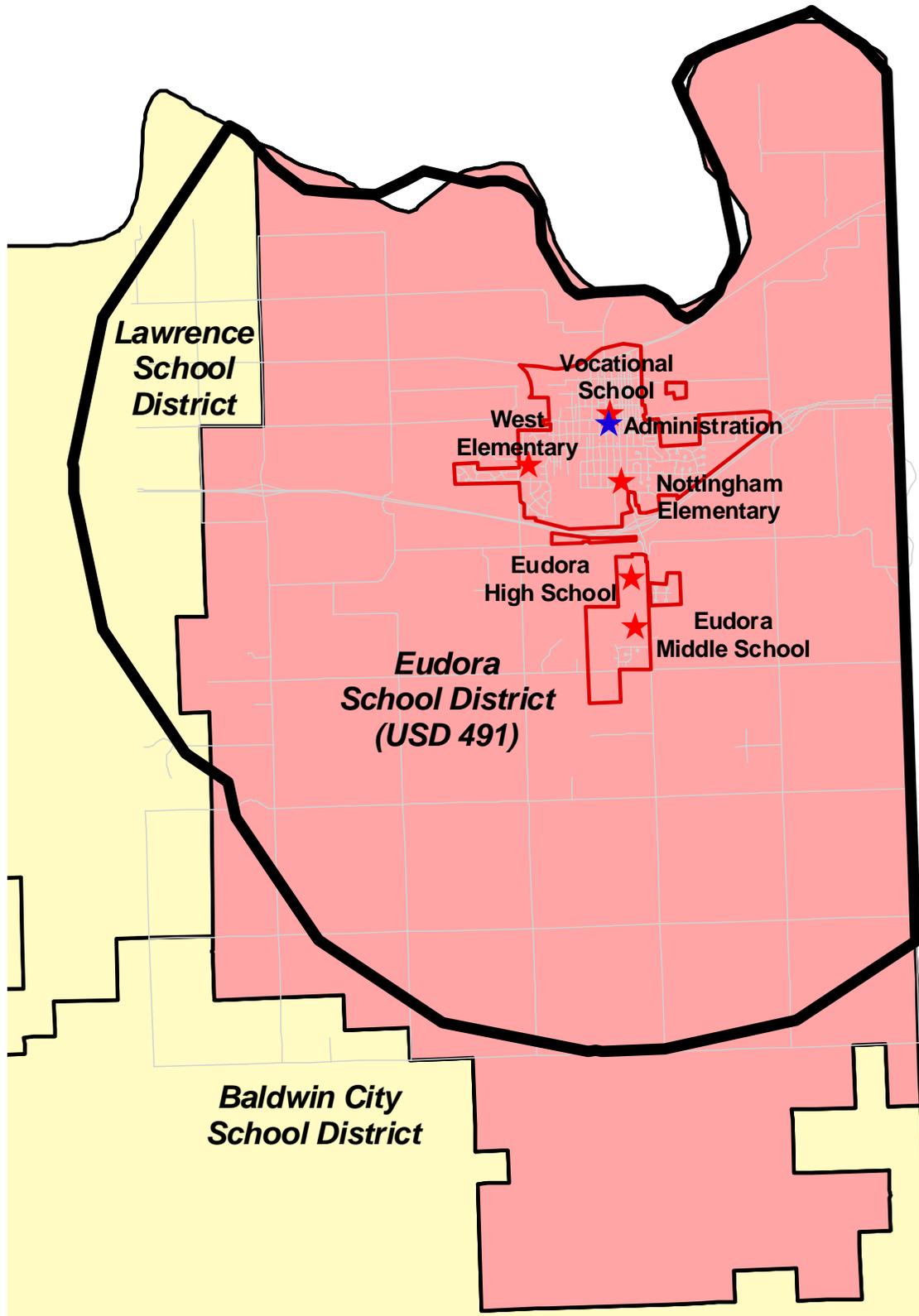
District Facilities

As of the 2003-2004 school year, the Eudora School District will operate two elementary schools, a middle school, a high school, vocational school and administrative offices. All the School District's facilities are located within the City of Eudora (**Ref. Figure 3-3**). Following is a brief description of the elementary, middle and high school facilities.



*Eudora School District offices located on the south edge of Downtown Eudora.
(July 2003)*

Figure 3-3: School District Boundaries and Facilities



Note: Facilities are identified by function beginning during the 2003-2004 school year.

Elementary Schools

The Eudora School District has two neighborhood elementary schools - Nottingham Elementary and Eudora West Elementary. Through the 2002-2003 school year Nottingham Elementary served kindergarten through third grades with a maximum student capacity of 400 students. 2002-2003 enrollment was 356 students. Based on the school projected growth rates of three percent per class per year, the District will have outgrown the facility by 2011. As of the 2003-2004 school year the facility will serve kindergarten through second grade, with the third grade class relocating to Eudora West Elementary. This relocation will reduce the projected 2011 enrollment from 410 to 313 students.



Nottingham Elementary School (July 2003)

Eudora West Elementary was opened in 1994 as a result of overcrowding at Nottingham Elementary which previously served kindergarten through sixth grades. From 1994 through the 2002 school year, Eudora West served fourth through sixth grades. In 2002-2003, the elementary school enrolled 271 students, well below the facility's 350 student maximum. However, the addition of third grade classes from Nottingham will require the District to relocate the sixth grade class. As of the 2003-2004 school year, Eudora West will serve third through fifth grades, with more than adequate capacity to serve the students through the next decade.



West Elementary School (July 2003)

As opposed to capacity the primary constraint on Eudora West is access. Located on the west side of the City with access from Winchester Road, the school is separated from most of the current and projected residential growth. Improvements to the City's street network are important to the ability to safely and effectively provide transportation connections to the school. In particular, improvements to 12th Street and Winchester Road and the City's pedestrian access to the school are important.

Middle School

Through the 2002-2003 school year the school facilities located north of the district offices, on the south edge of downtown Eudora, served as the Eudora Middle School, serving seventh and eighth grade classes. In 2003-2004, the sixth through eighth grades will be relocated to the former High School facilities located on Church Street (County Highway 1061) south of K-10 Highway. Although over 50 years old in 2003, the former Middle School will begin serving vocational classes on a potentially temporary basis. Long-term plans for this facility have yet to be determined. The School District has publicly discussed selling the facility to Eudora for public use, possibly including a community center. However, no formal plans have been made.



As of 2003-2004 School Year the former middle school will be used for vocational education. (July 2003)

The new Middle School, constructed as a high school in 1995, has the capacity for a maximum of 350 students. The population projections for student enrollment indicate that enrollment will be well under this projected capacity through the next decade, with a 2011 enrollment of 291 students.



As of the 2003-2004 school year the former High School will serve as the new Eudora Middle School (February 2002).

High School

The current Eudora High School, home of the Eudora Cardinals, served ninth through twelfth grades through the 2002-2003 school year. As of fall 2003, these grades will be relocated to the newly constructed High School. These new facilities are located immediately north of the existing high school, creating a Middle School and High School “campus” south of K-10 Highway. The new High School has a maximum student capacity of 550 students, more than adequate to serve the projected growth throughout the next decade. Enrollment in 2011 is projected to be 443 students, over 100 students less than the maximum capacity.



The new Eudora High School will be in operation as of Fall 2003. (July 2003).

District Enrollment

Recent enrollment trends show continued growth in the Eudora School District between the 1993 and 2002 school years (**Ref. Table 3-4**). During that 10-year period, enrollment increased by 282 students – an increase of over 30%.

As enrollment has increased, the School District has planned for expansion and growth to meet the needs of a larger student body. The City has historically been extremely supportive of these efforts. As opposed to many communities, bond issues related to School District improvements have been strongly supported and passed by the City of Eudora. As a result, the School District has been able to respond to growth with the construction of new facilities including the Eudora West Elementary School in 1994, the Eudora High School in 1995, and a new high school again in 2003.

In an effort to plan for continued growth and the subsequent demand for facilities, the School District has projected future enrollment. **Table 3-5** shows enrollment through the 2011 school year based on a 3.0% projected growth rate per class.

Table 3-4: Enrollment by Grade and Year (1993-2002)

Grade	'93-94	'94-95	'95-96	'96-97	'97-98	'98-99	'99-00	'00-01	'01-02	'02-03
K	80	90	104	89	91	95	86	95	73	91
1	75	80	87	91	78	83	93	78	104	74
2	73	74	76	94	97	79	88	92	86	108
3	73	81	72	78	94	104	89	85	96	83
4	83	79	79	78	82	97	101	88	91	98
5	70	89	79	83	81	82	100	109	86	86
6	76	75	86	89	83	87	84	103	105	87
7	80	75	81	88	90	86	96	81	101	110
8	61	83	75	80	94	95	87	90	85	104
9	81	64	85	84	89	93	95	94	94	89
10	53	68	60	77	75	84	96	93	95	92
11	61	49	72	53	76	75	76	86	89	87
12	49	60	43	65	48	75	70	72	88	89
Sp Ed	6	8	6	4	8	13	12	14	12	5
Total	921	975	1005	1053	1086	1148	1173	1180	1205	1203

Source: Eudora School District

Table 3-5: Projected Enrollment by Grade and Year (2003-2011)

Grade	'03-04	'04-05	'05-06	'06-07	'07-08	'08-09	'09-10	'10-11	'11-12
K	94	97	99	102	105	109	112	115	119
1	76	79	81	83	86	88	91	94	97
2	76	79	81	83	86	88	91	94	97
3	111	79	81	83	86	88	91	94	97
4	85	115	81	83	86	88	91	94	97
5	101	88	118	83	86	88	91	94	97
6	89	104	91	122	86	88	91	94	97
7	90	91	107	93	125	88	91	94	97
8	113	92	94	110	96	129	91	94	97
9	107	117	95	97	114	99	133	94	97
10	92	110	120	98	100	117	102	137	97
11	95	94	114	124	101	103	121	105	141
12	90	98	97	117	128	104	106	124	108
Sp Ed	5	5	5	6	6	6	6	6	7
Total	1224	1247	1264	1285	1289	1285	1307	1331	1340

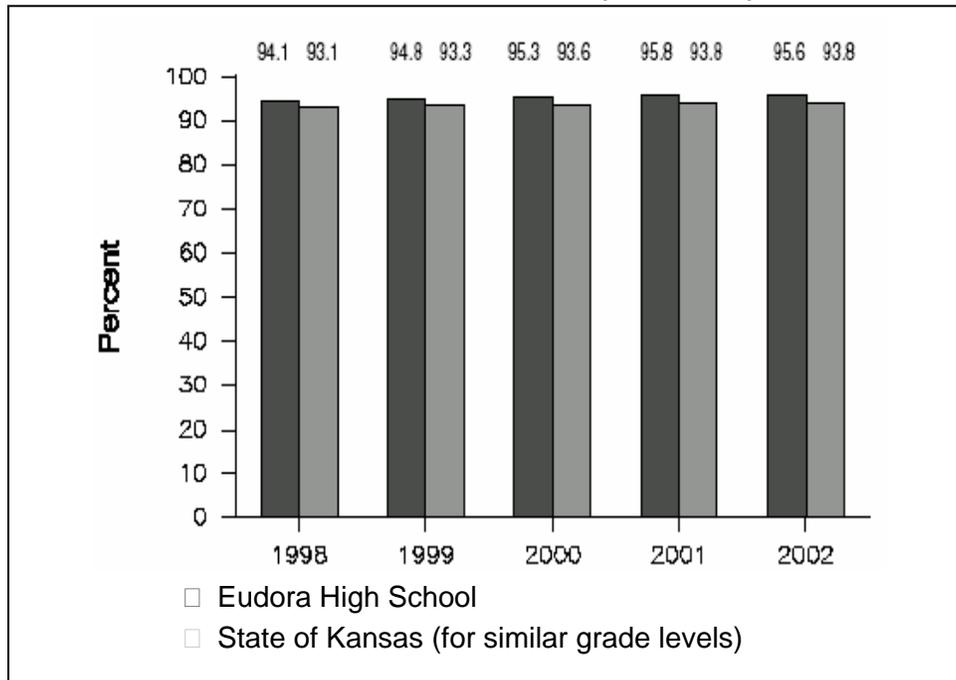
Source: Eudora School District

Based on the 3.0% growth per class, the School District is expected to grow by another 137 students by 2011 – an increase of approximately 11%. Based on this rate of growth and a capacity to serve approximately 1650 students, the School District will not outgrow their current facilities until sometime after 2020.

Attendance, Graduation and Dropout Rates

Important indications of a school's success are attendance, graduation and dropout rates. Following is a summary of these rates for the Eudora High School. **Table 3-6** shows the attendance rate for the five-year period from 1998-2002 for the Eudora High School and the State of Kansas. State data for attendance rates are for schools with similar or like grade levels (in this case senior high level).

Table 3-6: Attendance Rate (1998-2002)

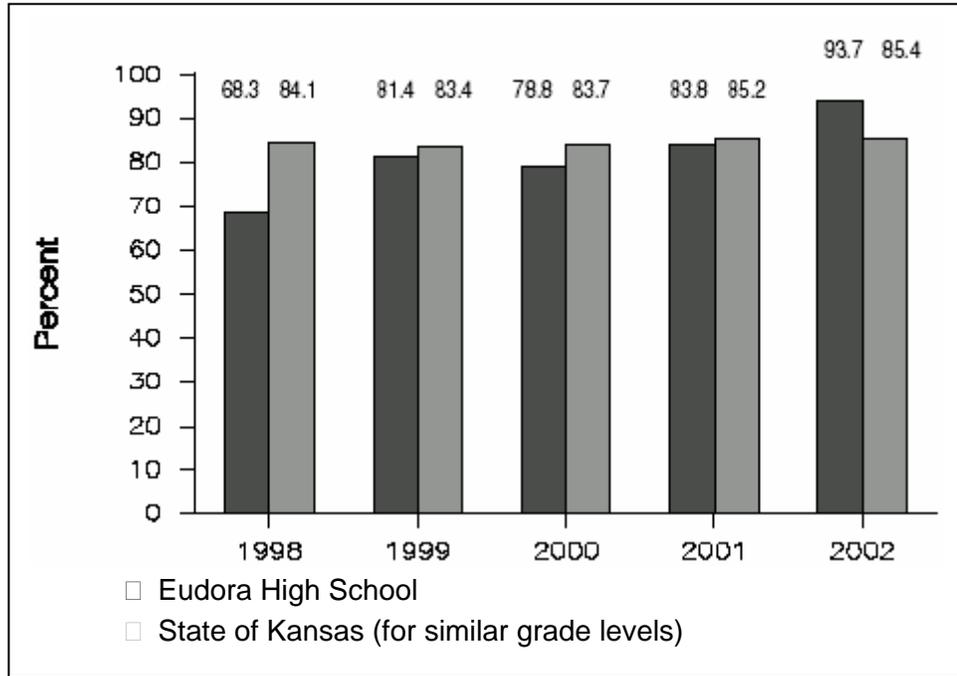


Source: Kansas State Department of Education

Table 3-7 shows graduation rates for the same four-year period based on a cohort group of students. Graduation rates for Eudora are based on graduation rates for the Eudora High School. The Graduation Rate is calculated by dividing the number of 12th grade graduates by the sum of graduates and all dropouts reported over the four-year period. Transfers are accounted for in the total graduates.

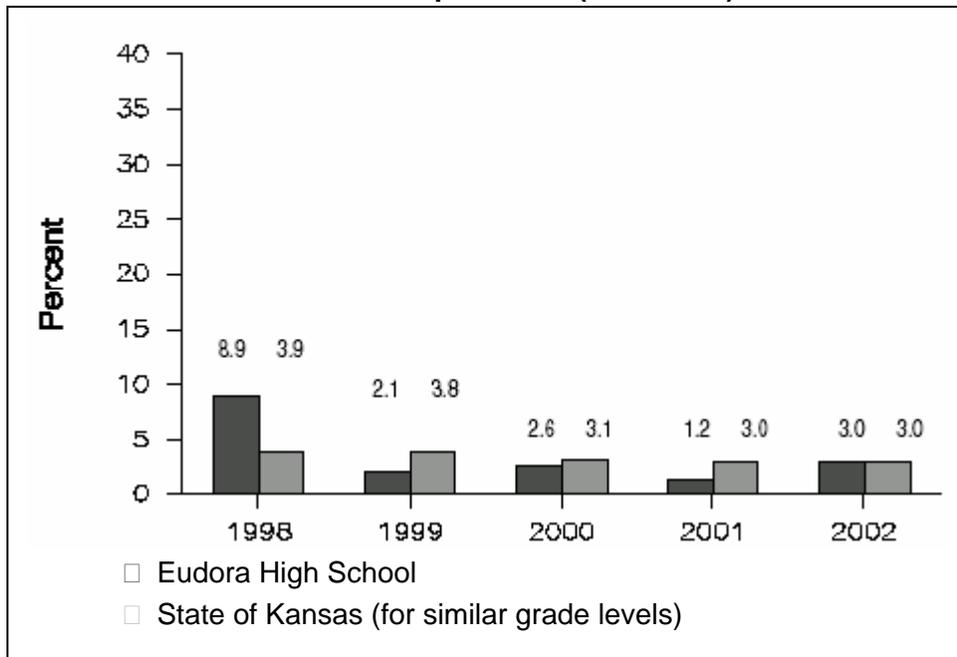
Table 3-8 shows dropout rate again for the same five-year period. The Dropout Rate is calculated by taking the total number of dropouts reported by each grade 7-12 and dividing that number by the total number of students reported enrolled in grades 7-12. State data for dropout rates are for schools of similar types (in this case senior high level). Dropout rates are not the inverse of graduation rates.

Table 3-7: Graduation Rate (1998-2002)



Source: Kansas State Department of Education

Table 3-8: Dropout Rate (1998-2002)



Source: Kansas State Department of Education



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CHAPTER FOUR: PLANNING ISSUES AND OBJECTIVES

INTRODUCTION

The Eudora Comprehensive Plan is designed to provide the City of Eudora with a set of development policies and recommendations for future actions to guide the growth of the City and its surrounding planning area.

The goals and objectives contained in the Plan can be used by local officials to guide them in proactively addressing issues pertaining to community growth, land use, zoning, development and other related short- and long-term issues. By following these goals and policies, the plan intends to aid Eudora in developing a community where residential, commercial and industrial uses enjoy mutually beneficial interrelationships, and development patterns minimize land use conflicts. A major focus of the plan is to also aid in providing high-quality city services such as streets, water, and sewer in a cost-effective manner based on projected growth patterns, desired growth phasing, and sound planning policies and principles identified by the plan.

Because the character of a city is created over time by the composite of each separate development, the policies of the Comprehensive Plan must be implemented incrementally. The Comprehensive Plan is a part of a continuing planning process. As local conditions change, goals and policies should be reevaluated to ensure that recommendations for future actions reflect local needs. This makes the planning process a dynamic and changing undertaking. In order to ensure that Plan remains a current reflection of the community's preferred future and blue print for achieving that future, the Governing Body and the City Planning Commission must periodically review and amend the goals and policies expressed in the Plan.

The Plan seeks to direct future growth in a number of ways. The most important method is through the Plan's goals, objectives and policies which are developed in conjunction with the community and reflect the community's priorities and desired future. Besides addressing growth and development issues, the goals and policies deal with various socio-economic aspects of the community. This approach is designed to more clearly articulate the City's goals and to provide an effective framework for achieving these goals.

PUBLIC INPUT AND CONSENSUS BUILDING

The City of Eudora Comprehensive Plan was initiated during the summer of 2001 in a multi-step process. Early in the process, the City Council, Planning Commission and city staff met to discuss planning issues in general and to agree on a planning approach. City staff was surveyed to further identify initial issues and opportunities. A Steering Committee consisting of representatives of the public and private sectors from within the City and the surrounding planning area, including the city administration, Planning Commission, City Council, city staff,

the school district, Chamber of Commerce, and the business community was formed to oversee the Plan's development.

During the development of the Plan, public workshops and open public meetings were used to help identify issues and preferences from a community perspective. Public workshops provided an opportunity for residents of Eudora and the surrounding planning area to identify and prioritize issues that are critical to the future of the community. Likewise, the input helped identify options and preferences to resolve the top issues identified. To help ensure broad based representation, meeting notices were sent to members of the Steering Committee and to all elected and appointed officials. Meetings were also publicly advertised in the Eudora News. Meetings were open to the public and residents, landowners, business owners and other community stakeholders were encouraged to attend.



During the development of the plan, the public identified issues, preferences and strategies paramount to crafting and implementing the goals, objectives and actions of the plan.

Following is a brief description of the public input and consensus building sessions:

- **Focus Session:** The first public workshop, the “Focus Session,” was held in July 2001. This workshop allowed the community to identify the most critical issues facing the City of Eudora community in the coming years. **Appendix A** contains a full summary of the Focus Session results.
- **Policy Planning Charrette:** The second public workshop, a “Policy Planning Charrette,” was held in October 2001. During this interactive workshop, participants helped to formulate goals, objectives and action steps for the issues previously identified as most critical to Eudora’s future. **Appendix B** contains a full summary of the Policy Planning Charrette results.

- Public Presentations: Throughout the project, public presentations to the Steering Committee and Planning Commission were used to further discuss issues and verify approaches.

During the public workshops issues were discussed in relation to three major categories:

- Future Land Use and Infrastructure: Issues discussed related to the planning for and funding of infrastructure improvement and the intensity of land uses in and around the City.
- Economic Development: Issues discussed related to attracting and providing services to new commercial and industrial developments along with preserving downtown.
- Quality of Life: Issues discussed focused on factors that influence the beautification of Eudora and portraying a positive image to potential residents and businesses.

GOALS, OBJECTIVES AND IMPLEMENTATION STEPS

The following goal statements and planning objectives are based on a summary of the ideas expressed during the public input and consensus building process. Implementation of these goals and objectives are intended to aid Eudora in proactively reaching the community's preferred future.

The Plan allows the City to formulate goal statements and policy objectives in an action agenda. The goals and objectives are arranged by major category. Overlapping issues have been combined where appropriate to minimize duplication. For each issue and goals/objectives statement, an implementation step or "primary responsibility" designation identifies the entity or group—public or private—that is the appropriate agent for taking action to implement the Plan objectives. However, these entities are not assumed to have sole responsibility for the proposed objective, nor is the intent to imply any authority. Rather, the entities identified for the implementation steps are viewed as the strategic agents for taking initial action and spurring the objective toward completion.

The following implementation agents, entities and groups have been identified:

- The Mayor and City Council (Gov. Body): The elected Mayor and City Council of Eudora, currently including five City Council members.
- Planning and Zoning Commission (Planning): The appointed advisors to the City Council, currently including seven appointed members, including two Douglas County residents.
- City Staff (Staff): The appointed administrative staff of Eudora, currently including the City Administrator, City Clerk and other administrative and support staff, including the city engineer, planner, parks and recreation director and/or city consultants.



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Public Works Staff (Pub. Works): The City staff responsible for utility and infrastructure improvement, maintenance, inspection, permitting, and provision of services (street, water, sewer and building inspection and permitting), currently including the City Superintendent, Electrical Superintendent, Building Inspector, and support staff.

- Police Department (Police): The City of Eudora Police Department including the Police Chief, officers and support staff.
- Emergency Services (Emerg. Service): The City of Eudora Fire Department and Township ambulance service, including the voluntary and paid staff.
- The Eudora Chamber of Commerce (ECOC). The Eudora Chamber of Commerce is a business organization engaged in activities that will lead to expanding the economic base of the Eudora Community and improving the vitality of its members.
- Lawrence/Douglas County Chamber of Commerce (LDCCOC). The Lawrence/Douglas County Chamber of Commerce which actively markets commercial and industrial opportunities throughout Douglas County, including Eudora.
- K-10 Corridor Association (K-10 Assoc): The non-profit association comprised of public and private members, including the City of Eudora, who actively promote the K-10 Corridor, including the City of Eudora, as a place to “live, work, and play.”
- Douglas County Commissioners and Staff (LDC CC): Commissioners and staff primarily involved with zoning, annexation, and provision of services. Eudora is part of the Douglas County’s Second Commission District which is represented by one of three County Commissioners.
- Lawrence-Douglas County Planning Commission (LDC PC). The 10 member Planning Commission who jointly represent the City of Lawrence and the unincorporated areas of Douglas County, including areas within Eudora’s designated planning area.
- Lawrence-Douglas County Metropolitan Planning Office (LDC Planning). The Lawrence-Douglas County planning staff primarily involved in current and long-range planning in Lawrence and the unincorporated areas of Douglas County, including areas within Eudora’s designate planning area.
- Kansas Department of Transportation (KDOT): KDOT District One, Subdistrict 2, which includes Douglas and Osage Counties, who is responsible for construction and maintenance of State Highways including K-10 Highway.
- Eudora School District No. 491 (School Dist.): The District Board Members and the Elementary, Middle and High Schools Administrative Staff, primarily including the district superintendent and school principals.
- The Eudora Development Community (Developers): Land owners, business owners, developers, development consultants and others with a vested interest in development within Eudora and the surrounding planning area.
- The Eudora Community (Public): The residents of Eudora and the surrounding area.

These goals, objectives, and responsibilities should not be considered absolute. Rather, they should guide the community in reaching a preferred future. They should help determine priorities for capital improvement planning, ordinance updates and other plan implementation strategies.

In order to implement these goals and objectives effectively, it is necessary to track short- and long-term progress. As the Plan is implemented, these goals and objectives should be reevaluated and updated as appropriate. As a means of tracking progress and encouraging use of the Plan, implementation activities should be advertised and celebrated as a reward for the continuous efforts of the City and area residents.

Future Land Use, Infrastructure and Our Community

Goal: Provide safe and sanitary housing for all current and future residents of Eudora by encouraging redevelopment, rehabilitation and new residential development that fulfill existing and unmet residential markets.

Objective: Adopt policies and regulations that promote neighborhood stabilization and well being, enhance lifestyle and help maintain existing neighborhoods.		Implementation Steps
Actions	Invest in neighborhood infrastructure, such as sidewalks and walkway linkages in existing neighborhoods.	Gov. Body, Pub. Works, Public
	Promote public education about neighborhood investment and beautification, including help with organizing neighborhood meetings.	Gov. Body, Staff
	Advertise and promote procedures and programs for home repairs and maintenance, being particularly sensitive to the needs of elderly and low- to moderate-income homeowners.	Gov. Body, Public Works, Staff
	Implement infill guidelines that promote compatibility between existing and newly developed homes and then actively promote infill opportunities.	Planning
	Promote public-private partnerships in financing for neighborhood stabilization improvements such as 12 th Street and 14 th Street improvements and upgrades of chip sealing roads.	Gov. Body, Planning, Staff, Public
	Utilize the Planned Overlay Districts to permit large-scale infill develop of different forms and densities to co-exist with existing residential neighborhoods, and then promote infill projects that meet the standards, diversify the city's housing stock, and maximize the use of existing infrastructure investments.	Gov. Body, Planning Staff

Goal: Provide cost-effective services by promoting development that is compact and close to existing urbanized areas, while minimizing impacts on existing development, productive agricultural uses and natural resources.

Objective: Coordinate major service and infrastructure improvements so that the services will provide maximum benefit to the Eudora community.		Implementation Steps
Actions	Encourage cooperation and coordination between the City and special districts, major utility companies, and private enterprise.	Gov. Body, Pub. Works, LDC CC
	Implement plans for service and utility expansion through implementing a formalized Capital Improvements Program.	Staff, Pub. Works. Gov. Body
	Establish and coordinate regularly scheduled project overview and coordination meetings to help improve timing and awareness of improvement projects.	Staff, LDC Planning

Objective: Promote contiguous development to minimize costs associated with expansion of infrastructure and to minimize future obstacles to service expansion.		Implementation Steps
Actions	Support expansion in close proximity to existing services.	Gov. Body, Planning, Public Works
	Promote opportunities for development contiguous to existing utilities and within drainage basins currently served by sanitary sewer.	Gov. Body, Planning, Public Works, CDC, LDC COC, ECOC, K-10 Assoc
	Limit higher density development to areas where adequate utilities exist or can be readily extended.	Gov. Body, Planning, Public Works
	Require development beyond existing services, premature to planned expansions, to extend adequate infrastructure and utilities as a cost of development.	Gov. Body, Planning, Public Works, LDC Planning
	Develop appropriate financial plans and strategies for funding service expansions and upgrades.	Staff, Gov. Body, Public Works
	Utilize City authority to influence zoning and platting within 3 miles to help ensure development proposed within the County can be served with adequate utilities and plan to accommodate future service expansion.	Gov. Body, Planning, Pub. Works LDC CC, LDC PC, LDC Planning

Objective: Provide utilities that will adequately serve the existing and proposed land uses and intensities identified by the Comprehensive Plan.		Implementation Steps
Actions	Implement a formalized capital improvement planning program and prioritize and plan for key utility expansion and upgrade projects for a three to five year period.	Staff, Gov. Body, Public Works
	Prepare and implement expansions based in part on projected growth patterns and existing capacity limitations.	Gov. Body, Pub. Works
	Evaluate and update plans for future service in conjunction with periodic review and amendment of the Comprehensive Plan and five-year Capital Improvement Plan	Staff, Planning, Gov. Body, Pub. Works

Goal: Maintain and enhance a transportation system that provides safe and efficient access to the City, Planning Area and Region.

Objective: Implement the City’s street network plan in order to ensure adequate circulation, connectivity and safety to support existing and projected development patterns.		Implementation Steps
Actions	Ensure development provides improved connection to the community, surrounding development and existing streets through implementation of access and connection policies.	Gov. Body, Planning, Police, Emerg. Service
	Coordinate with the County and KDOT on long-range road improvements that support projected development patterns.	Gov. Body, LDC CC KDOT
	Implement access control policies and standards to reduce curb cuts and points of conflict along arterials such as Church / 1061.	Gov. Body, Planning, Pub. Works, LDC CC
	Require traffic studies for development accessing major roadways to ensure adequate improvements are made, and sight lines and capacity are maintained.	Gov. Body, Planning, Police
	Incorporate bike trails in conjunction with the street network plan in order to implement the City and County’s regional trail plans, improve pedestrian circulation, and provide recreational and alternative transportation routes.	Gov. Body, Planning, LDC Planning

Goal: Enhance the overall design appearance and image of Eudora and the K-10 Highway Corridor by ensuring high-quality development through use of design standards and guidelines.

Objective: Develop and implement clear, concise procedures, regulations, standards and guidelines for development.		Implementation Steps
Actions	Periodically evaluate existing regulations and administrative procedures to: <ul style="list-style-type: none"> • Determine whether they are “user friendly.” • Clarify processes and responsibilities. 	Staff, Gov. Body, Planning
	Maintain regulations in a format to promote maintenance and use of up to date regulations.	Staff
	Evaluate new development and redevelopment based on compliance with defined site planning and development standards aimed at increasing development quality and reducing monotony.	Gov. Body, Planning
	Adopt and implement infill guidelines to help ensure new development is compatible with existing patterns and styles of development and meets or exceeds the quality of surrounding development.	Gov. Body, Planning
	Provide periodic training for staff and elected and appointed officials to ensure clear understandings of procedures, regulations and their role in relation to implementation.	Gov. Body, Planning, Staff
	Communicate planning regulations, standards and policies to the development community through pre-application meetings and opportunities for informal public discussion at public meetings.	Gov. Body, Planning, Public Works

Goal: Promote the integrity of design in public and private places by following principles of good design.

Objective: Implement policies to protect views along highways, arterials and collectors providing access to and within Eudora.		Implementation Steps
Actions	Require underground utilities in new developments and encourage relocation of existing above-ground utilities along existing major thoroughfares.	Planning, Gov. Body
	Clarify and implement landscaping and buffering standards that require preservation of existing materials and utilization of native or area landscaping materials.	Pub. Works, Gov. Body, Planning
	Implement plans for gateway and streetscape improvements for primary access points within Eudora.	Gov. Body, Planning

Quality of Life and Our Community

Goal: Continue to develop Eudora as a safe, accessible community for residents and visitors.

Objective: Advocate real and perceived safety through the use of development standards and policies.		Implementation Steps
Actions	Clarify and implement access standards that require defined entries at limited access points particularly along existing arterials and near highway interchanges.	Gov. Body, Planning, LDC Planning LDC CC, KDOT
	Develop and implement plans to alleviate traffic and access conflicts at the intersection of Church Street/1061 and K-10 Highway.	Pub. Works, LDC CC, KDOT
	Develop and implement plans for improved highway interchanges, including improvements to local arterials and collectors.	Gov. Body, Pub. Works, County, KDOT
	Require the development of sidewalks in all new development and work with residents to infill and repair sidewalks in existing development.	Gov. Body, Staff, Pub. Works, Public
	Develop adequate pedestrian crossings at strategic points along K-10 Highway to provide opportunities for access to schools and public facilities across K-10 Highway.	Gov. Body, Pub. Works, School Dist., KDOT
	Help minimize crime and vandalism through the design of the environment, utilizing design principles that promote definition of public and private space, internal visibility and minimization of conflicts.	Gov. Body, Planning, Police, Emerg. Services
	Maintain effective sight lines at entrances and intersections through the implementation of sight triangle and AASTO standards.	Planning, Pub. Works, LDC Planning, KDOT

Goal: Provide safe, well-designed accessible areas for passive and active recreation to meet the needs and desires of all age groups.

Objective: Proactively identify and meet community recreational needs through development of strategic partnerships and implementation of local and area recreational plans.		Implementation Steps
Actions	Prepare a community needs assessment/survey to determine activity preferences and willingness to support funding and development.	Staff
	Partner with the County and State agencies to implement regional parks, recreation and open space programs such as the Metro-Green and Lawrence-Douglas County trails plans.	Staff, Gov. Body, Planning, LDC Planning
	Continue to develop partnerships with the School District and county to avoid duplication of services and make better use of facilities and programs.	Staff, Gov., School Dist., LDC Planning
	Continue to acquire park land and green space with new development through park fees and open space dedication requirements.	Gov. Body, Planning
	Develop active recreation facilities in conjunction with the School District to capitalize on joint facilities and program opportunities.	Gov. Body, Staff, School Dist.
	Develop and implement plans for provision of trails along existing drainageways and creeks that connect Eudora's neighborhoods and activity centers and planned regional trail systems.	Staff, Gov. Body, Planning, LDC Planning

Goal: Preserve and protect the natural environment, open space and scenic quality of the community and its surrounding area.

Objective: Establish sound planning policies for natural resource preservation.		Implementation Steps
Actions	Maintain the integrity of creeks, valleys, ravine systems and steep slopes through buffering and utilization of the City's floodplain regulations.	Gov. Body, Planning
	Provide incentives for preservation of key natural resources such as existing vegetation and water features through use of the Planned Overlay District standards.	Gov. Body, Planning
	Encourage responsible development practices such as designing development to utilize the existing terrain through site planning and development standards.	Gov. Body, Planning
	Assess and evaluate historical sites and amenities and preserve those sites that are significant to the community.	Staff, Gov. Body
	Designate greenways and natural corridors to be preserved as part of a greater recreation and open-space program implemented in partnership with the County.	Gov. Body, LDC CC, LDC Planning

Goal: Develop and preserve gateways into Eudora that help reflect the character and image of the Eudora community.

Objective: Implement gateway plans through the application of development regulations and public investments in gateway development.		Implementation Steps
Actions	Designate gateways and gateway corridors based on location, visibility, traffic volumes, street function and purpose.	Gov. Body, Planning
	Utilize the development review and permitting processes to ensure that adequate aesthetic considerations are given to development near community gateways.	
	Implement gateway overlay district standards requiring special consideration of visual impacts and requiring greater than normal building setbacks and access spacing.	
	Develop plans for landscaping, signage and other key improvements to be developed at gateways to Eudora.	
	Utilize open space dedication requirements to obtain permanent open space at designated gateways.	Gov. Body, Developers
	Seek private partners to donate land and amenities for gateway development.	Gov. Body, Planning, Public, Developers
	Make investments in well-designed, highly-visible gateway improvements to increase the recognition of gateways and unique corridors.	Gov. Body

Economic Development and Our Community

Goal: Provide for a variety of uses, services and retail outlets which are convenient and attractive to consumers in order to strengthen the community's economic base.

Objective: Promote development of new business and institutions as well as retention and expansion of existing establishments to meet the demand for local goods, services and employment opportunities.		Implementation Steps
	Proactively foster and promote development opportunities to meet local niches and fill market voids.	ECOC, LDC COC, K-10 Assoc
	Update the City's economic profile and actively market infill, reuse and new development opportunities in Eudora.	Gov. Body, ECOC, LDC COC, K-10 Assoc
	Seek out and foster strategic partnerships between businesses to help provide a wider variety of services and reduce start-up risks.	ECOC, LDC COC, K-10 Assoc
	Promote the clustering of development with strong access to Eudora and the K-10 Highway corridor through the development of mixed use and business parks to minimize the cost of serving development, improve access and strengthen draws.	Gov. Body, Planning, ECOC, LDC COC, K-10 Assoc

	Partner with property owners to develop conceptual plans to market new and infill development opportunities and proactively identify resolutions to particular development challenges.	Staff, Gov. Body, Planning, Developers
	Develop and implement a market assessment for Eudora, identifying market strengths, weaknesses, opportunities, and target businesses.	Gov. Body, ECOC, LDC COC

Goal: Promote an active and viable Downtown, while preserving its historical and cultural significance to Eudora.

Objective: Promote compatible commercial development, infill, expansion and redevelopment in Downtown.		Implementation Steps
Actions	Utilize community “anchors” such as City Hall and other public facilities to attract business and increase awareness of downtown.	Gov. Body, ECOC
	Ensure uniformity and the retention of a unique identity in downtown by utilizing development standards that require infill, redevelopment and expansion to be compatible with existing development.	Gov. Body, Planning
	Work together with downtown business and property owners to continue maintenance, rehabilitation and renovation of older buildings in downtown.	Gov. Body, Developers
	Prepare a feasibility study and pursue and implement conceptual plans for the long-term revitalization of restoration of downtown as a unique district within Eudora.	Gov. Body, Planning ECOC
	Support opportunities for additional mixed-use development such as first floor commercial with second floor residential uses.	Gov. Body, Planning
	Evaluate and develop public improvements that can be used as a catalyst for private improvements in downtown.	Gov. Body, Planning
	Promote and support infill and redevelopment of housing in and surrounding downtown as a means of building a stable local support network for a broader variety of downtown activities.	Gov. Body, Planning, ECOC

Objective: Improve user access to downtown by promoting downtown as a unique destination and promoting and increasing parking opportunities.		Implementation Steps
Actions	Utilize easily identifiable signage to clearly identify downtown, public parking lots and routes to parking in downtown.	Gov. Body, Public Works, ECOC
	Promote the location of existing parking, planned parking and additional opportunities for parking expansion within downtown as part of a downtown marketing campaign.	Gov. Body, ECOC
	Develop and implement a plan to increase public parking in conjunction with new development and redevelopment projects	Gov. Body, Planning
	Establish a uniform character for downtown to be implemented through public and private efforts including the use of similar design elements, repetition of material and colors, repetition of signage and other design elements.	Gov. Body, ECOC Developers

Goal: Promote variety and long-term viability in Eudora’s residential development.

Objective: Encourage reinvestment in existing neighborhoods to help ensure their long- term success and viability.		Policy Steps
Actions	Target infill development in strategic locations by identifying and promoting vacant or non-conforming lots that are served by existing utilities and infrastructure.	Gov. Body, Planning, Pub. Works
	Allow yard area exceptions for existing legal lots of record that are nonconforming because of changes in regulations.	Gov. Body, Planning
	Implement infill development guidelines to ensure quality and compatibility.	Gov. Body, Planning
	Encourage private investment in neighborhoods through public investment efforts to resurface streets, replace curbs, and improve sidewalks.	Gov. Body, Public Works
	Partner with existing residents to share the costs of upgraded and improved utilities and services.	Gov. Body, Public
	Support higher-density infill development in close proximity to downtown and K-10 Highway.	Gov. Body, Planning
	Promote “grass roots” improvement programs such clean-up-days, bulk item pickup days and adopt a street or highway programs.	Gov. Body
	Implement nuisance abatement programs and initiate action against dilapidated, unkempt properties and structures.	Gov. Body, Staff, Pub. Works
	Reduce the amount of response time for complying with code violation notices by coordinating code enforcement with the police department and the municipal court and prosecutor to ensure quick compliance with code enforcement violations.	Gov. Body, Staff, Pub. Works, Police
	Develop and implement a voluntary home inspection program for older homes to help ensure educated decisions can be made about needed repairs and maintenance.	Gov. Body, Planning, Public Works

Objective: Promote variety of density, size and price range in newly developed subdivision to reflect the traditional development patterns of Eudora and meet multiple market segments.		Policy Steps
Actions	Utilize the Planned Unit Residential Development standards of the zoning regulations as a means of approving developments with a mix of residential uses.	Gov. Body, Planning
	Discourage monotonous, segregated and stand-alone residential development patterns through the subdivision review and approval process.	Gov. Body, Planning
	Encourage the development community to address the need for entry-level homes, homes for the elderly, and well planned mixes of uses within the City.	Gov. Body, Planning

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CHAPTER FIVE: FUTURE LAND USE & INFRASTRUCTURE

INTRODUCTION

This Chapter, including the Future Land Use Plan, serves as a guide for the planned and orderly growth of the City of Eudora. Zoning changes, subdivisions, annexations, infill development, redevelopment and new development should be coordinated with the future land use plan prior to approving an action or making a determination. The Future Land Use Plan sets out the anticipated growth to the year 2020 and long-range goals that are implemented incrementally. The Future Land Use Plan consists of the Future Land Use Map and the supporting text, both of which must be considered when making land use changes. This plan must guide the direction of growth, but at the same time be a dynamic tool that accommodates changes in our style of living. The Future Land Use Plan serves as the basis for zoning. If an application for zoning change is in accordance with the Future Land Use Plan and goals and policies of this Comprehensive Plan it is presumed to be reasonable. If a zoning change request is not in accordance with the Future Land Use Plan, the Plan needs to be reviewed and either the zoning or the Plan amended to achieve consistency between the Plan and zoning.

The existing core community, which lies between K-10 Highway and the Wakarusa River, east of Winchester Road and west of the industrial park, is essentially built out. There are opportunities for infill and redevelopment but few opportunities for significant new development exist. Within Eudora, demand exists for new development in all categories, i.e., residential, commercial and industrial and much of this will have to occur in undeveloped areas south of K-10 Highway. Accordingly, the planning area covered in this Plan includes unincorporated land within Douglas County. In planning for growth in these areas, the City will need to balance its resources in protecting and preserving the built community while investing in infrastructure to expand into new areas to the south.

FUTURE LAND USE PLAN

This section presents a Future Land Use Plan for the planning area of Eudora, Kansas. It includes a Future Land Use Map, land use descriptions, an overview of development projections and a series of policy statements.

Future Land Use Map

The Future Land Use Map (**ref. Map 7 Future Land Use Map**) is a general, graphic depiction of the Comprehensive Plan's goals, recommendations, and policies as they related to the Community's preferred long-term development patter. In the short-term, the City's phasing plans represent the City's best judgment as to where short-term growth should occur.

The land use element of the Future Land Use Plan recommends residential, commercial, industrial, public/semi-public, and open space uses in the planning area. The Future Land Use Map shows these recommendations graphically, while the following text further defines the

planned uses and supports the Plan Map with principles and policies for each land use category. Although the map shows parcel lines and land uses generally follow these lines, the map cannot be construed to dictate a specific use and should not be used in isolation from the text of this Plan.

Land Use Categories

The following is a list of the land use categories and their definitions identified on **Map 7, Future Land Use Map**.

1. Rural Policy Area: This is land that is predominantly used for farming, crops and pasture and is within the planning area but will not likely develop at typical urban densities during the 20 year planning period. This category has a dual purpose of allowing continued agricultural and rural residential use, and serving as a holding zone to ensure that premature development does not restrict utility service or future growth of Eudora. Although this land use should be primarily dominated by agricultural uses, it is anticipated that rural residential uses will continue to develop. Residential development in this area should demonstrate the ability to accommodate future urban improvements, including potential resubdivision in to smaller lots in the future. Although no further subdivision will be required in the future, the ability to resubdivide affords owners the ability to create additional lots once City services and amenities are provided.
2. Low-Density Residential: Low-density residential uses are primarily characterized by single-family detached dwellings but could also include low density attached single-family dwellings, two family dwellings and elderly housing. Densities of three or less dwelling units per acre are considered low density.
3. Medium-Density Residential: Medium-density residential primarily includes single-family detached, single-family attached, duplexes, townhouses and other smaller multiple unit structures designed with single-family neighborhood characteristics at densities not exceeding six units to the acre. Retirement homes, rest homes, adult congregate living facilities and similar uses also may be appropriate in this category given that the impact of these types of dwelling units (such as traffic, building mass, etc.) tend to be far less than standard dwelling units.
4. High-Density Residential: High-density residential land use is characterized primarily by a range of all residential land uses, including multifamily unit types at densities greater than six units per acre.
5. Mixed Use: Mixed Use incorporates residential, retail and office uses. Retail and office uses may be stand-alone or may be on the ground floor with residential on the upper floors. This category supports a variety of zoning districts; however, the focus of development within the category is not so much on use as it is on design. All

development projects should be well planned and designed to ensure a high level of compatibility with surrounding development. Accordingly, the Planned Unit Development process needs to be employed to ensure the objectives of this category and the planning districts are met.

6. Commercial: This category includes the broad variety of retail, service and office uses whether located in commercial centers or in stand alone buildings. The list of uses includes but is not limited to retail, financial, professional services and restaurants.
7. Central Business District: The Central Business District includes medium- and high-density residential, office, retail, entertainment, civic and governmental uses. Central Business District encompasses all of downtown Eudora and is the historic “heart” of the City. The vitality of the downtown frequently is an indicator of the vitality of the City. Development density and intensity, setbacks and parking requirements are treated differently than in other districts. The form of the design and relationship to the street and surrounding development should be the primary focus when formulating development projects.
8. Business Park: This category includes commercial, office and service uses, with public and semi-public institutional uses, such as medical office complex, developed as a unified campus or center. Business parks are generally planned with open space, screening and uniform development standards.
9. Industrial Park: This category includes the complete range of industrial uses from warehousing to manufacturing including office warehouse, contractor yards, wholesale uses and business parks with limited outdoor storage and operations. Industrial parks are generally planned with open space, screening and planned development standards. Industrial/business parks may include a mix of office, light industrial and limited commercial uses.
10. Public and Semi-Public: This category includes uses such as schools, churches, post offices, fire stations, libraries, cemeteries, utility facilities, governmental uses and religious institutions. The zoning code may or may not include an exclusive public/semi-public district but these uses are identified on the Future Land Use Map in order to identify actual and proposed uses within the planning area.
11. Parks, Open Spaces & Conservation Areas: Parks are public areas set aside specifically for active and passive recreation and may include tot lots, trails, linear parks, community parks, neighborhood parks and regional parks. The conservation areas are for land that is environmentally sensitive including wetlands, flood plains, steep slopes, woodlands, drainage ways, creeks, bluffs, etc. Conservation areas are areas where development could create costly impacts to the natural systems. These areas may be either publicly or privately owned but should be considered in the overall design of development

projects because they could provide natural landscaping, buffers and routes of connectivity throughout the City.

Correlation between Land Use and Zoning

The following table contains a list of the Future Land Use Plan categories and their correlation to the compatible zoning districts.

Table 5-1: Correlation between Land Use and Zoning

Future Land Use Plan Categories	Compatible Zoning Districts
Rural Policy Area	RA - Agriculture Residential District
Low-Density Residential	RE – Residential Estate District ER – Estate Residential District RS – Low-Density Residential District
Medium-Density Residential	RS – Low-Density Residential District RT – Two Family or Duplex Residential District
High-Density Residential	RE - Elderly Housing District RC – Condominium Dwelling District RG – Garden Apartment District RM – Multi-family Residential District
Mixed Use	Any zoning district permitting residential, retail and office uses developed within a unified concept as a Planned Unit Development, “PUD” district.
Commercial	CO – Office Commercial District C-1 – Restricted Business District CH – Highway Commercial District CN – Neighborhood Commercial District C-3 – General Business District CG – General Commercial District
Central Business District	C-2 – Central Business District
Business Park	Any zoning district permitting commercial, office, service and public and semi-public institutional uses developed within a unified concept as a Planned Overlay District.
Industrial Park	I-1 – Industrial District P.I.P. – Planned Industrial District
Public / Semi-Public	All Residential Districts and the CO District
Parks, Open Spaces & Conservation Areas	All Residential Districts CO – Office Commercial District F-P – Flood Plain Overlay District

DEVELOPMENT PROJECTIONS

Residential and non-residential development projections are made based upon analysis of a variety of factors including, but not limited to existing and projected population projections, real estate trends, existing development patterns, availability of land, utilities, infrastructure, housing and local workforce, local market, location, geography, history, and local preference. Analysis of these factors allows development projections, preferred land use alternatives, policy and regulation development to guide future growth in the City of Eudora. Because of the ever-changing nature of these factors the Comprehensive Plan and the projections herein should be re-evaluated on a regular basis in conjunction with the statutory requirement for annual review of the plan to determine needed revisions and amendments of projections based upon these changes.

Residential Land Use

Residential areas are designated on the Future Land Use Map in four major residential categories: 1) Agriculture, 2) Low-Density Residential, 3) Medium-Density Residential, and 4) High-Density Residential.

In general, the City should support a variety of high-quality, well-designed residential uses with the intent of ensuring that Eudora residents are afforded opportunities for quality living in housing of sufficient size to create a healthy living environment. A primary objective of the community's residential land use is to offer affordable housing in a range of types to both homeowners and non-homeowners wishing to live in the area.

In addition to general quality of life, housing availability and variety have a significant impact on employment and economic development. Employee retention is as important as employee recruitment. One of the major factors in the retention of employees is the availability of housing. Eudora's mix of housing options helps provide housing opportunities for employees and executives of area businesses. In addition to affordable- to moderate- income housing providing alternatives for entry-level and move-up homebuyers, the City has begun to see limited higher-end housing development. However, additional opportunities to retain second, third and higher-end home-buyers need to be further promoted.

Purchasing a home is one of the largest investments in most people's lives. This investment in housing should be protected from outside impacts through planning and requirements for quality residential development and appropriate land use transitions. However, this protection must always be balanced against the greater community's investment in planned expansion of services and stake in it future growth and development. This investment must be protected by ensuring appropriate development patterns that accommodate future residential development at densities providing for cost effective expansion of utilities and services.

Finally, housing should be located in a safe and healthy environment developed as part of an overall community within convenient distance from neighborhood services and public facilities. As opposed to restricted access neighborhoods, Eudora desires to grow in its historic fashion with strong relationships between residential uses and the public and private facilities, services and conveniences necessary for a high quality of life.

Residential Land Use Demand

The Land Use Plan is, in part, based on the population projections for Eudora through 2020. These projections from Chapter 2 indicate over 4,700 persons by 2020 (**Ref. Table 2-2**). Based on an average household size of 2.63 persons in 2000 (**Ref. Table 2-11**), the 20 year population increase equals demand for approximately 1,804 new residential units.

Two scenarios have been used to determine the approximate acreage needed to accommodate the development of 1,804 single-family residential lots. The first scenario is based on the City’s minimum single family residential lot size of 0.16 acres (7,000 square feet), resulting in a need for 289.9 acres. The second scenario is based on the City’s average single family lot size of 0.37 acres (16,067 square feet, calculated using parcel acreage data obtained from the City’s GIS system), resulting in a need for 665.4 acres.

In order to determine the “gross” acreage needed, the projected acres of development must be further multiplied by a factor of 0.27 given the typical rights-of-way and easement dedication needed for streets, utilities, open space and other infrastructure and amenities. Next a multiplier of 2.0 is applied to the gross acreage to determine “net acreage” or area of land for which to plan. This multiplier accounts for inefficient uses of developable land due to difficult terrain, physical barriers such as creeks and streams, unwilling sellers, etc. **Table 5-2**, shows the resulting gross and net acres.

Table 5-2: Residential Land Use Distribution

Scenario	Residential Acreage	Gross Acres	Net Acres
I - Using minimum single family lot size (0.16 acres)	290	368	736
II - Using average single family lot size (0.37 acres)	665	845	1,691

Source: BWR

The resulting net acres indicate a need for approximately 1.15 to 2.64 square miles of single family residential land area through 2020. Although neither calculation accounts for two-family or multifamily development and the resulting reduction of needed space, the calculations provide a reasonable basis for projecting residential land areas needed for planning purposes. One of the primary objectives of this plan is to promote a variety of residential opportunities,

including executive or estate housing development, which would tend to favor larger lot sizes. As such, the low- and medium-density residential land uses shown in the Future Land Use Map (Ref. Map 10) have been projected based on Scenario II.

Residential Growth Patterns

Growth is projected to continue in the City and planning area as indicated on the Future Land Use Map. The pattern of residential growth is expected to following three primary patterns: infill within the existing City limits, limited expansion east and west of the city limits north of K-10 Highway, and south of K-10 with primary access provide by Church Street (County Road 1061) and Winchester Road (2100th Street). These areas fall within drainage basins served by sanitary sewer services or in areas where future service is planned.

Residential development is expected to continue to spread in one of two patterns:

- Incrementally and dispersed where land owners and developers petition and pay for extensions of public utilities; or
- More compact in areas where the city has already extended main sanitary sewer trunk lines, where water service is available, and where major streets are improved.

Infill development within the area bound by Church Street and Winchester Road north of K-10 and the area south of K-10 Highway near the high school and middle school are projected to accommodate the majority of short-term residential development. Land for developments to the north, south and east, served by or in close proximity to existing utilities, will also continue to attract near-term growth. The vast majority of the projected short-term development will be medium-density residential development with limited low-density residential development to the west and high-density residential development in nodes near K-10 Highway.

Residential development further to the south and to the east will develop in later stages only after the area property owners and developers are willing to finance extension of sewer mains, streets and other public infrastructure as part of planned development costs.

Residential Land Use Policies

The following policies support the residential land use recommendations of the Future Land Use Map:

1. Residential development is encouraged adjacent to existing urban development where services are available in order to prevent areas from developing in a haphazard, scattered or unplanned manner. Before any development occurs, the City should verify that adequate utilities and infrastructure will be available in a timely manner to support permitted uses.

2. Non-farm residential uses are discouraged in rural areas not served by wastewater treatment facilities. Residential development allowed within these areas should be restricted to platted subdivisions with access to roads with adequate capacity.
3. Single-family residential lots should be designed to take access from local streets only. Direct access from residential lots to collector and arterial streets will generally not be supported except for existing uses. Where direct access does exist, restricted access points should be required to minimize conflicts and preserve the function of the street.
4. High-density residential areas should be located toward the fringe of neighborhood areas or as buffers to low- and moderate-density residential areas from traffic generated by commercial and industrial areas. Land use buffers, screening, landscaping or other transitions should occur between high-density residential uses and abutting low- or medium-density uses to improve compatibility.
5. Neighborhoods should be planned and designed with respect, sensitivity and preservation of special geographic features such as streams and natural vegetation clusters. If vegetation or tree removal is necessary, replacement should be encouraged. Conservation easements are encouraged to protect lands identified as worthy of preserving in their undeveloped state.
6. Future utility transmission lines and existing overhead lines should be placed underground when installed or replaced where feasible as determined by the City. Above ground utilities should be screened from public view to the greatest extent possible by promoting placement away from the right-of-way, use of landscaping or other means.
7. Residential subdivisions should incorporate high-quality landscaping aimed at improving the aesthetic quality of residential development, defining public and private space, providing shade and perpetuating the City's residential character of tree lined streets and well-landscape homes. Landscaping should in part be achieved through the preservation of existing vegetation to the greatest extent possible. Maintenance of landscaping should be the responsibility of individual lot property owners or homeowner's associations.
8. Strong pedestrian connections within residential developments and to surrounding public, service and convenience uses should be integrated into residential developments through the use of a sidewalk and trail network. Abutting streets, green space and adequate setbacks should be provided between the edge of pavement, sidewalk or trail to separate pedestrian and vehicular traffic. In general, sidewalks and trails should be located in the street right-of-way or within specially designated easements.
9. Open space should be an integral component of all residential development. Alternative development patterns such as zero lot line development and cluster development should be supported to provide larger areas devoted to open space. High-density development should

be designated to blend in with the natural character of the area preserving open space and vegetation and working to a great extent within the natural topography of the site.

10. Opportunities for redevelopment of existing non-conforming residential uses and scattered or unrelated residential development patterns such as small manufacture home parks, should be supported. New high-density residential development, including apartments and manufactured home parks should be developed contiguous to existing high-density development or as part of a unified development plan on 10-acres or more unless otherwise integrated as a part of a large-scale unified residential development plan. High-density uses will not be supported as infill on vacant lots in low- or moderate-density neighborhoods.
11. With the exception of temporary housing approved following natural disasters and approved recreational camping sites, transient housing such as residency in unapproved mobile homes, campers, travel trailers or other temporary living quarters, will not be supported.
12. All residential development is strongly encouraged to incorporate high-quality, single-family development characteristics including: creating a strong relation between the front façade and entry and the public or private street frontage; use of a variety of high-quality building materials; variation in height, floor plans, foot prints, roof lines, color, and architectural details; use of uniform materials and designs on all sides of the building and not just the front façade; incorporation of private spaces such as porches, stoops, and patios; and use of landscaping to accent the residential structure and help define public and private space.
13. Residential development should incorporate adequate off-street parking. Low- and medium-density development including single-family, two-family and manufactured homes on permanent foundations should include enclosed garage spaces. Medium- and high-density residential uses with demand for larger parking areas should break up parking lots into smaller parking areas and further minimize their impact through the use of landscaping and other means of screening.
14. The City supports the preservation of historic housing, residential neighborhoods and residential characteristics within the community. In order to preserve this historic development and promote renovation and active use of older housing stock, the City encourages use of incentives to provide for the maintenance and preservation of existing housing stock. Likewise a primary consideration of residential infill and redevelopment in established neighborhoods is compatibility with the character of the existing neighborhood.
15. The City should plan for sufficient residential land to meet the City's future housing needs. This land should be at varying densities to allow for both high-end and moderate or affordable housing. Vacant land for residential development should be brought into the City through annexation, particularly where development can be served with public utilities as part of planned expansion phases such as south of the K- 10 Highway.

16. Agricultural lands with high productivity potential at the edge of the planning area should be preserved to ensure the long-term viability of farm uses. Development which is not contiguous to existing development within the City should be limited to avoid “leap-frog” development patterns which prematurely impact agricultural uses. When development is permitted adjacent to existing agricultural lands, it should be screened and prevented from interfering with existing agricultural activities.

17. To minimize premature residential development patterns and development beyond the City’s existing services, a primary consideration of proposed annexation, rezoning and development plans should demonstrate that similar development sites are not available within the City boundaries.

Commercial and Industrial Land Use

Commercial and industrial areas are designated on the Future Land Use Map. The five major categories are: 1) Mixed Use, 2) Central Business District, 3) Commercial, 4) Business Park, and 5) Industrial.

A major principle of the Comprehensive Plan is to provide convenient, safe, and appropriately scaled commercial and industrial development opportunities in the planning area. While able to support a variety of non-residential uses, the Plan promotes development in commercial nodes as part of business parks. With the exception of neighborhood commercial services, the plan encourages these development parks to be developed under unified control with application of uniform design standards as opposed development on a parcel by parcel basis. Within the park setting strong internal circulation and interconnection between uses is critical to decrease traffic conflicts and preserve the capacity of the City’s arterial street network. Individual entrances directly onto to an arterial should be avoided. To help support the park concept the “business park” land use concept has been introduced in the plan.

In general, commercial uses should be integrated with surrounding residential developments in a manner that provides strong pedestrian connections and protects and buffers those residential areas. To help realize stronger ties between commercial and residential development, the plan introduces the “mixed-use” land use concept to encourage development of integrated commercial and residential development.

Similar to commercial development, the Plan projects additional light industrial development in industrial park settings. Again, this development should be planned as part of the industrial park plan as opposed to a lot by lot planning approach.

Commercial and Industrial Growth Patterns

Commercial and Industrial development is projected in three primary areas within the City’s planning area: 1) along the K-10 Highway corridor, 2) in new neighborhood commercial nodes,

and 3) within a revitalized Central Business District. While infill, redevelopment and revitalization of existing commercial district is encouraged, the plan recognizes that with substantial development south of K-10 Highway additional commercial development opportunities will be needed. A primary opportunity for new commercial development will be south of K-10 along 20th Street (1300th Street). In particular, the area east of Church Street (County Road 1061) provides a substantial opportunity with access to K-10 from two separate interchanges that are located within a one mile stretch. This area is envisioned to be developed under a business park concept with supporting retail and convenience commercial uses. However, limitations in existing infrastructure, including sewer service and need for improved internal access via an improved arterial, currently exist.

Other primary residential opportunities exist in the revitalization of Eudora's historic central business district. In 2003, the City began planning for reinvesting in downtown, including new streetscape improvements. Opportunities for commercial redevelopment and revitalization exist primarily within a two block area on Main Street between 7th and 9th Streets. Additional redevelopment opportunities may be presented to the south if the former high school is sold or the current fire/police department is relocated to the south closer to K-10 Highway. These building would provide opportunity to develop additional community facilities which could serve as an anchor to help stabilize downtown and encourage additional traffic to the area.

In addition to these general commercial opportunities, neighborhood commercial nodes are projected to serve new residential growth south of K-10 Highway. Two nodes, located at the intersection of Church and 28th Street and the intersection of Winchester and 20th Street, are projected to meet neighborhood service and convenience needs.

Additional industrial development opportunities are planned near the existing Intech Business Park, building on the existing developments regional identity and providing quick access to K-10 Highway via the County Road 442 interchange. This consolidation of light-industrial uses provides and opportunity to focus infrastructure improvements needed to serve industrial development and to build on the K-10 Highway corridor "America's Smart CorridorTM" image.

Commercial Policies

The following policies support the commercial land use recommendations of the Future Land Use Map:

1. Commercially zoned districts should provide facilities compatible with and sensitive to surrounding areas, particularly abutting residential areas.
2. Requests to zone for commercial development should be analyzed closely in light of potential negative impact in the Central Business District. When ever possible commercial uses that are not directly dependent on highway traffic such as restaurants and community service type uses should be encouraged to locate in Downtown Eudora.

3. With the exception of planned neighborhood commercial uses, new commercial nodes should be primarily located only along existing and planned interchanges with K-10 Highway. Commercial development should not be permitted as infill on residential lots.
4. New commercial development that provides for land uses that are presently absent from the City, such as hardware and home repair supplies, or new employment opportunities particularly management and other high-paying positions, are highly encouraged.
5. Commercial curb cuts on major arterials should be discouraged. If direct access cannot be avoided, no more than one curb cut should be permitted for any development. In no event will curb cuts be located closer than 250 feet from centerline to centerline.
6. Curb cuts located on opposite sides of a street should be aligned whenever possible. Where off-setting curb cuts is necessary, they should be off-set a minimum of 125 feet. When this distance cannot be met, the curb cuts should be set directly opposite one another.
7. Commercial development proposals should not be approved where there is a lack of contiguous urban development. A proliferation of scattered commercial development, for example automobile-service oriented development, should be avoided. New commercial development should be restricted to areas within the city boundaries.
8. Pedestrian access to new and existing commercial development is a priority of the community. Sidewalks, including grass strips, should be constructed on all frontages for commercial development. Internal pedestrian circulation should also provide access to major site features including parking areas and public entrances. An emphasis on accessibility by all residents including the elderly and disabled should be included.
9. Future utility transmission lines and existing overhead lines should be placed underground when installed or replaced where this is feasible as determined by the City.
10. Public assistance for commercial development is discouraged unless a reasonably foreseeable market demand exists. However, a wide variety of retail, service and convenience uses should be encouraged. Commercial development should be promoted on land currently zoned for commercial uses, particularly in the Central Business District and near K-10 Highway.
11. Revitalization and redevelopment of downtown is encouraged; however, infill and redevelopment should be of a scale and character that is compatible with existing businesses so as not to destroy the inherent character of the existing downtown.

12. Municipal parking facilities should be provided to accommodate a major portion of the demand in Downtown. Private parking should not be required downtown and should be permitted only if deemed to be compatible with adjacent land uses and streets through the process of site plan review.
13. Adequate parking should be provided for commercial uses. Parking should be integrated into the overall site design in a manner that provides convenient access without dominating the site. Buffering, screening, and other means of minimizing the visual impact of parking are important considerations.
14. Reasonable effort should be made toward preserving and renovating buildings and facades of architectural and historic merit. The City's codes should be enforced with an emphasis on maintaining the overall scale and the character of existing buildings. Development near these historic features should be sensitively designed to not conflict with them.
15. Private signs should contribute to, and not detract from, the appearance of commercial development. Effective communication of important public information and the scale and proportion as they relate to the building should be the primary concern in determining the location, design, and control of signs. However, as the City seeks to create a unique environment downtown, artistic, colorful sign solutions are encouraged within the district.
16. Signage for commercial uses located near K-10 Highway should be restricted to prevent the creation of a negative image for the City. Limitations have been adopted for signs including number, size, height, illumination and materials in accordance with the K-10 Corridor Overlay and gateway guidelines.
17. Off-site advertising and billboards advertising individual uses are not encouraged. Rather, the promotion of the community in general is encouraged through public advertising in trade magazines, local newspapers, travel and tourism materials and other targeted marketing efforts. Advertising media for individual uses should be restricted to signs on the property where the business advertised is located. Signs should be appropriate in scale so as to promote the business without creating visual clutter.
18. Outdoor storage should be restricted to side and rear yards and screened from view of the public. Trash receptacles and other normal rear yard equipment should also be screened from public view through the use of landscaping or other means.
19. Outdoor activities such as temporary displays, dining or sales are supported by the community. However, displays of goods offered for sale should be restricted to approved locations behind building setback lines on a temporary basis. In order to preserve the overall character of the community these displays should be screened from arterial street and the Highway and required to be well-maintained, compatible with surrounding uses and not adversely affecting surrounding development.

20. Large-scale office commercial developments should be designed as office or business parks. As such, each office park should include an internal circulation system as well as landscaped open spaces, architecturally compatible buildings, and planned building orientations.
21. Individual, free-standing office buildings should have adequate on-site parking, as well as be landscaped and buffered from surrounding uses.
22. Office developments may be used as a transitional land use between commercial retail and residential areas if: (a) the office development has direct access to a major street, and non-residential traffic is directed away from the neighborhood, and (b) the office area is compatible with the neighborhood in terms of architecture and height, and is screened from the homes.
23. In support of public and semi-public uses such as religious and civic organizations the occupancy of existing commercial structures on a temporary basis while starting up or relocation to new facilities is supported. However, non-commercial uses are encouraged to relocate to permanent facilities so as not to compete for parking nor disrupt the intended use of commercial districts.

Industrial Policies

In addition to the commercial policies above, the following policies support the industrial land use recommendation of the Future Land Use Map:

1. Industrial uses should be on land that is well drained and free from flooding.
2. Industrial development should be concentrated on land currently zoned for industrial and in existing and new industrial parks, promoting the proper mix of light and heavy industrial development, and encouraging employment opportunities for the existing pool of skilled labor.
3. Industrial areas should have reasonable and convenient access to major arterials and railroad facilities as required. The use of local streets and traffic that cuts through the community off of arterial streets is strongly discouraged as it increases road maintenance and traffic conflicts.
4. Setbacks, open space, landscaping, preservation of natural features and other means of buffering and screening should be used to provide adequate separation between industrial and non-industrial uses. Just as industrial development that encroaches on residential development should be substantially buffered, so should residential development that encroaches on projected industrial uses.

Public and Semi-Public Facilities

Public and semi-public areas are designated on the Future Land Use Map. This land use category includes schools, churches, existing parks, civic facilities, etc. In general, public/semi-public areas should be located in convenient locations and on sites of sufficient area to ensure adequate service delivery and room for future expansion.

Public facilities, parks and recreation opportunities have been projected separately as part of **Map 11, Parks and Trail System Map**. The projected parks and trail system is discussed in more detail in the Parks and Recreation Section of this Chapter.

Public/Semi-Public Growth Patterns

Public and semi-public uses such as schools, emergency service facilities and other high-demand facilities which require equitable distribution within the community are projected to generally follow commercial development patterns, developing centrally and along major transportation corridors where they can be easily accessed. Other public uses such as churches, libraries, and civic buildings are projected to locate in areas where they can serve as anchors to the community and serve as stabilizers to development such as in and around downtown.

Public/Semi-Public Policies

The following policies support the public/semi-public and open space/floodplain recommendations of the Future Development Plan Map:

1. Churches, libraries, museums, and civic institutions should be encouraged to remain in their present location within the currently developed part of the City.
2. When new facilities are required, such as police and fire departments, development of facilities that provide strong connection to the surrounding development pattern are encouraged.
3. The City should support the development and expansion of the various organizations serving all residents of all ages and needs, including the City's youth and the growing segment of the population that is age 65 and older. This includes the City's educational facilities and nursing homes.
4. Public facilities such as utility substations, utility towers, maintenance and storage facilities and other uses that have a significant visual impact on surrounding development and the community should be located and screened to minimize negative impacts. Likewise, emergency service facilities, facilities that require operation of noisy mechanical equipment and other uses that require increased and frequent noise, should be located near other

similar intensity uses, buffered from surrounding residential development to the extent possible.

Primary Growth Areas

Primary Growth Areas are those areas where the next increment of urban-level development should be encouraged in the planning area, given expected and desired urbanization patterns. This is the area in which the city should expand. The boundaries for each Primary Growth Area were delineated based on the following factors: existing urbanization trends, limiting environmental characteristics (such as floodplains, creeks, or rivers), existing and proposed street and utility network, and natural drainage basins.

For planning purposes alone, future water and sewer lines are shown on the Primary Growth Area Map on a hypothetical basis. Two criteria were used: water and sewer lines which are already planned to serve the high school site, and those facilities which are appropriate given the existing environmental characteristic and utility network.

PARKS AND RECREATION

The Parks and Recreation element of the Eudora Comprehensive Plan was developed from a series of participatory meetings and direct observations made by touring the parks and school district facilities. The groups we met with included:

- User Groups
- Staff of Parks and Recreation and Public Works
- Parks & Recreation Board, Elected Officials and Superintendent of Schools
- Citizens-at-Large

Generally, the meetings were conducted to determine the current level of satisfaction with the availability of facilities, a discussion of the physical condition of the facilities, suggestions for improvements to the park system, suggestions for the role of the City and School District in the process of providing facilities, comments about the role of citizens and organized user groups in the process of utilizing facilities owned by the City and School District and an historical perspective on parks and facilities relative to the role of the City, citizens and organized users.

From these discussions and direct observations of parks and facilities, the Plan concludes the following recommendations are appropriate for Eudora as it moves toward implementation of its Comprehensive Plan.

Commitment

The City Council should commit to an improved park system and recreation program that moves it from its current position to one which includes the recommendations in this report. The benefits of making this commitment will soon present themselves throughout the community in the categories of:

- **Environmental benefits** which serve the community by connecting people with and educating them about nature. In addition, greenways can provide alternative transportation opportunities. Parks and open space are essential weapons in the City's arsenal against environmental degradation.
- **Social benefits** which serve the community by connecting people with neighbors of other ages, incomes, backgrounds and abilities. Parks and recreation can build community pride and spirit.
- **Benefits to individuals** by promoting physical fitness and self-improvement. Opportunities for exercise and being outdoors result in greater physical fitness, emotional well-being and connectivity to nature.
- **Economic benefits** which serve the community by improving the quality of life in the City and helping to attract businesses and residents. Top-rated parks and recreation programs and facilities can be a competitive advantage for Eudora in economic development.

Successful communities who have made this commitment have positioned themselves to mitigate some of the current issues facing the City of Eudora; for example, many businesses and industries remain in communities, or move to new communities, because of a quality of life which rates higher with their employees. Although quality of life can mean many things, it is not uncommon for businesses and industries to search for a top-notch park system linked by trails, a variety of indoor and outdoor facilities, and open spaces.

The commitment by the City Council should proceed in six categories: a) departmental staffing; b) financing; c) system process improvements; d) understanding and responding to citizen expectations; e) inclusion of the Parks and Recreation Board into the decision-making process (governance); and f) parks.

- **Staffing** – The City's decision to hire a full-time Director has been recognized by citizens as a very positive move. It is important for the City to recognize that the benefits to the community from having this position will continue to be positive if the following occur:
 - a) pay is commensurate with the responsibilities of the position;
 - b) the job description for the position is clearly defined;
 - c) the Director is involved with the Parks and Recreation Board in the decision-making process on all parks and recreation matters which come before the City Council;

- d) the Director is provided with reasonable necessary resources with which to perform the job; and
 - e) an office manager is provided to assist the Director.
- **Financing** – A dedicated funding source for capital expenditures, park maintenance and recreation programs should be identified and approved by the City Council. Continuity in these funding categories lends itself to the creation of an environment within which short and long term planning can occur. The value of planning is that the City can encourage its staff and partners (school district, civic clubs, developers, special interest groups) to work together to leverage dedicated funds for the improvements that citizens will support.
 - **Process** – Important to the success of the Parks and Recreation Department is the recognition of the processes it will use within the City structure to function. Some of the processes will include: purchasing, personnel, coordination with other City departments, budgeting and reporting. Within these processes, the City must ensure that purchasing procedures are modern and not prohibitive to efficient operations (spending limits for routine purchases should be evaluated); a spirit of cooperation between departments is an expectation taxpayers have as they financially support all City services; inclusion of the Parks and Recreation Board and staff in the decision-making process at the City Council level is important as parks and recreation issues are being discussed.
 - **Citizen Expectations** – The City should use a statistically valid citizen survey immediately to determine the level of citizen support for facilities and programs and their willingness to pay for each. The failure of the recent bond for the pool renovation indicates a better understanding of the community's desires and expectations is needed. Especially since the department is new, it is important to immediately understand these issues so staff, the Parks and Recreation Board and City Council can efficiently and effectively use available resources to provide citizens with improvements they support.
 - **Governance** – The City can build upon the existing culture of cooperation within the community as it works with its staff, Parks & Recreation Board, School District and special interest groups to provide facilities, services and programs which citizens will generally support.

Parks and Trails System Projections

The park system is dependent upon the School District for active and passive park areas. The City provides 12.3 acres of mini parks, neighborhood parks, community parks and undeveloped land. As discussed in Chapter 3, the City's park land is substantially deficient. Based on project growth and national park standards (**Ref. Chapter 3**), over 150 acres of additional park land is needed within Eudora by 2020. Land acquisition strategies must be developed as land is getting more expensive and less available.

In addition, access to City parks is currently not equitable; all existing parks are west of Church Street. New parks should be located in those areas to the south and east where parks are not

currently located. These parks should then be linked via a trail and sidewalk system. The design and construction of a trail system to connect neighborhoods to the City park system and school facilities should be a high priority as citizens throughout the nation rate this type of improvement as important and necessary.



*Improved connections between neighborhoods and community facilities are a priority of the community. Improved trails and bike lanes can help reduce current conflicts while providing recreational opportunities and alternative transportation options.
(March 2002)*

During the preparation of the Comprehensive Plan update, citizens expressed a need for more soccer fields, indoor recreation space, and improvements to the municipal pool as top priorities. The City is encouraged to enter into a park system master planning process to determine specific needs and quantities for facilities. During or prior to this process, neighborhood meetings should be held to provide citizens with an opportunity to provide input for improvements to their neighborhood park.

Meanwhile, future parks and trail systems have been projected as shown in **Map 11, Parks and Trail System Map**. The Map identifies future trail connections. The intent of these connections is to provide opportunities for recreation and alternative means of transportation. As such the City must carefully consider the intent and associated design of each trail/path. In order to ensure public safety and preserve the intended function of future trails/paths, the plan recommends the City follow the American Association of State Highway and Transportation Officials (AASHTO) guides for trail, path and bike facility development.

In addition to these projected parks and trails, the preservation of open space in the planning area incorporates floodplain and other natural areas into Eudora's overall land use pattern. In general, open space/floodplain areas correspond to the limits of the 100-year floodplain as identified on Eudora's and Douglas County's Flood Hazard Boundary Maps.

Parks and Open Space Patterns

As identified in Chapter Three, Existing Conditions, the City needs to develop substantial additional parks and open spaces to accommodate new and improved opportunities for passive and active recreation. As with other public services, recreational opportunities are projected to follow residential development patterns to the south, northeast and west.

Open space projected within the floodplain as preservation will primarily be implemented in conjunction with development as a result of preservation requirement and setback guidelines.

Parks and Open Space Policies

1. Provision of parks and recreational services to meet the needs of the community is one of the community's top priorities. The City and area land owners should partner with public and private agencies such as the Eudora School District, Lawrence Douglas County Planning Department, KDOT and the K-10 Corridor Association to promote and develop local and regional recreational amenities such as regional trails.
2. Private development should provide adequate open space and amenities as an integral part of the overall site design. Outdoor gathering space, walking and biking trails, visual amenities such as public gardens, and other private amenities are highly encouraged to support outdoor activities, healthy life styles, recreation opportunities and a sense of community for local residents and employees. Private open space should be visually and physically accessible and well-maintained.
3. The expansion of the existing sidewalk network and connection to local and regional trails is a priority of the community. Strong connections between neighborhoods, public facilities and community activity centers should be developed throughout the community as part of existing street and sidewalk improvement programs and new development proposals.
4. Acquisition of small, isolated parkland and open space tracks is discouraged. Rather, the plan identifies the need for large parkland and open space areas to meet national recreational standards. Park land and open space dedication should only be accepted where it may contribute to the overall plan for park land and open space acquisition.
5. To the greatest extent possible, areas within the floodplain and along water features such as creeks, streams and river corridors should be reserved as open space. In order to offset the impact of preservation on individual land owners, density bonuses should be permitted to off-set reduction in development capacity.
6. The City is committed to its parks and recreation department and the development of a strong community park system with environmental, social, individual and economic benefits.

7. Parks and open spaces should provide benefits to the environment by connecting people with and educating them about nature. In addition, greenways that provide alternative transportation opportunities are encouraged. Parks and open space are essential weapons in the City's arsenal against environmental degradation.
8. When development is proposed near existing parks, parkland dedication is discouraged. Rather, the priority should be placed on improvements to the existing park as opposed to creation of a new one.
9. Parks and open spaces should provide social benefits by connecting people with neighbors of other ages, incomes, backgrounds and abilities. Parks and recreation can build community pride and spirit.
10. Parks and open spaces should provide benefits to individuals by promoting physical fitness and self-improvement. Opportunities for exercise and being outdoors result in greater physical fitness, emotional well-being and connectivity to nature.
11. Parks and open spaces should provide economic benefits by improving the quality of life in the City and helping to attract businesses and residents. Top-rated parks and recreation programs and facilities should be used as a competitive advantage for economic development in Eudora.
12. Strong partnerships between public and private entities such as the City of Eudora, the Eudora School District and private property owners are encouraged to meet the parks and recreation needs of the community.

MAJOR STREET PLAN

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

1. To promote the orderly development and use of land in Eudora, both within an urban and a rural context.
2. To facilitate the safe and efficient movement of people and commodities.
3. To provide a City street system that is integrated with the local, state, and national transportation systems.

This section will review the street system of Eudora. This examination includes an explanation of the various types of streets and the designation of the major system.

Map Interpretation and Relationship to Regulations

Major street recommendations are shown in **Map 12, Street Network Map**. The Planning Commission should utilize its subdivision (platting) process to review proposed plats, particularly to assure that rights-of-way for proposed major streets are dedicated to the City as a part of the plat approval process. Similarly the City's adopted street improvement standards should be applied during the plat and development plan approval process.

Standard Street Classifications

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

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

Arterial Streets

Arterial streets should function to connect areas of principal traffic generation and important area highways. They provide for distribution and collection of traffic to and from collector and local streets. The arterial street is given preferential treatment over collector and local streets in signing and signalization of intersections. It is preferable that local streets do not have direct access to arterials but are provided access to the arterial through the collector street system. Arterials in Eudora intersect with many local streets in the older parts of the City because of the grid pattern of development. Of greater concern on an arterial such as Church, however, are the multiple drive approaches. Parking on arterials should be restricted in all cases where it interferes with traffic flow.

Access to private property along an arterial should be controlled to avoid hazards and the interference of traffic flow due to ingress and egress traffic movements. Access control can be achieved at differing levels through subdivision design, street design, and curb cut regulations. Two such methods include restricting curb cuts and utilization of shared parking among businesses. A landscaped buffer along the arterial will help maintain the viability of abutting land for residential purposes.

Arterial roadways are appropriate for carrying traffic through primarily residential land uses without directly accessing any of the properties. A minor arterial road section includes four

through lanes and should provide an additional left turn bay at all signalized intersections and any major intersections. Sidewalks should be provided on both sides. Only public roads should be allowed to access a four-lane arterial road and road spacing should be related to design speed. The ideal range for traffic volume on a four-lane arterial roadway is between 12,000 and 25,000 vehicles per day.

Arterial streets should be designed and used to move large volumes of relatively unimpeded traffic. However, they differ from thoroughfares in three ways: 1) design speeds are lower, 2) traffic flow is more restricted, and 3) direct curb-cut access to adjacent properties is more common, although it should be discouraged in new developments.

Rural Arterials

In addition to roads which currently carry high traffic volumes, rural roads which are projected to carry higher traffic volumes in the future have also been designated as collectors. The purpose of these “rural arterials”, such as 28th Street, is to serve as a temporary link in the circulation system until development warrants constructing the road to urban standards. Frequently, it is necessary to complete such a link years before the adjacent areas develop; therefore, their interim use is to connect presently developed areas with existing highways, commercial areas, etc. In addition, by designating these roads as rural arterials, sufficient right-of-way width can be acquired through appropriate dedications as an area develops. Rural arterial construction is similar to that of urban arterials except that curbs and gutters are absent.

Collector Streets

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

Collector roadways are best classified as two-lane and three-lane collector roadways. The two-lane collector roadways typically function to collect traffic in residential neighborhoods. Because traffic volumes on two-lane collector roadways may range between 1,500 and 5,000 vehicles per day, residential properties abutting the collector road may not be as desirable as those abutting a local road. To accommodate wider travel lanes, sidewalks and street lighting, a larger right-of-way is needed than for local streets. Parking and private access to the collector should be discouraged. If needed, parking should be allowed on one side only.

A three-lane collector roadway section is appropriate for collecting traffic in high-density residential and non-residential areas, such as a business park or shopping center where traffic demand is expected to range between 1,500 and 12,000 vehicles per day. This road section includes two through lanes, and can be widened by adding a center left turn lane. On-street parking should be prohibited.

For safe accommodation of local traffic movement and effective preservation of the character of residential areas, experience has shown that collector streets should be spaced at intervals of about one-half mile, though in Eudora the existing street system is not as systematic.

Local Streets

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

The ideal traffic volume for local roadways is less than 1,500 vehicles per day. On-street parking is usually permitted. However, in order to meet fire codes which require a 20-foot path for equipment, parking should be limited to one side of the roadway for pavement widths less than 28 feet wide.

Design Guidelines

Right-of-Way Standards

Table 5-3 identifies recommended right-of-way standards for the above street hierarchy.

Table 5-3: Minimum Right-of-way Standards

Street Classification	Minimum Right-of-way Width
Arterial Street	100-120 feet
Collector Street	80 feet
Local Street	60 feet

Curbs and Gutters

Required curb and gutter design is established by city policy. The integral curb and gutter system serves two functions. First, it provides a surface drainage channel along the side of the street. Second, access control is improved with the use of curbs. All urban streets should include curbs and gutters.

Access Control

Just as the design of a roadway helps to move traffic efficiently, controlling access to the roadway system can help do the same. The lack of an adequate access control policy or plan increases the probability of having traffic hazards and increased traffic congestion. Traffic hazards and traffic congestion reduce the capacity of the roadway to accommodate the traffic volumes for which it is designed. Traffic congestion and traffic hazards increase the pressure to widen roadways which requires additional public funds.

Roadway capacity can be increased or decreased in a number of ways. The method utilized most frequently to increase capacity is to widen a road to provide additional travel lanes. In some instances, however, it is not feasible to add additional travel lanes due to abutting land uses on either side of existing roadways. In these instances, other methods of increasing roadway capacity may be more appropriate. Other methods include constructing intersection improvements, turn bays, medians, restricting road and driveway access, or providing traffic signal timing improvements. Conversely, road capacity can be decreased by adding cross roads, driveways, traffic signals, or other traffic control devices. By developing an access control policy, road capacity can be maintained to accommodate future development.

Specific design characteristics associated with each functional classification depend on factors such as projected traffic volumes and local access control policies. Higher traffic volumes, for example, those exceeding 20,000 vehicles per day, warrant construction of a four or five lane arterial road. Traffic volumes of 10,000 or 15,000 vehicles per day can be accommodated by a four-lane arterial road or by a two-lane arterial road which includes turn bays, good signal 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 road at approximately half the cost.

Acceptable traffic volumes on a major arterial roadway can range between 25,000 and 35,000 vehicles per day. This capacity, however, can be reduced by excessive curb cuts and mid-block turning movements. The center turn lane is appropriate because of frequent entrances into higher traffic generation land uses such as business parks and retail centers. A median can be constructed in locations where left-turns should be prohibited and on-street parking should not be allowed. For design speeds greater than 35 mph, or for peak hour right turn-in traffic volumes exceeding 100 vehicles, it is recommended that a right turn lane be constructed along the arterial roadway approaching the curb cut.

Intersection Spacing

Adequate distance between intersections is essential for the safe and efficient flow of traffic. Appropriately spaced intersections provide through-motorists an opportunity to respond to traffic entering the street from a side street. **Table 5-4** shows the minimum standards for spacing intersections, determined by through-traffic speed.

Table 5-4: Minimum Intersection Spacing Standards

Through-Traffic Speed	Minimum Intersection Spacing
30 mph	210 feet
35 mph	300 feet
40 mph	420 feet
45+ mph	550 feet

Source: Institute of Transportation Engineers

Driveway Spacing

Like a street, private driveways create an intersection with a public street. Conflicts and potential congestion occur at all intersections - public and private. Methods to reduce conflict include:

- Separating the conflicts by reducing the number of driveways and intersections;
- Limiting certain maneuvers such as left turns; and
- Separating conflicts by providing turn lanes.

No access drives should be located within the operations area of an intersection. Driver conflicts need to be spaced in order to eliminate overlaps between through traffic and right turns.

It is recommended that driveway locations, at a minimum, comply with the corner clearance criteria indicated in **Figure 5-1**. Proper spacing of driveways permits adequate storage and stacking of automobiles on the public street. This distance may have to be increased in cases with high volumes to ensure that driveways do not interfere with the operation of turning lanes at intersections.

The number of driveways accessing undivided arterial roadways should be minimized. The following standards are based on AASHTO standards and the Institute of Transportation Engineers (ITE) Manual. The City of Eudora should adopt its own standards by using the guidelines listed in **Table 5-5**.

Table 5-5: Suggested Maximum Driveway Guidelines

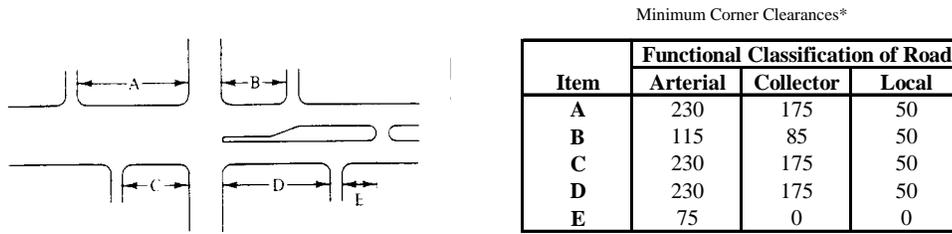
Maximum Number of Driveways	Driveway Spacing	
	Undivided Arterial Streets Length of Lot Frontage	Divided Arterial Streets Length of Lot Frontage
1	0-399 feet	0-529 feet
2	400 - 899 feet	530 - 1199 feet
3	900-1,399 feet	1200 - 1859 feet
4	1,400-1,899 feet	1860 - 2525 feet

Source: *Institute of Transportation Engineers (ITE) Manual*

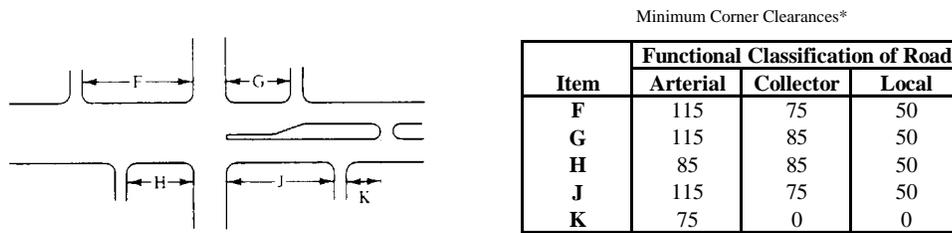
Corner Clearance

Minimum corner clearance guidelines are listed in **Figure 5-1**. These guidelines can be used to regulate new commercial developments located along arterial or collector streets.

Figure 5-1: Corner Clearance Guidelines



(a) Signalized intersection control



(b) Non-signalized intersection control

Street Network Plan

Based upon an evaluation of the capacity of the existing street system and the projected growth of Eudora, a Street Network Plan has been prepared as shown in **Map 12**. Indicated on the map are extensions of certain arterial streets and the creation of certain new collector streets to carry future traffic to arterials. The thoroughfare plan should be consulted when preparing the Capital Improvement Program, ranking major street improvements, and when reviewing proposed development.

Designation of the Major Street System

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

As a general rule, arterials should be located at one-mile intervals and collectors located midway between arterials. This general rule, however, must often be modified to accommodate land uses with high traffic demand, the existing street system, or natural and man-made features which disrupt the normal street pattern, such as the extensive floodplain, area water features, K-10 Highway, and existing development patterns.

It is important to note that the need for improvements to existing streets is equally important to the improvement of projected streets. Within the existing city limits, particularly north of K-10 Highway in the older part of town, it is important to focus on improving east-west connections. As identified in the existing conditions summary of Chapter 2, the City's historic grid system and uniform street improvements have resulting in existing streets that while built to local street standards, function as collectors and arterials. For example, 12th Street functions as a collector serving as the primary connection between development to the west along Winchester Road and access to K-10 Highway via Church Street. 12th Street is also a primary route to West Elementary Road. Improvement of 12th Street should be a high priority. Likewise, improvements to Winchester Road and 20th Street which would help complete the collector system and provide alternative routes should be a priority. Similarly it is important to complete east-west connections through undeveloped areas, such as providing for the connection of 14th Street to the west.

Other major focuses of the plan include the desire to improve access to K-10 Highway to the west. The City has historically planned for an interchange at Winchester Road. The City realizes that this improvement does not meet with current KDOT design standards for intersection spacing. However, growth and development projections warrant further consideration of improvements to Winchester Road and consideration of improved access to K-10 Highway west of the Church Street interchange. Meanwhile, the importance of providing safe and efficient traffic circulation via an improved collector and arterial street network is compounded as growth continues to the south. As such, a primary focus of the community should be to improve the existing street network and ensure that new streets are improved in conjunction with future development.

Major Street and Transportation Policies

The following policies support the major street element of the Future Land Use Plan and Street Network Map.

1. Establish and utilize appropriate roadway classification and design standards which are related to land use types, densities and vehicular traffic volumes as a way to reduce congestion.
2. Encourage improvements of major arterials leading into and out of the community. Improvements to these roads should be in place before major new development occurs that will significantly increase the use of these roads.
3. Direct access to arterial streets from business and industrial facilities should be limited through development of an internal street system and/or frontage road construction.
4. Develop a program to buffer existing residential uses from major traffic routes.

5. Promote the development of alternative transportation systems within Eudora, specifically through the provision of pedestrian and bicycle paths.
6. Maintain streets and related improvements, e.g., street paving, intersections, gutters and sidewalks as a way to prevent physical and aesthetic deterioration.
7. Plan for major streets in the undeveloped portions of the planning area that support the land use recommendations of the Long Range Physical Development Plan while at the same time ensuring that new streets are planned in accordance with existing streets in the community.
10. Each highway interchange to the City should be distinctive with its own easily recognizable and attractive identity. These areas should be treated as gateways or entries to the communities they serve. Special landscaping, architectural and/or public improvements should be installed to enhance these areas.
11. The entry routes to the City should encourage unified street accessories (street lights, informational signs, etc.) to create a more orderly appearance and to assist motorists.
12. The street edge of properties abutting major entry routes into the City should be uncluttered and as maintenance free as possible.



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CHAPTER SIX: IMPLEMENTATION

INTRODUCTION

The Comprehensive Plan Implementation chapter outlines recommended strategies for implementing the stated goals, objectives and policies of the Plan. In that regard, it must be clear that these recommendations do not constitute a set of regulations or ordinances. Rather, they are guides for future amendments to existing City regulations and ordinances. Similarly, it is not anticipated that these recommendations will be implemented in their entirety upon adoption of this plan. Rather, the intent of the Comprehensive Plan is to equip the City to accomplish short- and long-term objectives through stated policies and implementation of the recommended strategies as determined by the City of Eudora to be appropriate.

FUTURE LAND USE PLAN IMPLEMENTATION

The primary means of implementing the Future Land Use Map is the zoning ordinance. Over time, the City should seek to achieve consistency between the Zoning District Map and Future Land Use Map and between the Zoning Districts and the Future Land Use Categories. In this Plan, several methods are proposed for accomplishing this:

- Proactive rezonings on the part of the City;
- Creation and adoption of “overlay” district regulations;
- Development-specific proposals including Site Plans, Planned Developments or Special Use proposals; and
- Landowner proposed rezoning.

Proactive Rezoning

As the City implements the Comprehensive Plan inconsistencies between the existing land use, existing zoning and future land use will be apparent. This is also often true of undeveloped parcels. In order to promote projected growth and development the City should consider proactively rezoning property to allow uses projected herein. This approach can also help the City promote economic development within Eudora and minimize conflicts between incompatible uses that arise over time

Overlay Districts

In several areas, the City should consider overlay districts. Most of these areas are in commercial districts where the overlay provisions would address unique use, signage, landscaping, setbacks, buffering, parking and, possibly, architectural design requirements to preserve and enhance the character of the areas. Once these are in place, the higher intensity uses shown on the Future Land Use Map should be implemented with a proactive increase in the intensity of underlying zone. Prior to adoption of the overlay districts, however, increases in

intensity should take place only on a development-specific basis either through the Planned Development or Special Use processes to best meet the objectives of the particular area.

Development Specific Proposals

The plan projects significant land use/zoning changes that would greatly increase the density/intensity of development in areas such as near the interchanges with K-10 Highway. Most of these areas are near the K-10 Highway corridor where changes in surrounding development could create or already have created isolated pockets of incompatible and/or marginal uses. However, an inappropriate conversion of these uses to a higher density/intensity use through poor site design could have an even greater negative impact on the surrounding area. In these cases, the best means of achieving the proposed land uses is through development-specific Planned Development and Special Use Permit process. However, these processes may not be required of all such development. As such the City will have to rely more heavily on the Site Plan Review process and the guidelines and standards herein.

Landowner Proposed Rezoning

One of the difficulties currently facing the City in managing the quality and compatibility of development is an incomplete set of zoning and development regulations. The current Zoning Ordinance contains very few “performance” standards (such as screening, buffering, building mass and scale, building orientation, etc.). A strong recommendation of this Plan is to adopt a more modern code that includes a range of performance standards that help meet planning objectives. With such a code in place, the City should have more security and assurance of the ultimate development potential of sites within each of the zoning districts.

General Development Review Considerations

The Future Land Use Plan has been designed for use in evaluating proposed development projects in addition to guiding the general growth and development of the City. Accordingly, future plan amendments, ordinance and regulations should be designed to be consistent with the Plan objectives. In order to further implement the goals and objectives of the plan, the City’s ordinances should require that they be part of the criteria for evaluating and deciding all significant development applications, such as zoning map amendments, subdivisions, planned developments and conditional uses.

In determining consistency, the various portions of this Comprehensive Plan must be considered individually so that the Plan can be interpreted and applied in its totality, including:

- the Goals, and Objectives;
- the Future Land Use projections and policies;
- the Future Land Use map;
- the Street Network projections and objectives; and
- the implementation strategies of this chapter.

However, no one portion of the Plan can be considered in isolation from the rest of the document. Although the Future Land Use Map provides detailed recommendations for the future development of areas and parcels, these must be implemented using the strategies contained in the Plan.

Because of the short- and long-term nature of the plan, conflicts may arise during implementation. Where provisions of the Plan appear to conflict or are unclear, guidance should be sought from the City Staff. As interpretations are made, the City should document them and make them available to future applicants and the general public in an effort to maintain consistency.

Plan Amendments

The Planning Commission is vested with the authority to review the Comprehensive Plan annually and, following a public hearing, report to the City Council and include proposed changes to the Plan. The Planning Commission should also hold a hearing from time to time as initiated by the City in response to changes in development demands and recommend changes to the City Council.

LAND USE AND DEVELOPMENT POLICIES

Rural Policy Area Strategies

Development within the Rural Policy areas as designated by the Future Land Use Plan should generally be limited to agricultural uses. However, when rural residential patterns are developed, the following strategies will help ensure that the development is designed to ensure future compatibility with projected growth patterns and the ability to accommodate future growth and related infrastructure.

Platting Requirement

The City in coordination with the Lawrence/Douglas County Planning Department should implement platting requirement for rural residential development on lots smaller than 10 acres. The subdivision application and review process should be implemented through a joint review and approval process developed to provide equal representation of the City and County's interests.

Staged Subdivision

A desire to ensure the ability to allow rural development with an ability to resubdivide at the time urban infrastructure is available was identified during the public workshops. Requiring applicants to show an ability to accommodate urban densities and provide utilities and services,

such as public sewer and water, in the future is an important component of ensuring that rural development does not block future development of the City while protecting owners' investments in rural property by ensuring current and future owners that their parcels have the ability to be further subdivided. Following are recommended standards for staged subdivisions.

Applicability. Any subdivision within a drainage sub-basin in which public sewer is projected to be developed in the future, but for which it is not feasible to provide public sewer at the time of development, and meeting the requirements of the subdivision shall be defined as staged subdivisions.

Standards. Such Staged Subdivisions shall be subject to the following criteria:

- No parcel in existence on the effective date of this section shall be subdivided more than once according to the staged subdivision process regardless of change in ownership. No further subdivision of a lot created by the staged subdivision process shall be permitted unless it meets the requirements for resubdivision as stated in the City of Eudora Subdivision Regulations.
- Direct access to collector and arterial streets is prohibited unless meeting the minimum design requirements for access separation as stated in the Subdivision Regulations and the guidelines specified by Comprehensive Plan policies.
- Each lot proposed shall demonstrate the ability to be resubdivided into future lots with areas no greater than 0.5 acres. Each lot must show the ability to resubdivide independent of other lot owners in the subdivision by indicating future lot lines and access points.
- Primary structures shall be located on no more than one (1) future lot unless made necessary by site features and approved during the platting process. Prior to permitting a primary structure to span two (2) lots, a written request must be submitted explaining necessity. In no case shall the building pad span more than two (2) lots.
- Accessory structures may be located on more than one future lot, but shall be oriented to the development of such future lots. Individual accessory structures shall not be located on more than one (1) lot.
- The stormwater drainage and sanitary sewer system shall be designed to accommodate full development based on the proposed ability to resubdivide. Surface drainage shall be handled in a development-wide facility located on a separate lot to be maintained by a subdivision association or dedicated to the City so all resubdivided lots need only install on-site drainage improvements.

Annexation Policy

In order to help minimize the impact of growth outside the City Limits and promote cost-effective extension of urban services, Eudora should annex land based on an ability to provide services within identified growth areas. The annexation laws of the state of Kansas establish three separate procedures whereby land can be added to a city, including:

1. By the city under its unilateral power.
2. By petition of the landowners. Petitioners annexations actually consist of two separate procedures: one permitting the city to annex adjoining lands under K.S.A., and the other requiring the Board of County Commissioners to approve annexation of non-adjoining land where the property owners petition for the annexation.
3. By approval of the Board of County Commissioners basically acting as a local boundary commission, commonly referred to as “district annexations.”

Where a city desires to annex land that does not qualify for unilateral annexation the Board of County Commissioners becomes involved. In some cases the City may wish to utilize the Board of County Commissioners’ process even though the city could unilaterally annex land. In any case, the City of Eudora has an opportunity to build on positive city/county relations and pursue a county-approved annexation plan in the City’s planning areas.

A triggering mechanism could be established for annexation of land within the designated areas based upon the 14-point issues listed in the state statutes. For example, when the City responds to proposals for business, commercial and industrial development in the area, the annexation “trigger” established by the City and the County could be used. Annexation would be approved for the service area lands upon application for other than municipal utilities, such as:

- platting of land;
- building permits; or
- rezoning to a non-agricultural district.

The 14 issues to be considered under district annexations are as follows:

1. Extent to which any of the area is land devoted to agricultural use;
2. Area of platted land relative to unplatted land;
3. Topography, natural boundaries, storm and sanitary sewers, drainage basins, transportation links or any other physical characteristics which may be an indication of the existence or absence of common interest of the city and the area proposed to be annexed.

4. Extent and age of residential development in the area to be annexed and adjacent land within the city's boundaries;
5. Present population in the area to be annexed and the projected population growth during the next five years in the area proposed to be annexed;
6. The extent of business, commercial and industrial development in the area;
7. The present cost, methods and adequacy of governmental services and regulatory controls in the area;
8. The proposed cost, extent and the necessity of governmental services to be provided by the city proposing annexation and the plan and schedule to extend such services;
9. Tax impact upon property in the city and the area;
10. Extent to which the residents of the area are directly or indirectly dependent upon the city for governmental services and for social, economic, employment, cultural and recreational opportunities and resources;
11. Effect of the proposed annexation on the city and other adjacent area, including but not limited to, other city, fire, sewer and water districts, improvement districts, townships or industrial districts;
12. Existing petitions for incorporation of the area as a new city or for the creation of a special district;
13. Likelihood of significant growth in the area and in adjacent areas during the next five years; and
14. Effect of annexation upon the utilities providing services to the area and the ability of those utilities to provide those services shown in the detailed plan.

Stream Buffers and Floodplain Protection

Headwater streams are often severely degraded by development. As a consequence, many communities have adopted stream buffer requirements as part of an overall watershed protection strategy. Stream buffers are an integral element of any local stream protection program. By adopting some of these rather simple performance criteria, Eudora can make their stream buffers more than just a line on a map. Better design and planning also ensure that communities realize the full environmental and social benefits of stream buffers. Recommendations in this section are adapted from the American Planning Association (APA), PAS Memo of August 2000.

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. In most regions of the country, this requirement translates to a buffer that is perhaps three to five mature trees wide on each side of the channel.

Effective stream buffers divide the total buffer width into three zones:

- Streamside;
- Middle core; and
- Outer zone.

Each zone performs a different function and has a different width, vegetative target and management scheme.

The **streamside zone** protects the physical and ecological integrity of the stream ecosystem. The vegetative target is mature vegetation 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, footpaths, and a few utility or roadway crossings.

The **middle core** zone extends from the outward boundary of the streamside zone and varies in width depending on stream order, the extent of the 100-year 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 vegetation, 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 bike paths and storm water best management practices (BMPs). The minimum width of the middle core is 50 feet or the width of the 100-year floodplain, whichever is greater.

The **outer zone** is the buffer's buffer, an additional 25-foot setback from the outward edge of the middle core zone to the nearest permanent structure. The vegetative target for the outer zone is usually turf or lawn. In many instances, this zone is within a residential backyard. Although the property owner is encouraged to plant trees and shrubs, few uses are restricted in this zone. Gardening, compost piles, yard wastes, and other common residential activities are promoted within the zone. The only major restrictions are no septic systems and no new permanent structures.

The outer and middle zone of the stream buffer may be used as a grass/vegetative filter strip under limited circumstances. For example, the buffer cannot treat more than 75 feet of overland flow from impervious areas and 150 feet from pervious areas such as backyards or rooftops. The designer should compute the maximum runoff velocity for both the six-month and two-year storms from each overland flow path, based on the slope, soil and vegetative cover. If the

calculations indicate that velocities will be erosive under either condition (greater than three feet per second (fps) for a six-month storm, five fps for a two-year storm), the allowable length of contributing flow should be reduced. When the buffer receives flow directly from an impervious area, the designer should include curb cuts or spacers so that runoff can spread evenly over the filter strip.

The stream buffer can be accepted as a storm water filtering system if basic maintenance can be assured, such as routine mowing of the grass filter and annual removal of accumulated sediments at the edge of the impervious areas and the grass filter. A maintenance agreement that allows for public maintenance inspection should also be required.

A particularly difficult management issue involves locating storm water ponds and wetland in relation to the buffer. Several arguments can be made for locating ponds and wetlands within the buffer or on the stream itself. Constructing ponds on or near the stream allows the greatest possible drainage area to be treated at one topographic point. Also, ponds and wetlands require the dry weather flow of a stream to maintain water levels and prevent nuisance conditions. Lastly, ponds and wetlands add a greater diversity of habitat types and structure and can add to the total buffer width in some cases. Given the effectiveness of storm water ponds and wetlands in removing pollutants, they should not be prohibited within the buffer. Rather they should be evaluated on a case by case basis.

The limits and uses of stream buffer systems should be well defined during each stage of the development process, from initial plan review through construction. The following steps are helpful during the planning stage:

- Require that the buffer be delineated on preliminary and final development plans;
- Check that buffer expansions are computed and mapped properly;
- Check suitability of use of buffer for storm water treatment; and
- Ensure other best management practices (BMPs) are properly integrated in the buffer.

Flexibility in application of stream buffer requirements provides less opposition to use. In general, the courts have found that buffer ordinances are enforceable and avoid “takings” issue, by proving that buffer strips provide compelling public safety, welfare, and environmental benefits to the community to justify restriction of land use. In order to limit the hardship on developments, the following planning methods can be utilized to mitigate any negative impacts associated with the creation of stream buffer strips.

Buffer averaging. Flexibility in the buffer width should be provided, permitting the buffer to become narrower at some points along the stream as long as the average width meets the minimum requirement.

Density compensation. Credit for additional density elsewhere on the site to compensate for developable land lost to the buffer should be granted. Developable land is defined as the buffer area remaining after the 100-year floodplain, wetland and steep slope areas have been

subtracted. Credits are granted when more than five percent of developable land is consumed, using the approach shown in **Table 6-1**. The density credit is accommodated by allowing greater flexibility in setbacks, frontage distances, or minimum lot sizes. Cluster development also allows the developer to recover lots that are taken out of production due to buffers and other requirements.

Table 6-1: Density Credits – Compensation for Excessive Land Consumption by Buffers

Percentage of Site Lost to Buffers	Density Credit*
1 to 10%	1.0
11 to 20%	1.1
21 to 30%	1.2
31 to 40%	1.3
41 to 50%	1.4
51 to 60%**	1.5
61 to 70%**	1.6
71 to 80%**	1.7
81 to 90%**	1.8
91 to 99%**	1.9

Adapted from Burns, 1992.

*Additional dwelling units allowed over base density (1.0)

**Credit may be transferred to a different parcel

Conservation easements. Perpetual conservation easements should be allowed to protect lands within the buffer with a perpetual conservation easement.

Variiances. A variance to the buffer requirements can be granted if the owner can demonstrate severe economic hardship or unique circumstances make it impossible to meet some or all buffer requirement.

Downtown Redevelopment Potential

Downtown redevelopment and economic development are most effective when they are proactive rather than reactive. To be successful, development strategies require the cooperative support, participation and leadership from elected and appointed public officials, along with business and civic organizations.

Potential exists for Eudora to grow economically stronger and downtown Eudora to become more diversified in the future. Downtown Eudora, the city’s historic retail district, is experiencing the same changes confronting other cities its size throughout Kansas and the U.S.—a decline in locally owned retail establishments and a shift toward retail franchises and establishments, and changes in traffic patterns have resulted in an increased demand for commercial property in close proximity to major thoroughfares such as K-10 Highway. This trend coupled with the

City's increased dependence on regional shopping in Lawrence, Johnson County and Kansas City, has greatly reduced the viability of Downtown. As such, the attraction of new retail investment and retail establishments into Downtown must be carefully targeted since the degree of success will be closely connected to under-represented components of the retail sector. Therefore, local officials, other residents and business persons must recognize the revised role that the Central Business District will serve in the future and carefully target the attraction of new business.

Downtown Eudora cannot be expected to return to its historic role as the retail center for the community due, in part, to the location of K-10 and the presence of large national retail stores in close proximity to the City. Downtown Eudora can, however, continue to play a special role in the life of the community. Recognizing these market forces will enhance the ability of local businesses to pursue the opportunities that these changes have created leading to enhanced activity, appearance and pride in Downtown.

Citizens showed strong support for the continued improvement and investment in Downtown throughout the planning process. Participants identified positive and negative aspects of downtown and identified opportunities to address issues specific to downtown. A summary of input during the plan is included in the Appendix.

Downtown Improvement Actions

Target New Retail and Office Commercial Uses.

Eudora should target the types of uses compatible with the character of downtown where the number of choices in Eudora and Douglas County may be below retail standards on a per capita basis. An economic development study should be completed in conjunction with the Eudora and Lawrence/Douglas County Chambers of Commerce to determine market strengths, weaknesses, opportunities and external threats. Further, the identification of per capita retail opportunities as compared to downtown Eudora businesses today would give the City and Chamber clear direction regarding businesses to target.

Implement the Neighborhood Revitalization Act

To stimulate and help fund building renovation and rehabilitation, the city should establish a special district under the Kansas Neighborhood Revitalization Act. Under this Act, any increase in property taxes resulting from building improvements may be rebated to the property owner. This rebate helps offset investment costs and can be a significant stimulus to redevelopment of the Central Business District.

Establish a Downtown Eudora Business Improvement District (BID)

Eudora commercial property owners, with the cooperation and assistance of the Chamber of Commerce, the Downtown Business Association and the City, should organize a Business Improvement District. A Business Improvement District has the power to assess special fees for common purposes in the district. One of the advantages of such a district is to ensure more widespread financial participation for common projects rather than voluntary contributions from those businesses and/or property owners. Furthermore, by establishing a district, the City of Eudora could be encouraged to increase public financial commitment to the area through demonstration of financial participation by downtown property owners.

The BID is a “benefit district” of property owners, in partnership with the city, to assist with determining, planning and financing certain improvements such as:

1. streetscape improvements;
2. installing and seasonally replacing plant materials and/or light pole displays,
3. installing directional signs informing and directing motorists to Downtown Eudora and to public parking areas within downtown; and
4. setting aside a portion of the funds generated by the improvement district to provide discounted interest rates on business loans for persons undertaking building renovation (window replacement, awning removal, signage replacement, etc) to enhance their original character.

In conjunction with funds from other sources such as CDBG funding from the state, improvements made as a result of the BID district can have a significant impact on the stability of Downtown.

Establish a Eudora Business Incubator

The reuse of a vacant building in downtown Eudora as a new home for local start-up businesses should be pursued by establishing a business incubator. Eudora officials should identify one of the vacant downtown buildings for reuse as a small business incubator to assist individuals in starting and expanding new businesses.

Create a Downtown Enterprise Zone

The City Council may further induce private improvements in downtown through a municipally designated “Downtown Enterprise Zone.” Within the zone, a policy could be implemented to review and consider the reduction of fees for all city permits, inspections and other development related fees. While this policy would be nominal in lost revenue to the City, it will demonstrate

an additional public financial commitment to encourage redevelopment. Further, by packaging this policy with other public incentives, such as the tax increment rebate and possible CDBG or other grant funds, it will demonstrate a clear public policy for strengthening the downtown.

Expand and Enhance Public Parking

In addition, to improving on-street parking, the city should work with property owners to identify public parking opportunities and improve parking areas such as at the northwest corner of 7th and Main Street. Such strategies will increase convenience and access for shoppers and provide parking alternatives for employees (off-street parking for local employees should be encouraged wherever possible to increase parking for customers). Parking improvements such as increased screening, landscaping and lighting should also be incorporated into expansion and enhancement projects.

Encourage Mixed Use Development

Encouraging a mix of uses, including high density residential uses within downtown helps strengthen the central business district by: increasing the users/persons in the district; increasing the financial feasibility of business ownership through secondary income alternatives; and increasing building maintenance by encouraging use of the entire structure rather than just the first floor or store front. In order to ensure these objectives are accomplished without disrupting the intended business uses, or creating conflict between business and residential uses, the following strategies should be used.

1. Residential uses should be restricted on the first floor, ensuring the primary street level activity is commercial in nature. Residential uses should be primarily restricted to second stories to ensure that they do not interfere with the intended operation of the business districts. Residential uses intermingled with commercial uses at ground level tend to create conflict and break up the connectivity of a business district.
2. The residential uses should be permitted as special uses. Multi-family dwellings should be permitted in downtown or within the specified overlay as special uses. Because of the nature of mixed-use development, special considerations will need to be made for access, parking, etc. The requirement for a conditional use permit gives the Planning Commission and Governing Body more control and the ability to apply special conditions as necessary.
3. Restrict residential parking in Downtown. Parking should not be permitted on-street or to the front of the building except during non-business hours. Parking should be restricted to the rear of the building with access off the alley or driveway whenever possible. If parking is permitted on-street, it should be permitted only during restricted hours. Residential parking should not limit or restrict parking or access to the primary business use.

DESIGN AND DEVELOPMENT STANDARDS

Downtown Development Standards

Eudora should regulate the quality of redevelopment and new infill development downtown to foster attractive mixed-use development in the central business district corridor. Important factors to be considered include:

1. Building facade treatment – Standards should be utilized, requiring that the facades of all buildings receive treatment to avoid long conflicts with existing architectural patterns. Rear/side walls should also have some detailing.
2. Building materials – To ensure high-quality building materials compatible with a mixed-use development area, the city should consider prohibiting the use of certain materials, such as Exterior Insulation and Finish Systems (EIFS) and corrugated metal facades.
3. Unique signage opportunities such as projecting, lighted and other artistic expressions should be supported to promote the area as a unique district. However, with the exception of signs identifying and promoting the district in general, off-premise signs (billboards) should not be allowed in the district.

Landscaping and Buffering

Poor transitions between land uses of differing intensity create incompatibility, hardships and long-term negative effects on surrounding development and the community as a whole. Ideally, all transitions between a high-intensity use and a low-intensity would take place along a definitive boundary, separation by a roadway, creek or other physical and visual barrier. Reality proves that these transitions do not often take place along clearly identified boundaries. As such, residential neighborhoods are impacted by the activities of commercial and industrial development. Glare from lighting, unobstructed views of trash dumpsters and loading docks, and noise from daily activities are all problems associated with these transitions. Likewise commercial and industrial development suffers from fierce opposition to development.

In order to minimize these and other similar conflicts Eudora should institute additional landscaping and buffering standards. These standards would specify combinations of landscaping and other screening materials required between land uses of differing intensity as well as for development abutting unique corridors or amenities such as the K-10 Highway corridor or identified gateways. In addition, these standards would specify landscaping required to minimize the impact of other adverse elements of development such as parking lots, loading and unloading areas, above ground utilities, signage and trash collection areas.

Landscaping and Buffering Standards

- Landscaping, screening and buffering should be provided for all new development, redevelopment and expansion, with the exception of improvements or repairs to existing development that do not result in an increase in floor area nor an in intensity.
- Locate transition buffers between uses of differing intensities as identified by the existing and/or proposed zoning classification.
- Require new development to install buffers at the time of development to ensure completion.
- Require transition buffers to meet minimum specifications including width, height, opacity, materials options, and location based upon the zoning classification of both the proposed use and the zoning of the abutting property.
- Allow design flexibility by allowing buffering alternatives such as varying buffer widths, plant material options and options to install fencing, berms or other solid screens in lieu of planting requirements.
- Require screening of visually intrusive site elements such as dumpsters, loading and unloading areas, parking lots and storage areas.
- Continue to require street trees along new public roads.
- Encourage the use of landscaping to create pedestrian scale, minimize monotony of new development and as a component of well-planned site design.
- Encourage the preservation of existing materials and natural grades to provide instant screening.

Residential Development

Good urban design can help new developments relate to adjacent developments to form strong neighborhoods. The land use pattern of a neighborhood plays a major role in determining its strengths and weaknesses. The current Eudora pattern of neighborhoods meets traditional planning standards. Most older neighborhoods are linked in the traditional grid street pattern, which today is called a "neo-traditional" pattern. Neo-traditional concepts should continue to steer new and infill development in Eudora and the City's Planning Area.

Residential land use in Eudora should be driven by a strong emphasis on the implementation and enforcement of the Eudora Zoning Regulations and Subdivision Regulations, while exploring innovative regulatory approaches in response to private sector development needs. The following section contains guidelines based on neo-traditional planning principles for new

and infill development which are recommended to be required through the Zoning and Subdivision Regulations and/or encouraged throughout the plan development process.

Residential Development Guidelines

- Encourage the development of logical, interconnected street grids, and avoid “jigsaw” street systems.

Interconnected, grid-like street systems allow for a more dispersed traffic pattern because there are multiple routes to move from one place to another within the city. A grid configuration of streets helps to minimize peak hour traffic flows. In addition, these interconnected systems are more comprehensible and, thus, easier for visitors and residents alike to find their way around the city. On the contrary, “jigsaw” street systems, with no apparent repetition or order, can be disorienting and tend to funnel traffic to collector-type roads, even for short distance travel. This situation contributes to unnecessarily heavy traffic on main roads at peak traffic periods. It should be noted that a gridded street pattern does not necessarily require all streets to be straight. The design of the roadway system should work with the land. The basic goal for the city's overall road layout is a system of north-south roads that regularly intersect with east-west roads.

- Require the development of tree-lined streets.

Eudora should implement the ambitious street tree program required for new development through the adoption of landscaping and buffering standards. Street trees help maintain long-term property values and neighborhood character. Street trees provide shade for streets and sidewalks, improve aesthetics, and generally encourage pedestrian use of sidewalks. Street trees maintain a ceiling or canopy that further imbue a pedestrian scale to the streetscape. Street trees also help improve transitions between land uses of varying intensity.

- Require landscaping, primarily through preservation of mature trees and existing vegetation.

Trees, shrubs, flowers, and other elements of the surrounding environment of a housing area greatly contribute to the quality of life within that area. Shade, wind breaks, beautification, and attraction of songbirds and other wildlife are all benefits of substantial plant communities within housing areas. By far the easiest way to capture these benefits for the residents of a housing area is to preserve the existing vegetation of a site as it is developed, rather than relying on newly planted materials to grow and mature, slowly recreating an environment which already existed in many cases. Preservation of high-quality vegetation should be required through the adoption of landscaping and buffering standards.

- Require grass or planting strips between curbs and sidewalks.

This separation between the curb and sidewalk provides safety for pedestrians on the sidewalks and creates an area suitable for street-tree plantings.

- Encourage a diversity of housing façade styles and colors in new or infill developments.

Repetitive or redundant façade styles within residential developments tend to diminish the visual interest and perception of quality in an area. Providing several façade styles allows for more individual expression of interest and taste, while minimizing monotony. Simple changes in architectural features such as window and door styles and locations, roof pitches and orientation, color, exterior material combinations, accent elements, and building footprints can provide unique character without major departures from developers' standard housing plans.

- Encourage front porches on new houses.

Front porches allow homeowners to comfortably spend more time near the front yard and street. This creates a greater opportunity to know ones neighbors, maintain a casual surveillance of the area, and thereby maintain a safe residential neighborhood with "eyes on the street." This also reinforces Eudora's desired small-town ambiance.

- Require sidewalks on both sides of residential streets.

One of the most significant elements of small-town atmosphere and function is that residents can easily walk to other places within the community. By placing sidewalks on both sides of streets, pedestrian use is indicated as a priority in the community because of a prominent, safe, and accessible system. Sidewalks also help defined public versus private space.

- Promote the creation of deep lots with houses build close to street to create usable private space.

Deep residential lots allow for more green space within a residential community by providing room for more backyard shade trees, landscaping, and in instances where existing vegetation is nearby, more beneficial wildlife habitat. Houses should be encouraged to be built close to the street to help establish the small-town pedestrian quality of the street environment. Deeper back yards also serve to provide a greater sense of privacy and buffering from surrounding uses.

- Require visually appealing, points of beautification within subdivisions.

The development of points of beautification within new subdivisions can enhance the perception of neighborhood, a characteristic that is important in the development and maintenance of small-town atmosphere. Beautification areas should be encouraged particularly at entrances. However, these beautification improvements should not be encouraged as a means of promoting exclusivity or advertising.

- Implement the City's fence specifications to control type of fencing used in residential areas.

Fences help individual property owners establish a clearly defined space around their homes, which is an important element in developing a sense of security in a residential area. Most fencing types should be allowed in residential areas, however, clear views to front yards and entrances should be maintained. Visual surveillance is an important part of creating a safe neighborhood environment.

- De-emphasize garages extending out from house fronts.

Garages which extend out from the front of a house create an emphasis on the automobile system of a neighborhood, diminish the effects of inviting front doors and porches, and are simply less attractive than the house itself. All of these effects break down the pedestrian oriented quality that is sought for new residential areas in Eudora. A maximum percentage of street façade devoted to garage area should be established as a control measure for visual quality.

- Encourage lots for new residential areas to be no more than approximately ¼ acre in size.

A major goal of Comprehensive Plan is encouraging development that is "cost effective". Lots that are developed at a density of less than approximately 3.5 to 4 units per acre cannot generally be developed with full urban improvements such as adequate sewer, water, streets, street lighting, and sidewalks. In addition, lots larger than approximately ¼ acre, especially those with deep setbacks and wider lot widths, will tend to create a rural residential feel that may conflict with the desired "walkable," small-town character of Eudora.

- Limit sprawl by prohibiting development that causes premature extension of utilities and services.

Identify areas of the City's planning area where there are private sector pressures for urban growth, or where growth pressures are projected to occur during the planning period. Encourage development and extension of city services in those areas as opposed to areas where City services and utilities can not effectively be provided.

- Stabilize older residential neighborhoods and districts.

Establish a Neighborhood Revitalization District for the areas where neighborhood revitalization is an issue, such as north of the Central Business District. The State of Kansas 1994 Neighborhood Revitalization Act (SB 732) provides Kansas cities with the ability to target special districts for revitalization by creating neighborhood revitalization districts. Within these revitalization districts, a rebate to taxpayers in those districts may be granted equal to 100 percent of the amount of the incremental increase in property taxes resulting from improvements made to the property.

The Act is designed to encourage development or redevelopment that otherwise might not occur and to eliminate the concern that some property owners may have about higher taxes which result from new investment in their property. This type of district can also help induce further rehabilitation efforts.

Periodic "Stabilization and Redevelopment Audits" can be used to help determine where a preponderance of conditions exist to warrant establishing a formal redevelopment program. The audit process helps identify targeted areas based on "grading" area development by reviewing identified factors. The higher the number of factors present, the more immediate and aggressive a redevelopment strategy is warranted. Some of these factors are quantifiable while others are subjective.

In order for City officials to ascertain when conditions for redevelopment exist, a combination of the factors should be present in the area under evaluation. These conditions, or factors, may be categorized into three major areas:

- Ownership Factors,
- Economic Factors, and
- Community Factors.

The evaluation of existing neighborhoods not only helps identify neighborhood in need of stabilization, but also set a "benchmark" of conditions in each neighborhood. The factors are then updated periodically, to "track" changes in conditions and record improvements in the community.

Table 6-2 provides a sample list of factors that may be considered.

Table 6-2: Stabilization and Redevelopment Audits – Sample Evaluation Sheet

Applicable Factor	Impact on Commercial	Impact on Residential
Ownership Factors:		
High Vacancy Rate	Yes	Yes
Extended Vacancy Period	Yes	Yes
Deed Restrictions	Yes	Yes
Ownership Changes	Yes	Yes
Non-owner Occupied Housing	-	Yes
Economic Factors:		
Retail Sales Decline	Yes	-
Property Value Decline	Yes	Yes
Lack of Renovation/Remodeling Activity	Yes	Yes
Economic Obsolescence	Yes	Yes
Tax Delinquency/Bankruptcy	Yes	Yes
Community Factors:		
Lack of Property Maintenance	Yes	Yes
Land Use Obsolescence	Yes	Yes
Physical Obsolescence	Yes	Yes
Environmental Concerns	Yes	-
Safety Concerns	Yes	Yes

Non-Residential Development

Non-residential development is often the most visible representation of a community's character. As such, the City should carefully consider non-residential development proposals to ensure that the proposed development is well designed and that the character projected is a desired representation of the Eudora Community. The following guidelines are intended to supplement the City of Eudora's regulatory review process. Each of the design elements or sections includes a statement of purpose and a listing of key issues.

The guidelines should be officially coordinated with adopted zoning and subdivision regulation amendments; however, the process is intended to remain flexible. The applicant is encouraged to propose innovative alternatives that accomplish the stated purpose of the guidelines.

The intent is for staff to use the guidelines in initial discussions with applicants as they prepare submissions. Upon receipt of a rezoning request, concept plan, or site plan, the staff would evaluate the request based on its compliance with guidelines or upon how effectively it

addresses the intent of each section through alternative solutions. The applicant should clearly show how he addressed the key issue(s) with supportive information and data.

When an applicable zoning case, circulation plan, land use plan, preliminary site plan, or site plan is presented to the Planning Commission and/or Governing Body the staff's recommended action will be included. Staff's recommendation should be based on its determination of the proposal's conformance to the guidelines and/or its effectiveness in meeting the purposes and issues of the various design elements.

General Considerations

In reviewing development proposals, such as in site plan reviews, the city should promote orderly non-residential development which is compatible with residential land uses.

- Cluster neighborhood centers, at the arterial roads that connect to the highways;
- Coordinate major thoroughfare improvements with patterns of non-residential growth so that streets can accommodate increased traffic volumes;
- Create strong continuous corridor edges using either consistent building setbacks or continuous sequences of plant materials, lighting fixtures or compatible signage;
- Minimize curb cuts and median breaks along collector and arterial roads;
- Require adjacent non-residential uses to design internal connections between parking lots to minimize street traffic and curb cuts;
- Require all non-residential developments to be pedestrian-oriented with clearly identified walkways between parking lots and buildings;
- Lighting for businesses and parking lots should be low glare and designed so as not to shine directly into adjacent residential areas;
- Where possible, encourage the location of developments internally to the site, maintaining a solid vegetated edge along thoroughfare frontage;
- Require substantial vegetated buffering and screening of distracting and unsightly development elements;
- Require substantial vegetated buffering and screening between non-residential uses and residences, and other incompatible land uses;
- Require non-residential development to maintain required landscaping and improvements.

PARKS AND RECREATION IMPROVEMENT STRATEGIES

Approach

The commitment by the City Council should proceed in six categories: a) departmental staffing; b) financial; c) system process improvements; d) understanding and responding to citizen expectations; e) inclusion of the Parks and Recreation Board into the decision-making process (governance); and, f) parks.

Staffing

The City's decision to hire a full-time Director has been recognized by citizens as a very positive move. It is important for the City to recognize that the benefits to the community from having this position will continue to be positive if the following occur:

1. pay is commensurate with the responsibilities of the position;
2. the job description for the position is clearly defined;
3. the Director is involved with the Parks and Recreation Board in the decision-making process on all parks and recreation matters which come before the City Council;
4. the Director is provided with reasonable necessary resources with which to perform the job;
5. an office manager is provided to assist the Director.

Financing

A dedicated funding source for capital expenditures, park maintenance and recreation program should be identified and approved by the City Council. Continuity in these funding categories lends itself to the creation of an environment within which short and long term planning can occur. The value of planning is that the City can encourage its staff and partners (School District, civic clubs, developers, special interest groups) to work together to leverage dedicated funds for the improvements that citizens will support.

Process

Important to the success of the Parks and Recreation Department, is the recognition of the processes it will use within the City structure to function. Some of the processes will include: purchasing, personnel, coordination with other City departments, budgeting and reporting. Within these processes, the City must ensure that purchasing procedures are modern and not prohibitive to efficient operations (spending limits for routine purchases should be evaluated); a spirit of cooperation between departments is an expectation taxpayers have as they financially support all City services; inclusion of the Parks and Recreation Board and staff in the decision-making process at the City Council level is important as parks and recreation issues are being discussed.

Citizen Expectations

The City should use a statistically valid citizen survey immediately to determine the level of citizen support for facilities and programs and their willingness to pay for each. Since the department is new, it is especially important to immediately understand these issues so staff, the Parks and Recreation Board and City Council can efficiently and effectively use available resources to provide citizens with improvements which they will support.

Governance

The City can build upon the existing culture of cooperation within the community as it works with its staff, Parks & Recreation Board, School District and special interest groups to provide facilities, services and programs that citizens support. Some suggestions to build upon the existing foundation are:

1. An annual meeting between the City Council and School District should be held to discuss policy matters of concern and opportunities which should be pursued in the future;
2. An annual recognition luncheon for the volunteer groups who support the community should be held. Examples might include those who organize activities, serve on committees, provide facility maintenance, or park improvements.
3. Inclusion of the Parks and Recreation Board and staff in the decision making process. Any parks and recreation issue coming before the elected officials should be discussed at the Board level first with a recommendation coming from it to the City Council.

Parks System Master Plan

The City should work to develop a park system master plan. The master plan would benefit the City by documenting the current condition of parks and facilities; identifying key issues which need to be addressed; opportunities for addressing key issues; and a step-by-step implementation plan for the realistic and practical things that should be done with associated costs, accountable persons for implementing the changes, and specific timetables for when the changes should be completed.

During the process, the City should focus on identifying the unmet needs of the community. As is typical, the expectations of organized groups are well documented. On the other hand, that is not the case with “silent majority” whose needs are not known; in fact, their expectations may be unmet. For this reason, it is recommended that a statistically valid citizen survey be completed in concert with a park system master plan to determine what unmet needs exist in the community. Identifying and understanding these needs empowers the City with the ability to target needed and desired facilities and services. The resulting identified needs then serve as a foundation for the Master Plan.

Parks and Recreation Management

The following management strategies are recommended to improve awareness of needs and coordinate between the City, user groups, program and facilities providers, and volunteers.

- Activity Based Costing – A system should be established to identify and document costs currently allocated for parks and recreation activities.
- Program Facilitation (User Groups) – The Parks and Recreation Director must formally meet on a seasonal basis with user groups to determine their level of satisfaction with current services and to record their suggestions for future change (s).
- Program Facilitation (Providers) – The Parks and Recreation Director must formally meet on an annual basis with the Eudora School District’s facilities director and any other provider whose facilities are being utilized by citizens for their leisure needs. Because the City, School District, and perhaps some private providers are collaborating to provide services, it is important to meet to ensure that program and facility duplication are kept to a minimum.
- Program Facilitation (Volunteers) – The parks and recreation staff person must meet seasonally with the volunteers who are involved with the organized programs. Additionally, there may be volunteers who are involved in the park system with flower gardens, park projects, etc. who must be communicated with as need be.

Volunteerism

Volunteers are important in the provision of park maintenance, park improvements and recreation programs. The City should do the following to encourage volunteerism:

- Prepare and distribute a brochure which identifies City needs where volunteers can be involved;
- Document the number of volunteer hours which are contributed to the City each year; and
- Formally recognize volunteer efforts on an annual basis. At the formal recognition event, mention the savings to the community resulting from their efforts.

Maintenance

The City should strive to allocate approximately \$1700 per acre of developed parkland for annual maintenance. This figure does not include capital expenditures. On a national level, this amount is not considered to be very high; however, it is competitive with communities in Kansas of a similar size as Eudora.

The minimum expectation for increased funding for park maintenance should include a mowing cycle of seven (7) days, trimming each time parks are mowed, daily trash pickup, annual

painting of park benches, trash cans and other facilities and equipment as needed, and timely response to urgent situations which surface during the year (not major capital outlay items).

Parks & Recreation Implementation Program

1. The City Council should commit to its parks and recreation department. The commitment will be within the context previously discussed in this chapter and targeted for the benefits a strong park system can provide a community. Those benefits are in the areas of: environmental, social, individual and economic. Specifically, strong parks and recreation programs have the ability to:
 - **Provide benefits to the environment** by connecting people with and educating them about nature. In addition, greenways can provide alternative transportation opportunities. Parks and open space are essential weapons in the City's arsenal against environmental degradation.
 - **Provide social benefits** by connecting people with neighbors of other ages, incomes, backgrounds and abilities. Parks and recreation can build community pride and spirit.
 - **Provide benefits to individuals** by promoting physical fitness and self-improvement. Opportunities for exercise and being outdoors result in greater physical fitness, emotional well-being and connectivity to nature.
 - **Provide economic benefits** by improving the quality of life in the City and helping to attract businesses and residents. Top-rate parks and recreation programs and facilities can be a competitive advantage for Eudora in economic development.
2. The City and School District should meet annually to confer about their dual role of providing facilities for use by citizens.
3. The City should ensure that a park system master plan is completed. The Plan will guide the City as it moves toward the upgrading of its current system and plans for future improvements by working in collaboration with its partners.
4. The City should initiate the process of documenting its costs for the facilities and services it currently provides in its parks and recreation department. Those costs can be used as the City considers fees, annual budgets and partnerships with others.
5. The City should schedule a formal recognition ceremony for its volunteers who have worked over several decades to ensure that services are provided.
6. The City should plan to expend \$1,700 per acre for maintenance of its developed parks.

7. The City should increase its ownership of parkland. Of importance is the development of a community park and neighborhood parks in those areas that do not currently have equitable access to one.
8. The City should develop a trail system that links neighborhoods to parks and to the school facilities.
9. The City should proceed with the design and construction of a trail system that links neighborhoods to parks and school facilities.
10. The City should proceed with its plans to modernize its outdoor swimming pool.
11. The City should analyze its commitment to staffing of the Parks and Recreation Department. The analysis should include pay, staffing levels, clarification of responsibilities and discussion of any issue that can be corrected to ensure that the Department is considered to be a good place to work.
12. The City should partner with the school district to provide additional game fields including soccer fields on a temporary basis until permanent locations can be developed.
13. The City should identify and implement a dedicated funding source for parks and recreation.
14. The City should utilize its Parks and Recreation Board and staff on all matters which come before it by first seeking a recommendation from the Board.

CAPITAL IMPROVEMENT PROGRAM

Planning is both process-oriented and production-oriented. The first step is to maintain an up to date Comprehensive Plan, a process that typically involves four entities—city staff, the Planning Commission, the public at-large, and the City Council. The second step is to implement the plan. Implementation tools include the capital improvements program (CIP).

Within the context of the Comprehensive Plan, many of the community's needs, desires, and goals have been discussed. The capital improvements program (CIP) provides an annual process of identifying and establishing priorities for specific improvements in order to achieve those goals—not just next fiscal year, but several years in the future. A more formal, 5-year CIP process includes more public involvement and helps assure fiscal implementation. This section, then, recommends both a process by which a capital improvements program can be developed, as well as a procedure by which projects can be ranked.

The Process

In order to be effective, a capital improvements program (CIP) must integrate community desires and goals in a formalized process of needs assessment and financial programming. The City of Eudora has long followed an informal CIP planning process. The Comprehensive Plan establishes a more expanded process to more formally include the Planning Commission and the general public, along with the City Administrator, Department Heads and the City Council to adopt the CIP. The more formal process would include invited participants in an annual workshop to review the needed projects, the goals of the plan and the budget available for capital improvements. The meeting may be made a part of an annual plan update prior to budget adoption. The City Administrator and other staff should facilitate the meeting.

The Capital Improvements Planning Process

In order to be effective, a capital improvements program must integrate community desires and goals in a formalized process of needs assessment and financial programming. The process includes six major steps:

1. The "Capital Facilities Committee" - a group of key City department heads and other key City staff members—appointed by the City Council—is recommended as a start to the CIP process. The City Administrator should lead the “Capital Facilities Committee.” In addition, one City Council member and one Planning Commissioner may be appointed by each of these bodies. The committee would be responsible for establishing an inventory of capital needs within their respective areas of concern, undertaking an evaluation of project requests (next year and in five years), describing each proposed project in sufficient detail for others to understand, and, as a group. Further, the committee would provide a preliminary ranking of each project relative to the funding cycles:
 - near-term (1-5 years) and
 - long-term (6-10 years).

The approach mirrors the general procedure for project budgeting in Eudora at this time except that the time frame is longer term, and the elected and appointed officials would be brought in at the earliest point in the process to represent the City Council and Planning Commission.

2. Administrative and Fiscal Review - the City Administrator, as the chief administrative officer should provide the first administrative and budgetary review in the capital facilities program process. Two key responsibilities of the City Administrator will be to check the program for consistency with both legal requirements and previous years' plans, and to make a preliminary check for financial integrity.

3. The Planning Commission - the Comprehensive Plan provides the Planning Commission with a role in the CIP process. The primary responsibilities of the Planning Commission in the CIP process should be twofold. First, the Planning Commission should receive the Capital Facilities Committee recommendations in a regular meeting, review projects and ensure that recommendations within the CIP are consistent with the Comprehensive Plan. Second, the Planning Commission should make comments back to the Capital Facilities Committee. The City Administrator and his designated staff should manage the CIP process, providing research and administrative expertise, and act as liaison to the Capital Facilities Committee.
4. The Public - to maintain the integrity of the Comprehensive Plan and achieve established community goals, the citizens of the City should play a role in this process. The City Council should invite the public to a public hearing to comment on the recommendations of the Capital Facilities Committee.
5. City Council Workshop - capital facilities programming involves many complex issues of both budgeting and development for the City. Because of the complexity of development in a growing, full-service community, detailed study should be undertaken by elected officials prior to adoption of the CIP. The City Council should hold a workshop to consider the reports of the Capital Facilities Committee. The City Council Workshop will allow the Governing Body to study the proposed CIP in detail, reviewing projects for their consistency with public policy and assuring financial soundness. The City Council should refine the draft ranking of proposed projects, with the City Administrator directing the administrative role, and the other members of the Capital Facilities Committee assisting in the research and recommendation process.
6. The City Council Adoption - finally, after rankings and reports from the Capital Facilities Committee—as submitted by the City Administrator—the City Council will adopt the plan.

It should be kept in mind that this process is not linear as suggested here, but cumulative and circular. At the end of each budget cycle, the process begins again, building upon the work of the previous year.

Priorities Setting

When the capital improvements process begins, the initial list of projects are little more than a cataloging of needed and desired projects. As the Capital Facilities Committee establishes its recommendations, the ranking of projects should become more formalized, based upon a given set of considerations. Further, these considerations should follow throughout each level of refinement. At a minimum, each project should be evaluated and scored based upon five major factors, each of which has sub-elements to consider. The relative weight given to each element in the ranking system is largely up to City's policy makers. For the purpose of this discussion, each of the five major considerations is weighted equally, on a basis of one to five, with five

indicating the greatest degree of need. The ranking system, then, is based upon the elements described below.

1. Maintenance

- Ordinary - is this a project which may be necessary and improve the quality of life, but is not essential and could be postponed to a later year (example: street reconstruction)?
- Continuation - is this project a continuation of a preceding year's on-going effort and therefore worthy of a higher degree of consideration?
- Imminent - is this a project that represents some threat to the public health or safety if not undertaken? A failure in a sewage system would rank highly, while a nonessential bridge which could be temporarily closed might rate less highly.

2. Development/Redevelopment

- Support of Revitalization - does the project support revitalization, such as in downtown along Main Street or the corridors leading to the Downtown, as advocated in the Comprehensive Plan?
- Stabilization of Decline - a project which seeks to stem physical decline, might receive a higher rating than one within a blighted area because it can be seen as eliminating a greater problem before it occurs.
- New Construction – does the project implement the Comprehensive Plan's projection for development in the planning area? Because projects which encourage new construction and infill development in older areas of the community are as important in many instances as projects in new areas, they too should be given consideration in the programming process.

3. Public Policy Support

- Comprehensive Plan - projects which serve to implement the goals of the Comprehensive Plan—particularly to serve growth in the designated Growth Areas where sewer and water service can be most cost-effectively extended—should be given immediate consideration.
- Political Considerations - political reality is a part of the capital improvements programming process. Consequently, consideration should be given to projects which achieve campaign promises, encourage intergovernmental cooperation, and/or implement federal or state mandates.

- Geographic Distribution - it is difficult for a CIP to be successful over the long-term if all projects are concentrated within a limited area. Consequently, both the historical and current year distribution of projects should be considered in the ranking process. Clearly, the future land use plan of the current Comprehensive Plan update should direct the public policy here. Investment, for example, where sewer interceptors are planned or under construction within a single drainage basin—or phased to coordinate among two or three basins—should be a guiding factor.
- Timing - it is critical to allow financing of timely projects, such as matching funds for state grants. The CIP process should be flexible and re-evaluated to accommodate such circumstances; and the availability of such funds should be factored into the ranking. Private sector initiative should be evaluated and support with public projects, so that growth is served adequately.

4. Investment Opportunities

- Term - consideration should be given to whether the implementation of a project has an immediate impact on the community.
- Characteristics of the Investment - some projects, by their very nature, affect competition in the market place. For example, a major capital improvement, funded by the community at-large, for a retail-commercial development, should not be given as high a ranking score as one for industrial development. The City has a high degree of competition in the east-Kansas industrial market place and such an investment could provide one developer an unfair advantage over another. Public investment to encourage industrial development is a beneficial expenditure of public revenues.
- Leverage - a project which leverages monies from other sources (grants, private investment, special assessments, etc.) might be rated more highly than one which stands alone; particularly if the "window of opportunity" is small and a program must be taken advantage of immediately, such as KDOT TEAP funding or T21 improvements.
- Uniqueness and/or Innovation - some projects represent a unique opportunity to the community. These projects, then, should receive additional consideration.

5. Debt Capacity

- Availability - clearly the ability of the community to fund improvements must be a consideration. Consequently, a project that utilizes currently budgeted funds should be rated higher than a project that requires a tax bond vote.

- Revenue Source - some projects may receive a higher rating because of the way in which they can be funded. For example, a project funded by a revenue stream unique to that project may be rated more highly than one which requires general obligation debt. In addition, projects which are funded by an equitable distribution of monies based upon impact may also rate more highly than one which requires an unfair collection of funds.

As each project is considered, based on the above described factors, some projects may rate highly under each category, some may rate well in some categories and less well in others, and some projects may receive no rating within a given category. This system attempts to provide a degree of objectivity to a process that is often as much art as science. However, if carefully followed, the Comprehensive Plan should be implemented, public trust should be enhanced, and limited public funds should be expended in a more efficient manner; hopefully encouraging complimentary investments from other sources.

Finally, both the relative weight placed on a rating category and financial limitation are important elements to the review process. Consequently, it would be helpful if the City Council, as the primary policy makers of the City, would provide guidance on the availability of funds for capital improvements programming. As the process continues over time, the Planning Commission will become better able to make recommendations to the City Council; they will better understand the funding limitations, become more aware of the needs for an emergency fund reserve, and, hopefully, become better informed concerning the differences between "planning" decisions and "political" decisions.

Project Scoring

When considering capital improvement projects and determining budgetary priorities, the following scoring considerations will aid in project comparison.

1. Project Number: (department abbreviation, year first proposed)
2. Project Description
3. Project Cost
4. Proposed Revenue Sources
5. Composite Priority Score

The composite score is the sum of the element scores, which are in turn averages of the sub-element scores. Scores are based on a scale of zero to five. A zero means the element or sub-element has little or no bearing on the ranking of the specific project. A five means that within that sub-element, this project rates as well as is possible. A sample scoring sheet is show in **Table 6-3**.

Table 6-3: Capital Improvement Program – Sample Scoring Sheet

Project No: _____		Project Description: _____	
Element	Sub-Element	Sub-Element Score	Element Score
Maintenance			<input type="text"/>
	Ordinary	<input type="text"/>	
	Continuation	<input type="text"/>	
	Imminent	<input type="text"/>	
Development/ Redevelopment			<input type="text"/>
	Support Revitalization	<input type="text"/>	
	Stabilization of Decline	<input type="text"/>	
	New Construction	<input type="text"/>	
Public Policy Support			<input type="text"/>
	Comprehensive Plan	<input type="text"/>	
	Political Considerations	<input type="text"/>	
	Geographic Distribution	<input type="text"/>	
	Timing	<input type="text"/>	
Investment Opportunities			<input type="text"/>
	Term	<input type="text"/>	
	Investment Character	<input type="text"/>	
	Leverage	<input type="text"/>	
	Uniqueness/Innovation	<input type="text"/>	
Debt Capacity			<input type="text"/>
	Availability	<input type="text"/>	
	Revenue Source	<input type="text"/>	



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APPENDIX A: FOCUS SESSION RESULTS

FOCUS SESSION OVERVIEW

The City of Eudora “Focus Session” was held in July 2001. The session provided an opportunity for residents, landowners, business and civic leaders, and other community stakeholders to identify issues that are critical to the City’s future. The session was open to the public. Over 50 residents, business owners and elected officials from within the City of Eudora gathered and identified issues that would shape the City for the next 20 years.

The process for Issues Identification used at the Focus Session was a structured idea-sharing process. Participants identified issues as a group and then refined, clarified and prioritized issues in “break-out” groups. The breakout groups discussed the following series of issues:

- **Land Use and Infrastructure:** Issues discussed related to the planning for and funding of infrastructure improvement and the intensity of land uses in and around the City.
- **Economic Development:** Issues discussed related to attracting and providing services to new commercial and industrial developments along with preserving downtown.
- **Quality of Life:** Issues discussed focused on factors that influence the beautification of Eudora and portraying a positive image to potential residents and businesses.

Information from the Focus Session served as a basis for a follow-up “Policy Planning Charrette” workshop held in October 2001 (Ref. **Appendix B**). During this second workshop, participants collaborated in study groups—with detailed “Workbooks” and area maps—to develop community policies and “action steps” for the critical issues as follow-up to the work completed during the Focus Session.

Following is a discussion of the issues identified during the Focus Session, including the top five issues as ranked by each of the break-out groups.

Land Use and Infrastructure Issues

During the large group discussion it became clear that a key challenge facing the City of Eudora is the development of infrastructure and the methods to fund these projects. Other items that will need to be addressed through the Comprehensive Plan process are identifying amendments to the zoning and subdivision regulations that are necessary to accomplish the City’s desired goals. All of the information gathered will be evaluated and utilized in the formation of the Comprehensive Plan for the City of Eudora.

Top 5 Issues:

- Improve street infrastructure- specifically the Winchester Loop. (28)
- Evaluate the timing and plan for major utility expansion. (20)
- Develop a fiscal policy for utility improvements. (17)
- Widen County Road 1061 providing sidewalks and pedestrian access across K-10. (14)
- Plan for an interchange at the intersection of Winchester Road and K-10 Highway. (12)
- Evaluate residential lot sizes along with landscaping and buffering requirements. (12)

A complete list of all issues identified during the large group exercise with a short narrative follows:

Improve street infrastructure- specifically the Winchester Loop.

As indicated by the number of votes this issue received, it is clear that this is a critical issue facing the City. The Winchester Loop is considered Winchester Road from County Road 442 south to 20th Street and 20th Street east to County Road 1061. After the completion of the route, east/west and north/south Eudora will be better connected. Additionally, the route will alleviate traffic on neighborhood streets north of K-10 Highway.

Evaluate the timing and plan for major utility expansion.

Major utilities include sewer and water lines, electrical lines, streets and sidewalks.

Utility planning is very important, in that it indicates to potential developers where infrastructure improvements will be made. As a result, the City is able to be responsive to existing residence and business owners needs along with future developments in a coordinated effort.

Develop a fiscal policy for utility improvements.

While the group sees the need to make infrastructure and utility improvements they also realize there is an associated cost with this. Several methods of funding were discussed including Benefit Districts, Impact Fees, and Development Fees.

Widen County Road 1061 providing sidewalks and pedestrian access across K-10 Highway.

Currently, County Road 1061 is the sole improved north/south connection between north and south Eudora. The road also is the direct route to the existing High school and potentially a middle school, however no pedestrian access is provided across the K-10 Bridge or along most of the road leading to and from nearby neighborhoods. Lastly, wider shoulders would provide an additional safety element for drivers and pedestrians alike.

Plan for an interchange at the intersection of Winchester Road and K-10 Highway.

The development of an interchange at the intersection of Winchester Road and K-10 Highway offers extensive growth opportunities for the City. However, funding of the interchange is out of the City's hands. The Kansas Department of Transportation determines where the next

highway interchange will be built and ultimately funds the project. Therefore, this issue may not be a near term project but rather a long-range goal. The City can take steps to ensure that adequate right-of-way is dedicated to allow for the interchange along with planning and building the needed infrastructure such as a parallel arterial road to support future development.

Evaluate minimum residential lot sizes along with landscaping and buffering requirements.

Concerns were raised regarding the minimal acreage difference between the Estate Residential (ER) and the Low Density Residential (RS) (500 square feet). Due to this concern the minimum lot size of all residential districts should be reevaluated.

In order to mitigate any potential problems with adjacent incompatible uses landscaping and buffering requirements need to be evaluated and revised as needed.

Other Issues Identified:

Provide an additional east/west corridor north of K-10. Concerns were raised that there are no sidewalk connections provide to either the school or the pool. Currently, 12th street carries a significant amount of traffic therefore an alternate street may need to be evaluated.

Need for more industrial and commercially zoned land. Several participants felt that as the current City Industrial Park fills up the City should be proactive and evaluate areas that would be appropriate for commercial and industrial development. One of the products of the Comprehensive Plan will be a future land use plan which will provide guidance to the Planning Commission and City Commission on acceptable locations for commercial and industrial development.

Evaluate the City's Transportation Plan. Currently, the majority of traffic is carried by several corridors, which travel through residential neighborhoods. Additionally, pedestrian and vehicular traffic are in direct conflict with each other. To mitigate these problems a road hierarchy needs to be established, maintained and future road need to be constructed to meet the City's needs.

Annex areas around the high school and to the west of the existing city limits to the Wakarusa River. It was indicated in the breakout session that the City is not currently in a position to actively annex surrounding properties, however, the City is willing to annex those residents that wish to be within the City Limits. It was also noted that the City will need to begin to budget for strategic annexation which will allow the City to grow in population along with the potential for increased tax base.

Provide additional areas for multi-family housing along with developing a distinct district for manufactured housing. While some felt as though there was a need for additional multi-family housing many of the participants were of the opinion that City did not need any more at

this time. There was little discussion regarding the development of a distinct district for manufactured housing.

Quality of Life Issues

Eudora benefits from both its small town character and close proximity to metropolitan communities. The group identified quality of life issues that would help strike a balance between growth and quality, focusing on community character and services. While close to major facilities in the Kansas City and Lawrence Metro areas, Eudora must invest in community assets that service the community in their hometown. Similarly, Eudora must strive to retain and capitalize on the City's established character.

Top 5 Issues:

Adopt and implement a Park Master Plan, including shared uses, linear parks, neighborhood parks, and a major community park. (20)

Establish private and public design standards with regard to street trees, parking lot landscaping and buffering and commercial and multifamily design, etc. (18)

Expand public library facilities. (14)

Develop a community center. (13)

Link North/South and East/West Eudora. (11)

A complete list of all issues identified during the large group exercise with a short narrative follows:

Adopt and implement Park Master Plan, including shared uses with the school district, linear parks, neighborhood parks and a major community park.

Develop a comprehensive parks and recreation program and facilities in cooperation with other public/private users.

Evaluate methods of acquiring land either through purchasing or through dedications associated with development.

Develop parks: neighborhood and community parks.

Establish private and public design standards with regard to street trees, parking lot landscaping and buffering and commercial and multifamily design, etc.

Participants felt as though the beautification of the City will build pride in the community along with enticing people to live and shop in Eudora rather than surrounding areas such as Kansas City or Lawrence.

Expand public library facilities.

Evaluate opportunities to partner with the school district to offer large and better library facilities. With the partnership additional programs could be offered and still be cost effective.

Develop a community center.

Recreation activities and programs should be provided for a diversified group taking into consideration: age, gender and education.

Link North/South and East/West Eudora.

With the development of better pedestrian access (sidewalks, bike trails) connecting north/south and east/west Eudora an improved sense of community will be created. Additionally, the new pedestrian paths will help mitigate existing vehicular and pedestrian conflicts.

Other Issues Identified:

Preserve historical structures in Eudora. Several participants indicated that there are structures in Downtown Eudora that represent the history of Eudora and Douglas County, such as the building in which Quantril stayed in the night prior to his raid on Lawrence. Downtown business owners and building owners noted that some of the building were worth saving and rehabbing, but others are in such disrepair that everyone would be better off if the were torn down and new buildings were constructed.

Provide a transition or buffer between land uses. This concern was also raised in the Land Use and Infrastructure breakout group and the solution was to evaluate the zoning regulations regarding buffering and landscaping required with new developments. The existing regulations can be modified or new requirements can be developed to mitigate any problems between incompatible uses.

Evaluate the feasibility of land uses prior to annexation. Participants saw the need to plan for phased growth prior to extending services to new areas. Annex accordingly.

Establish a community daycare/preschool. Currently few options exist for quality daycare locally. More choices need to be provided.

Enhance public safety. Make sure that local police and fire services are at acceptable standards.

Economic Development Issues

Being so close to the City of Lawrence poses unique challenges and opportunities for the City's economic health. Population growth in the last decade and the current growth trends provide a great opportunity for economic growth as well. The group identified several businesses and developmental issues that are necessary to improve the investment and the overall economic climate of the City of Eudora. The group felt that it is important that growth be accommodated, but that the growth must be conducive to Eudora's quality of life, uniqueness and character.

Top 5 Issues:

Attract more businesses and Industry. Plan commercial parks with appropriate infrastructure and zoning.

Revitalize and develop the downtown business district while building upon historic elements

Plan commercial areas/businesses near the interchanges along K-10

Provide vocational training to improve the skill level of the existing workforce.

Provide greater housing diversity. Plan infrastructure especially high-end housing.

A complete list of all issues identified during the large group exercise with a short narrative follows:

Attract more businesses and industry. Plan commercial parks with appropriate infrastructure and zoning.

The City needs to market commercial opportunities aggressively. Retail and office space should be encouraged along with light industrial uses.

The City should explore opportunities with larger cities like Lawrence and Kansas City, such as partnership with the Kansas City Bio-Science initiative.

Commercial parks equipped with infrastructure and zoning should be in place in order to set up an appropriate climate for attracting businesses.

Tax and other financial incentive opportunities should be explored but should not be used indiscriminately.

The City should also focus on business retention and aid for ailing businesses.

Revitalize and develop the downtown business district while building upon historic elements.

The downtown historic district should be expanded to include parts of Maple Street.

Historic elements should be preserved and the character of the district enhanced.

Mixed uses such as specialty retail, restaurants, offices and some multi-family residential units should be encouraged in the district.

The park should be expanded.

Plan commercial areas/businesses near the interchanges along K-10 and in other new areas.

The interchanges along K-10 should be used as prime commercial and mixed-use areas.

The land along the Santa Fe Railroad should be encouraged for light industrial uses.

Provide vocational training to improve the skill level of the existing workforce

Explore opportunities such as establishing partnerships with regional vocational schools and Community Colleges (satellite classrooms).

Discuss with local businesses their employment needs and use this data to determine which training and educational opportunities will meet the current market needs.

Provide greater housing diversity. Plan infrastructure especially for high-end housing.

The City needs more high-end housing options. Currently people are forced to leave town if they want to move into more expensive housing.

Annexation should be considered in order to provide land for more expensive housing.

Other Issues Identified:

Incorporate urban design principles and green linkages while planning for economic development.

This is important to prevent the mistakes of other suburban cities that have attracted too much commercial development at the expense of the town character and identity. An example is to incorporate hike/bike trails into industrial developments.



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Appendix B: Policy Planning Charrette Results

CHARRETTE OVERVIEW

The Eudora Comprehensive Plan is a “blue print” or guide for the future of the community. In order to gain crucial public insight into issues facing the future of Eudora, a “Policy Planning Charrette” was held on Tuesday, October 2, 2001, as a follow-up to the “Focus Session.” Approximately 50 persons participated in the Charrette, representing a broad cross section of interest and expertise. The focus of the Charrette, an interactive planning workshop, was to gain detailed insight into the community’s preferences, strategies and desired policies for current and future development as well as to build consensus on actions to be taken to reach the community’s goals.



Participants collaborated in teams throughout the evening to identify potential solutions to top community issues, and record preferences and opportunities for the future of the community.

During the Charrette, community stakeholders collaborated in teams on detailed questions. Questions were prepared based upon information from Planning Commission and Steering Committee meetings, demographics summaries, population forecasts, goals and objectives from the current plan and input from the “Focus Session.” The teams summarized their discussions in workbooks and on maps of Eudora and the surrounding community. Throughout the Charrette issues were discussed in terms of both the near-term and long-term plans.

Participants were asked to identify specific examples and preferences relating to the questions and issues discussed. The Charrette “Summary Map” is a graphical summary of this input provided by Charrette Participants (see attached). This information is supplementary to the written comments summarized on the following pages. Comments are organized by the three major categories identified during the Focus Session:

- **Land Use and Infrastructure:** Issues discussed related to the planning for and funding of infrastructure improvement and the intensity of land uses in and around the City.
- **Economic Development:** Issues discussed related to attracting and providing services to new commercial and industrial developments along with preserving downtown.
- **Quality of Life:** Issues discussed focused on factors that influence the beautification of Eudora and portraying a positive image to potential residents and businesses.

The following statements and planning objectives are based on a summary of the ideas expressed at the Policy Planning Charrette workshop.

CHARRETTE RESPONSE SUMMARY

Future Land Use, Infrastructure and Our Community

1. **Residential Growth.** Population projections for Eudora indicate the population will grow by over 2,000 people in the next 20 years, requiring the construction of approximately 800 new homes. This growth will require substantial amounts of previously undeveloped land to be developed.

Participants reached consensus that higher intensity development should continue to be focused around the K-10 Highway corridor, particularly south of K-10 and at the existing interchanges. Following this pattern, opportunities for the residential development were identified based on the following patterns:

- a. Moderate to High Density Residential – multi-family to small-lot single-family housing:
 - Focused around other higher density uses near interchanges; and
 - As a component of mixed use development south of K-10.
- b. Low to Moderate Density Residential – duplex and average-lot housing :
 - Expand existing development patterns near the school south of K-10;
 - Focus on single-family development north of K-10; and
 - Develop the large tracts available west of Winchester primarily for low to moderate density housing.
- c. Low Density Residential – Rural development and those without sewer:
 - Rural density should be restricted to areas outside the City limits beyond the planned growth areas to ensure the ability to expand and to provide cost effective services.

- d. **Manufactured Home Parks:**
 - Participants felt the manufacture homes currently available were sufficient to meet market demand, and that a focus on multi-family development would be more appropriate; and
 - If new manufacture home lots or parks are to be developed, they should be built to specified residential design standards.
- e. **Elderly Housing – continuum care and group homes:**
 - Elderly housing opportunities exist by the cemetery north of 10th Street and near the nursing home south of 15th Street.

2. Commercial Growth. In order to provide the goods and services for a growing community, capture local dollars and create employment opportunities, commercial expansion is needed. In general commercial development opportunities were identified along the K-10 Corridor and near interchanges, following existing commercial development patterns. Because of limited access to the west, commercial development should be restricted to areas around the intersections of K-10 and County Road 1061, and K-10 and County Road 442. Commercial development other than potential neighborhood service uses should not be developed at Winchester Road and K-10 unless an interchange is developed.

- a. Highway commercial areas, serving the motoring public, should be focused around the interchanges with K-10 Highway. This location reduces the impact on residential development and captures higher traffic volumes associated with the highway. Access restrictions and good traffic planning must be a key component of highway commercial development to ensure that the interchanges, which serve as primary access points, do not increase congestion or create unsafe traffic situations.
- b. Community oriented commercial areas are currently focused north of the K-10 interchange along County Road 1061 (Church Street). Because substantial residential development opportunities exist south of K-10, future commercial services will need to be provided in this area as well. This development would be best suited to the K-10 corridor, abutting the highway, providing easy access and separation from residential uses.
- c. Neighborhood shopping or service areas are needed in west Eudora. New residential development in this area would benefit from the development of neighborhood service commercial development.

3. Industrial Development. Industrial development accounts for much of the employment in Eudora. Opportunities for industrial development exist north of the existing industrial park, off of the County Road 442 interchange. Limited light industrial development could

be part of a mixed-use development or business park development south of K-10 between County Roads 1061 and 442.

4. **Office/Institutional Growth.** Greater demand for governmental and institutional services such as schools, community centers and other public service centers will be increased as a result of a greatly increased population. Likewise, populations increases will attract a greater variety of employment center opportunities. Office and institutional growth should be coordinated with other development opportunities such as a mixed-use development south of K-10, the creation of a community services or community center near downtown, or as part of existing expansion plans for the school district south of K-10 Highway.
5. **Park and Recreation Growth.** As Eudora continues to grow, increased demand will be placed on existing parks and recreation facilities. For this reason the City must ensure adequate park and open space dedication and development as part of residential growth. In particular, opportunities to partner with the school district were noted. In order to provide adequate access to the parks and recreation facilities, residents of the community feel the development of a complete sidewalk system and trail or linear park system is also necessary, such as a linear park along K-10 and following the central tributary.
6. **Serving Existing Development and Responding to Growth.** As the City continues to grow, a balance must be created between old and new growth. Issues such as poor water pressure in areas south of 15th Street must be addressed. In order to serve future growth, complete utility systems must be planned and implemented. In particular, areas south of K-10 are in need of sewer service with areas west of Winchester Avenue in need of sewer and water.
7. **Street Network and Traffic Safety.** Connectivity within a community is a key aspect of growth, viability and service. To improve connections, access and traffic safety, several major improvements are needed including:
 - Improve County Highway 1061 from 12th Street to the High School, including sidewalks;
 - Improve Winchester Road;
 - Improve 20th Street to City standards with new paving and the addition of curbs and gutters;
 - Improve 12th Street with sidewalks and a bridge improvement;
 - Extend 14th Street west of Fir to Cedar to provide an additional east-west connection; and
 - Complete the sidewalk network, focusing particularly on connections between higher density developments, public facilities and services.

Conflicts also exist on Main Street because of truck routes and related traffic, limited sight distances and angled parking in Downtown. An alternate truck route should be developed to minimize conflicts in Downtown. Any new route designation should be sensitive to existing residential development. A potential route was identified along 7th Street from the County Road 442 interchange, turning north near the cemetery and connecting with 6th Street to Main Street. West of Main Street the route was proposed to follow 6th Street just past Fir where it could turn south along a newly constructed route connecting back to 10th Street between Cedar and Winchester Road. This by-pass would minimize truck traffic on Main Street allowing for more active uses and helping to reduce needed road repairs without minimizing truck traffic between Lawrence and the existing industrial park.

8. **Infill and Redevelopment.** “Reinvestment” in existing neighborhoods is a key aspect of ensuring long-term viability of a community. Strategies for infill and redevelopment of vacant properties and incompatible uses should be developed. Strategies to stabilize the neighborhoods north of old K-10 should be developed particularly in those areas near Downtown. Incentives programs, such as temporarily offsetting increased property taxes as a result of private property improvements, should be developed. Private property investments should be encouraged through public investments in infrastructure and services in older neighborhoods.
9. **Compatibility.** One of the community’s goals is to provide housing variety while preserving existing neighborhoods. New homes should continue to develop at appropriate urban densities, compatible with existing development patterns. Mobile home park standards should be updated to ensure quality and compatibility.
10. **Central Business District.** The Central Business District area is a key component of the community, helping to define the character of Eudora. Development in Downtown should be fostered as a means of preserving the function and role of Downtown. Truck traffic should be rerouted and the intersection of Main Street and 10th Street should be signed to minimize traffic conflicts in Downtown. The use of bump-out curbs might also improve the intersection. Signs identifying and directing traffic to Downtown should be installed. Liquor by the drink could be allowed to encourage restaurant and entertainment uses.

Quality of Life and Our Community

1. **Community Identity.** Residents describe Eudora as a community with a “small town atmosphere.” Several elements make up this identity. Eudora’s image is enhanced by several community assets including:
 - the public library;
 - the schools;
 - the Wakarusa and Kansas rivers (including River Walk Park);

- Downtown;
- parks and open spaces; and
- community activities (CPA picnic, Eudora Fest).

Several negative features of the community detract from Eudora's small town atmosphere. These features include:

- lack of sidewalks in several areas of the community;
- congestion at the 1061 and K-10 interchange and lack of an access point to the west;
- deteriorated/outdated mobile home parks;
- minimal activities in Downtown and needed restoration;
- need for additional parks and open spaces; and
- lack of basic commercial services such as a hardware store.

The character of development within a community can greatly influence the perception of quality of life within that community. Development standards should specify the minimum acceptable standards for development with Eudora. Review of the existing sign, lighting and other development standards is necessary to determine if the City's preferred identity will be protected and promoted as new development occurs. In particular, the standards for high impact development such as commercial and high-density residential development should be considered.

Code enforcement and maintenance is a community priority. Investments in staffing positions such as a full time planner, engineer and city administrator will aid enforcement but must not fall solely on the City staff. Rather, maintenance and enforcement programs should be part of greater community volunteer/support groups and programs.

2. **Gateways.** "Gateways" are primary points of access into Eudora and its neighborhoods that identify the area and often influence a visitor's first impression. Four primary access points serve as gateways into Eudora:

- the Country Road 1061 (Church Street) and K-10 Interchange;
- the County Road 442 and K-10 interchange;
- the County Road 442 and Winchester intersection; and
- the County Road 1 and 15th Street intersection.

In order to improve these gateways, the City should invest in green space, landscaping, signage and lighting to better identify these entrances. Regulations should minimize the size and impact of business signs near these gateways to improve the aesthetics. Restricting access, providing deceleration and turning lanes, and acquiring adequate rights-of-way to accommodate roadway expansions as needed in the future will also improve these gateways and minimize traffic conflicts. The northern gateway (County Road 1) carries large volumes of truck traffic into Eudora. This traffic creates conflicts at the gate and in Downtown and must be rerouted to minimize these conflicts.

3. **Parks and Recreation.** Eudora has a very active population. Approximately 50% of the residents are between the ages of 6 and 34. In order to ensure adequate active and passive recreation opportunities for the community, Eudora must strive to improve and maintain existing facilities while developing facilities to meet current and future needs. The community has identified the need for walking trails (for exercise and connection), additional open space and additional recreation facilities to be developed as part of a parks and recreation master plan for Eudora.

Opportunities for parks and recreation and community facilities improvements include:

- expanding the existing library;
- replacing the trailer court on “Old K-10 Highway” with a park;
- converting the middle school to a museum, research and community center;
- a new City Hall built as part of a campus plan that would be central focus to the community;
- a park at 13th and Fir streets;
- a large-scale community park of 40 acres or greater north of the school facilities south of K-10 highway;
- developing a trail on the Wakarusa River with on- and off-ramps; and
- develop pedestrian trails (walking and biking) to connect parks and permanent open spaces with the schools and neighborhoods particularly along collector streets such as Church Street, Main Street, Winchester Road, 10th Street, 12th Street, and an improved 14th Street.

Often a community’s needs can be met through strategic expansion and partnerships. A partnership with the school district could help provide additional land, facilities and activities for the community. Because of the schools’ stake in the community, the district should be a key player in working with the City to resolve issues such as pedestrian connections across K-10 Highway.

Activities are a key ingredient of most successful parks and recreation programs, extending well beyond sports programs. Community courses such as computer training, theater, photography, cooking classes and art classes can be offered through partnerships with the school district and local specialists and artisans.

4. **Environment/Natural Resources.** Natural resources help define the character of the community and greatly contribute to the overall quality of life. The primary resources in Eudora are the Wakarusa and Kansas Rivers, the creeks, designated open spaces and floodplains. Requiring specific consideration during the platting and site planning processes should protect these resources.
5. **Connection.** One indicator of a quality community is the ease in which people can get from one place to another. Additional north/south connections are needed across the K-10 Highway Corridor which currently serves as a barrier, particularly to pedestrian traffic.

Road and sidewalk improvements are needed to safely allow school children to walk to the high school for example. A pedestrian bridge across K-10 at Elm Street provides an alternative to potentially major improvements needed to accommodate pedestrian traffic crossing at existing interchanges.

Additional east/west routes are also needed to improve connections between County Road 1061 (Church Street), the primary access into Eudora, and development to the west along Winchester Road. The extension of 14th Street to make a continuous connection between Church Street and Cedar Street provides one such opportunity. This extension would also help alleviate traffic and safety concerns on 12th Street, which needs road, bridge and sidewalk improvements.

6. **Transitions and Buffering.** The impact of development must be considered beyond the physical site. Compatibility with surrounding development must be a prime consideration. To achieve this goal, visual and physical transitions are needed between development of varying intensities. Transitions, including vegetation, landforms and structures, should be required based upon the difference between abutting intensities, for example between residential and industrial development. In general, higher intensity uses should bare greater transitioning and buffering responsibilities. Where development abuts high intensity areas such as the K-10 Corridor, buffering should be required regardless of the development's intensity.

7. **Safety.** Real and perceived safety greatly influences a person's choice of where to live, work and play. Improvements are needed to many streets and intersections throughout Eudora to make the community safer. Following are safety concerns sited by the community that should be investigated:
 - conflicts at the intersections of 12th Street and Cedar Street, and 12th Street and Oak Street;
 - the need to widen/improve the bridge on 12th Street;
 - the need for a stop sign at the intersection of 12th Street and Oak Street;
 - the need to widen Church Street;
 - U-turns at the intersection of 7th Street and Main Street;
 - need for lighting at intersections;
 - conflicts at the intersection of Winchester Road and County Road 442; and
 - need for turn lanes on collector streets including Winchester Road, County Road 442, County Road 1061/Church Street and 10th Street.

In order to ensure future safety, careful consideration of development plats and plans should be given as part of the review process. Development standards should be updated to reflect the community desire for better circulation and access management. Improvements such as sidewalks, curb and gutter, turn lanes, appropriate intersection and driveway spacing and compliance with regulations and ordinances including the

Comprehensive Plan's Transportation Network Map must be basic elements of all new development.

Economic Development and Our Community

- 1. Diversification of the Tax Base.** Economic diversity is one indication of the "health" and vitality of a community. Eudora's available land and structures, location between Kansas City and Lawrence, access to the highway, low cost of living and small town atmosphere help attract and retain business. These assets help counter the community's weaknesses such as lack of direct access to the interstate, and help attract service commercial, light industrial and construction uses.

In order to attract new businesses the City must develop strategic partnerships with Douglas County and the K-10 Corridor Association. These partnerships should focus targeted market strategy development and promotion. For example, the City should take an active role in the promotion of the labor profile being developed by the County. This profile will project businesses and labor forces that are likely to be drawn to Eudora.

These projections should be carefully considered in reviewing the goals and objectives of the comprehensive plan, future land use projections, policies and regulations. For example, strategies for business park development can be augmented by strategic investments in community infrastructure. These investments might include the extension of sewer and water mains, and improving roads to strategic sites.

In addition to targeting business and infrastructure improvements, the City and local business would greatly benefit from investments in community signage that announces the entrances into Eudora. Other City initiated incentives, including tax abatements, should continue to be offered. These efforts should be supplemented by the creation of additional professional staff positions potentially including a City Administrator, Economic Development Director, City Engineer and City Planner. For example, professional staff could work to develop strategies for retaining existing businesses upon the expiration of tax abatements, or to develop plans for strategic investments in public infrastructure.

- 2. Residential Markets.** Eudora's residential market primarily consists of moderately priced single-family homes, apartments and other rental units. In addition, demand for a greater variety of housing appears to exist. For example, high-density affordable housing could provide alternatives to old, deteriorating mobile home parks. The community would also benefit from senior housing development and higher income homes.

3. **Central Business District.** As typical to many downtowns, Eudora's downtown suffers from lack of parking, limited usable square footage and needed infrastructure improvements. The Central Business District's lack of identity, lack of activity, indirect access, and high vacancy rate compound these conditions. Downtown Eudora has lost much of its identity and function due to shifts toward highway development and changes in consumer demands.

Activities should be reintroduced to Main Street. The development of a Downtown anchor such as active community facilities and offices, development of gathering places like a farmers market, and scheduling of other regular events to familiarize patrons with downtown business and services are potential strategies. Business owners should be encouraged to offer "street level" or outdoor venues such as outdoor eating and gathering areas increase visible activity.

Community oriented business that are not dependant on highway traffic should be targeted for Downtown. Professional services including dental, optometry offices and clinics would be appropriate for downtown. Specialty shops or boutiques could also enhance the draw to Downtown. Community attractions such as a museum and historic society offices could be located in Downtown.

Strategies for use of the upper stories of the existing buildings should be developed. Rehabilitation for residential uses for example, brings additional evening activity to Downtown and provides additional security during inactive hours.

In order to improve Downtown, reinvestment is needed from both public and private resources. Partnerships with the County to improve County Road 1 (Main Street), improve the intersection of 7th and Main Street and reroute truck traffic to minimize conflicts with patrons are necessary. Partnerships with private investors to improve building facades, sidewalks, landscaping and parking are also necessary. Public improvements such as updated sewer and water service, improved alleys, directional signage and district identification signage can spur greater private investment in business and residences in the Central Business District. In particular, partnerships formed between downtown business owners and residents, the City, and the Chamber of Commerce will help further the renovation and reinvestment efforts of Downtown.

To ensure coordinated efforts and strategic investments, the City should undertake a Downtown Revitalization Plan. Potential funding for such a plan could be provided through competitive grant sources available such as through the U.S. Department of Housing and Urban Development (HUD) or the Kansas Department of Commerce and Housing (KDOC&H).

4. **Education/Training.** The availability of educated employees and employees with special skills greatly affects the business market. Job training is available in Eudora, but should be better publicized. Partnerships should be formed between employers (particularly those with needs for specific skills), the City and the local schools to provide specialized training and education. Vocational training is available through area technical colleges, but additional community oriented courses are needed. Basic courses in life skills including, balancing a checkbook, communication, organization, time management and using a computer would help promote more rounded employees and citizens.
5. **Public/Private Partnerships.** The development of effective partnerships is one means of accomplishing goals and objectives beyond the means of a single entity. The City has been effective in developing partnership, but should continue to development new partnerships. Strategic partners should include:
- Chamber of Commerce;
 - K-10 Corridor Association;
 - School District;
 - Neighborhood associations;
 - Downtown residents, property owners and business owners;
 - Civic groups and organizations (Lion’s Club, Jaycees, etc.)
 - Douglas County; and
 - KDOT.

In order to improve communication with residents and expedite neighborhood programs, the City should encourage or require the formation of neighborhood associations for new development, and encourage neighborhood association formation for existing neighborhoods. These associations not only help ensure neighborhood maintenance and informal policing, but can also provide a means of building stronger neighborhood relations and provide a common voice for residents. The City should support these efforts by offering special incentives to organized neighborhoods potentially including annual pick-up/clean-up programs, funding for block parties or news letters, improved communication of City actives and coordinated infrastructure improvements.

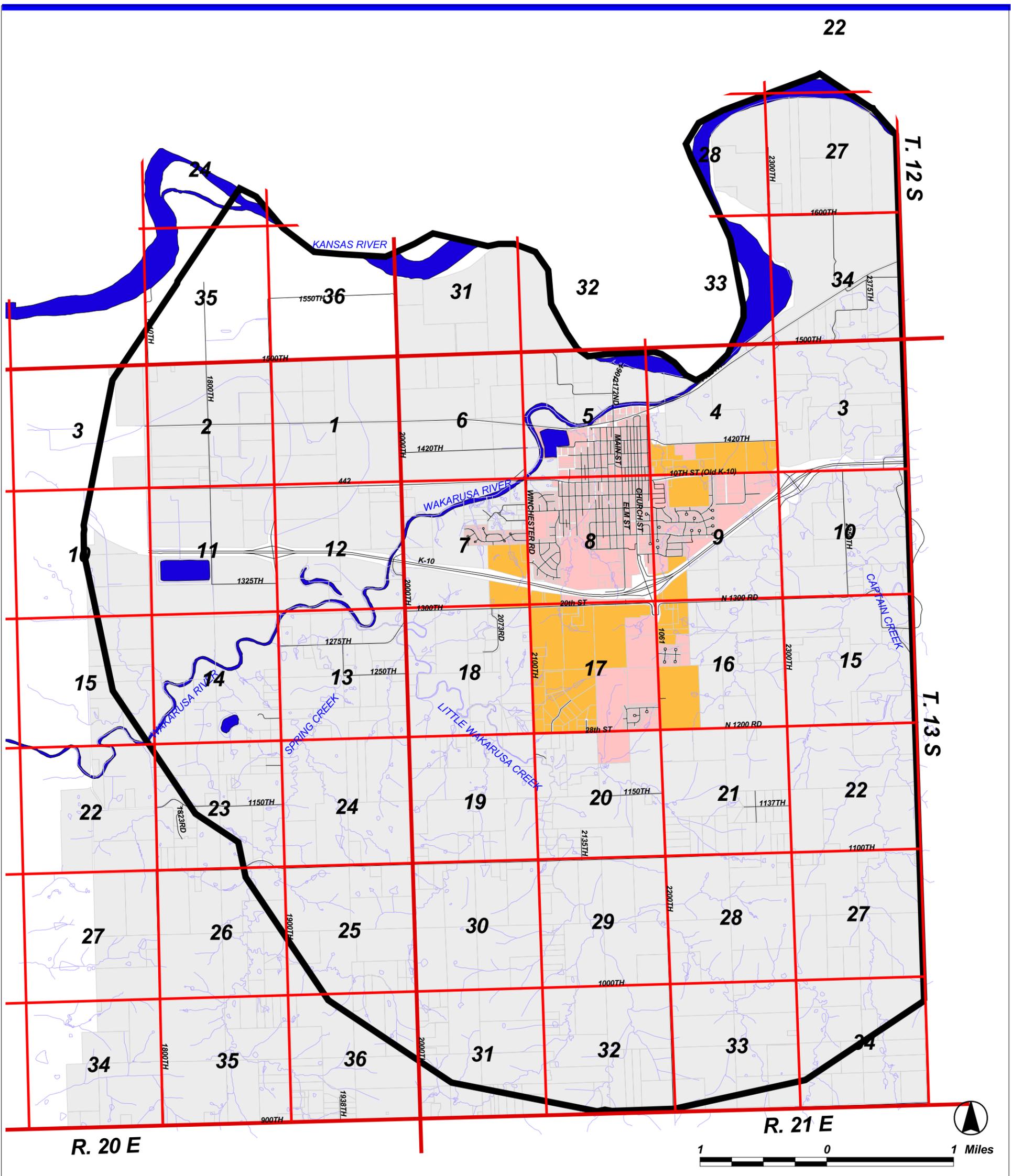
6. **Strategic Growth.** The Eudora community desires to grow from the inside out with new development taking place contiguous to existing growth. “Leap frog” and rural development near the City’s perimeter jeopardizes the community’s ability to grow in the future. To encourage development within Eudora versus surrounding Eudora in Douglas County, the City must annex land strategically and then provide needed services. Land use and infrastructure plans, including capital improvement plans should be kept up to date to adequately communicate Eudora’s preferred future and the community’s plans for future growth and services.

Open communication with Douglas County should be a priority. The partnership between the City and County will greatly effect the City's ability to ensure appropriate growth surrounding Eudora. The goals and objectives of the Comprehensive Plan should be actively communicated with the County. Updates should also be made to the Zoning and Subdivision Regulations to implement the goals and objectives of the Comprehensive Plan.

7. **Development Standards.** Development standards or guidelines can help a community communicate the minimum quality that is expected and will be accepted, but requirements must be carefully considered in relation to the local market strength. Development standards should specify the minimum acceptable standards for development with Eudora. Review of the existing sign, lighting and other development standards is necessary to determine if the City's preferred identity will be protected and promoted as new development occurs. In particular, the standards for high impact development such as commercial, industrial and high-density residential development should be considered.

State statutes require provisions allowing manufactured housing alternatives to be built in residential districts. To ensure that manufactured housing is compatible with traditional "stick-built" housing, manufacture housing development standards should specify residential amenities that must be included in the design. These standards could require amenities such as specified roof pitches, exterior materials and attached garages.

Code enforcement and maintenance is a community priority. Investments in staffing positions such as a full time planner, engineer and city administrator will aid enforcement but must not fall solely on the City staff. Rather, maintenance and enforcement programs should be part of greater community volunteer/support groups and programs



Map 1 Planning Area Map

City of Eudora, Kansas



LEGEND

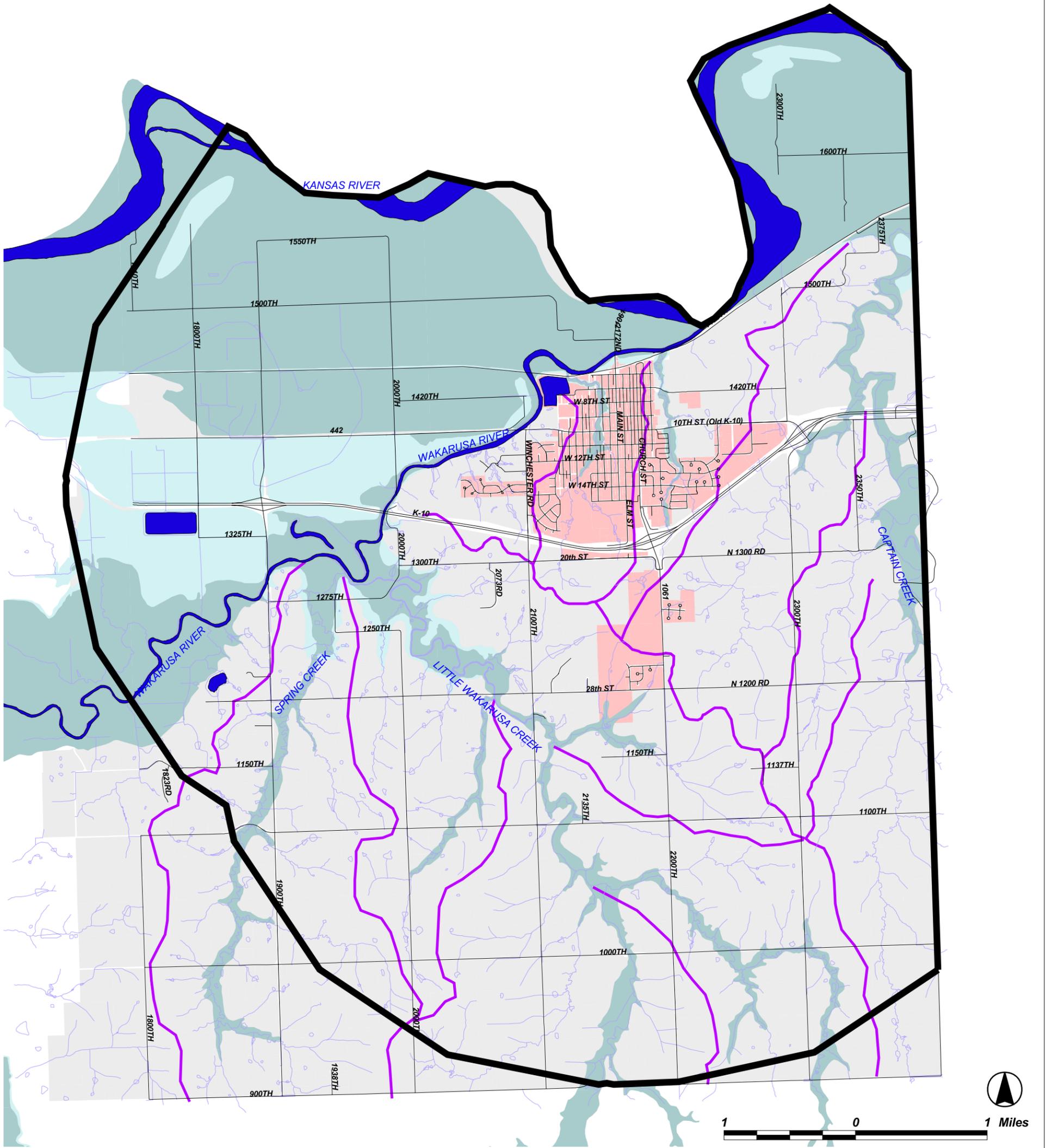
-  City of Eudora Planning Area
-  Roads
-  Water Features
-  Section Lines
-  City of Eudora
-  County designated growth area
-  Unincorporated Douglas County

Comprehensive Plan December 2003

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CORPORATION

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Map 2 Natural Features

City of Eudora, Kansas



Comprehensive Plan
December 2003

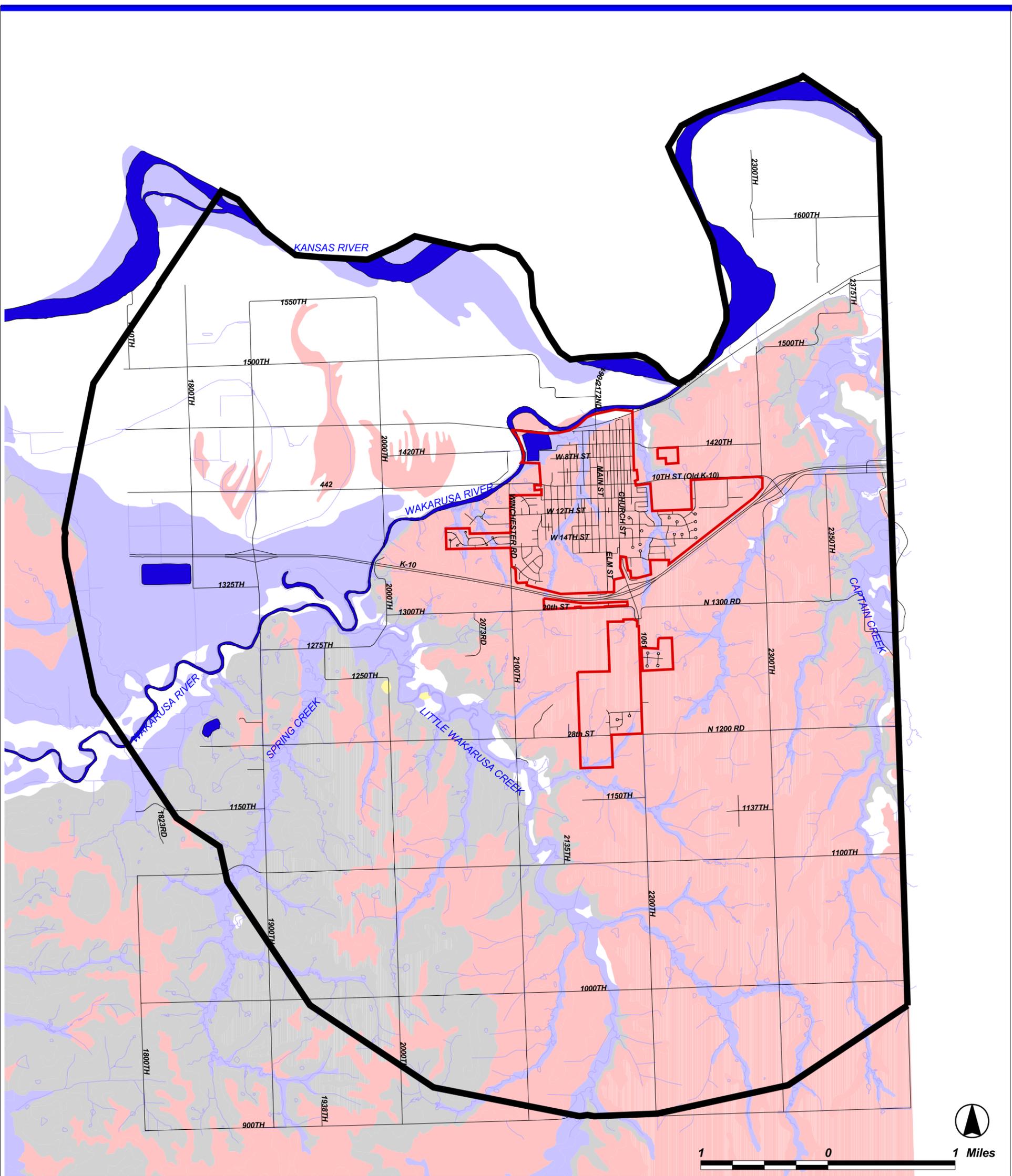
LEGEND

-  City of Eudora Planning Area
-  City of Eudora Corporate Limits
-  Unincorporated Douglas County
-  Roads
-  Water Features
-  100-year Floodplain
-  500-year Floodplain
-  Major Ridge Lines

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Map 3 Soils Map

City of Eudora, Kansas



Comprehensive Plan December 2003

LEGEND

- City of Eudora Planning Area
- City of Eudora Corporate Limits
- Roads
- Water Features

Soil Limitations for Septic Systems and Building / Site Development

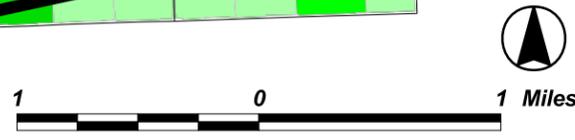
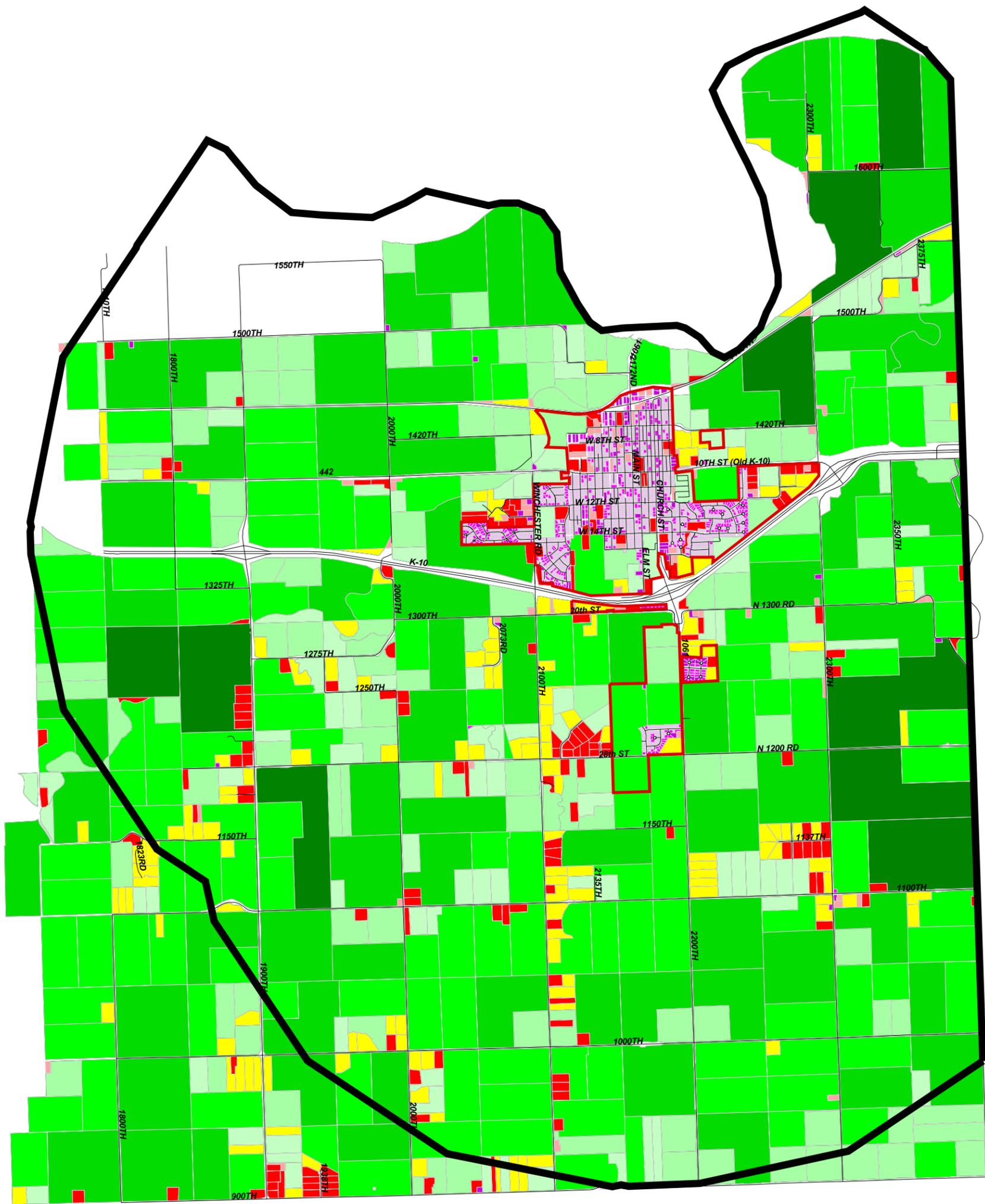
- Floods and Wetness
- Severe Shrink-Swell and Slow Percolation
- Shallow Depth to Rock
- Stony

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SOILS DATA SOURCE: USDA, Natural Resources Conservation Service



Map 5 Existing Parcel Acreage Map

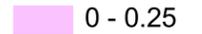
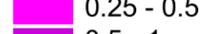
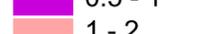
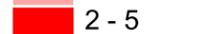
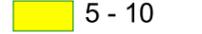
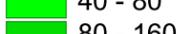
City of Eudora, Kansas



Comprehensive Plan December 2003

LEGEND

-  City of Eudora Planning Area
-  City of Eudora Corporate Limits
-  Roads
-  Parcels

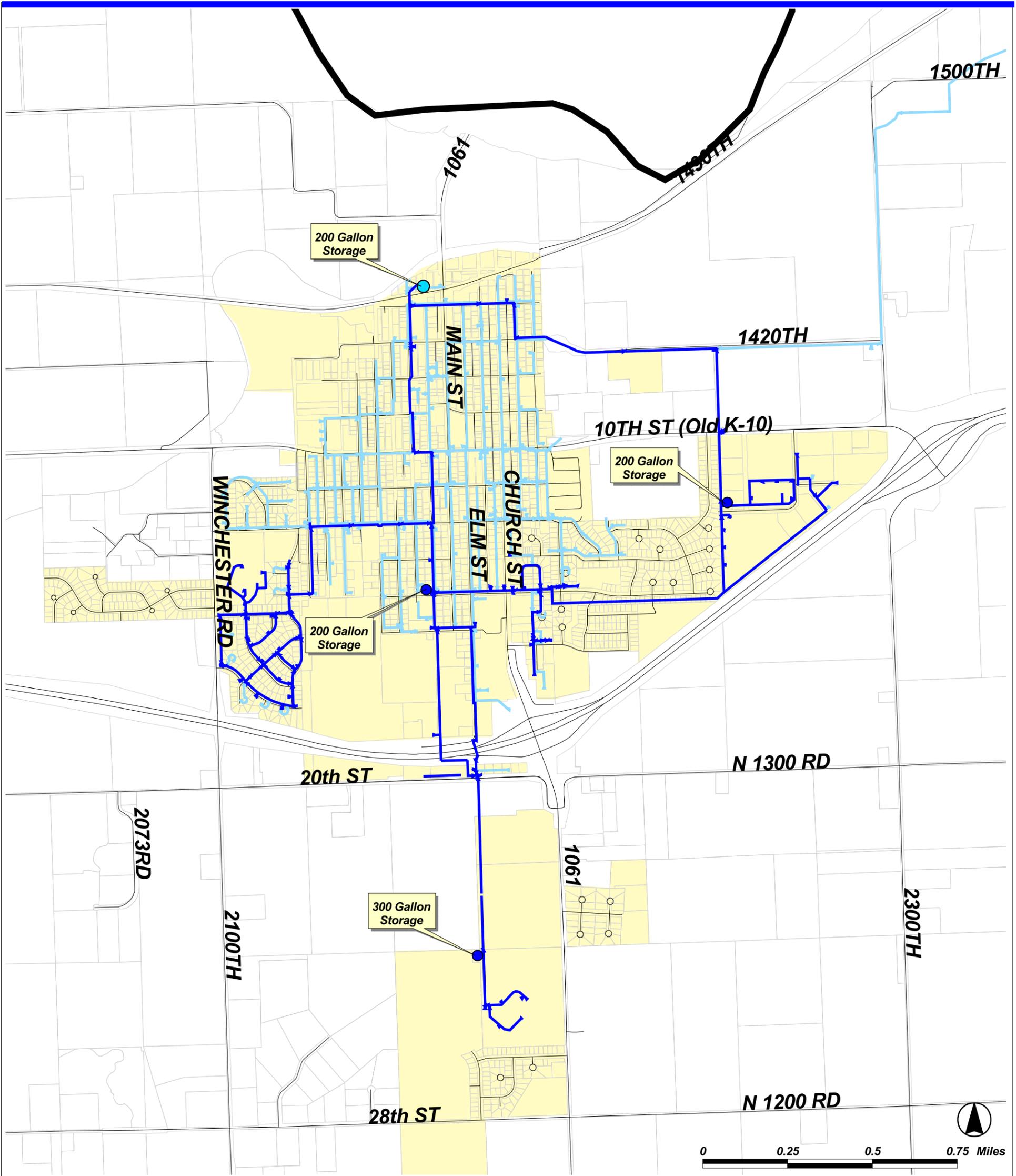
Parcel Acreage	
	0 - 0.25
	0.25 - 0.5
	0.5 - 1
	1 - 2
	2 - 5
	5 - 10
	10 - 20
	20 - 40
	40 - 80
	80 - 160
	160+

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PARCEL DATA SOURCE: Douglas County, Kansas GIS Department



Map 7 Existing Water Supply

City of Eudora, Kansas



Comprehensive Plan December 2003

LEGEND

-  City of Eudora Planning Area
-  City of Eudora Corporate Limits
-  Roads
-  Water Features
-  Water Towers
-  Storage Tank
-  Water Transmission Line (8" +)
-  Water Distribution Line (< 8")

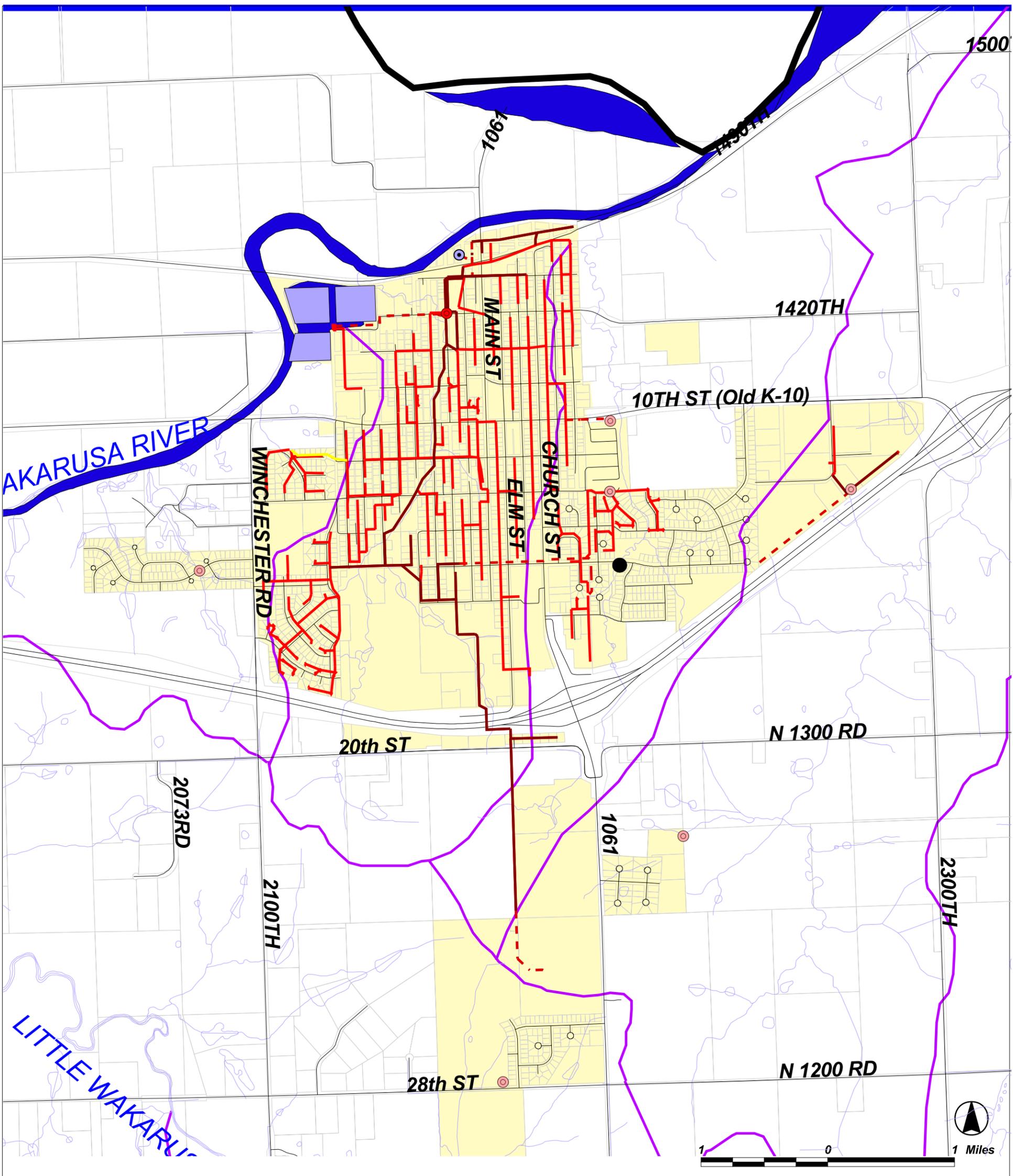
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UTILITY DATA SOURCE: City of Eudora Public Works Department.

NOTE: Data for lines constructed since 1997 not available as of July 2003.



Map 8 Existing Sewer Service

City of Eudora, Kansas



Comprehensive Plan December 2003

LEGEND

- | | |
|---------------------------------|-------------------------|
| City of Eudora Planning Area | Sewer Lagoons |
| City of Eudora Corporate Limits | Sludge Pump |
| Roads | Sewer Lift Stations |
| Water Features | Wet Well/Pump Station |
| Ridge Lines | Collector Sewer (10" +) |
| | Sewer Lines (< 10") |
| | Force Mains |

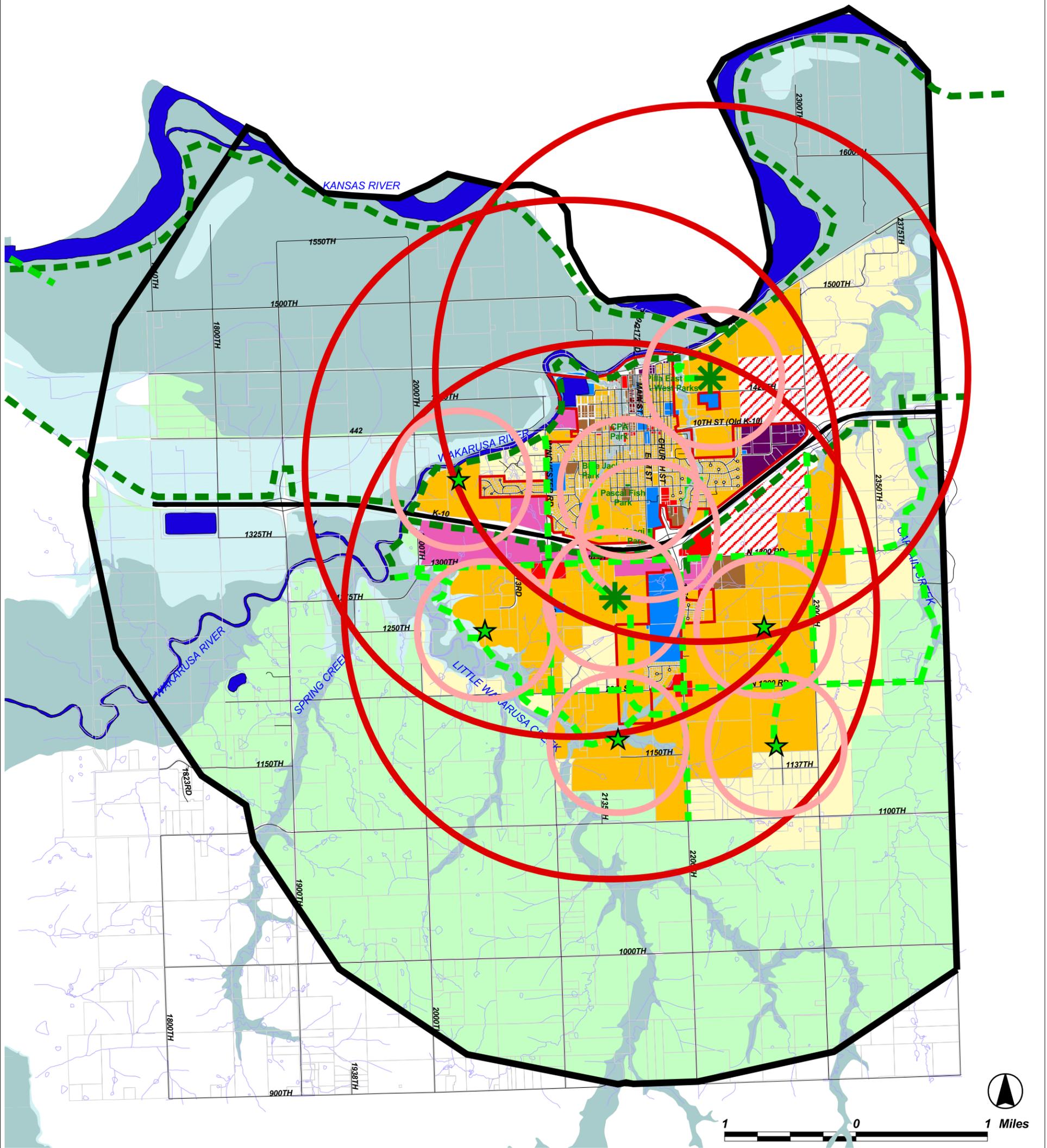
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UTILITY DATA SOURCE: City of Eudora Public Works Department.

NOTE: Data for lines constructed since 1997 not available as of July 2003.



Map 11 Parks and Trail System Map

City of Eudora, Kansas

Comprehensive Plan
December 2003

LEGEND

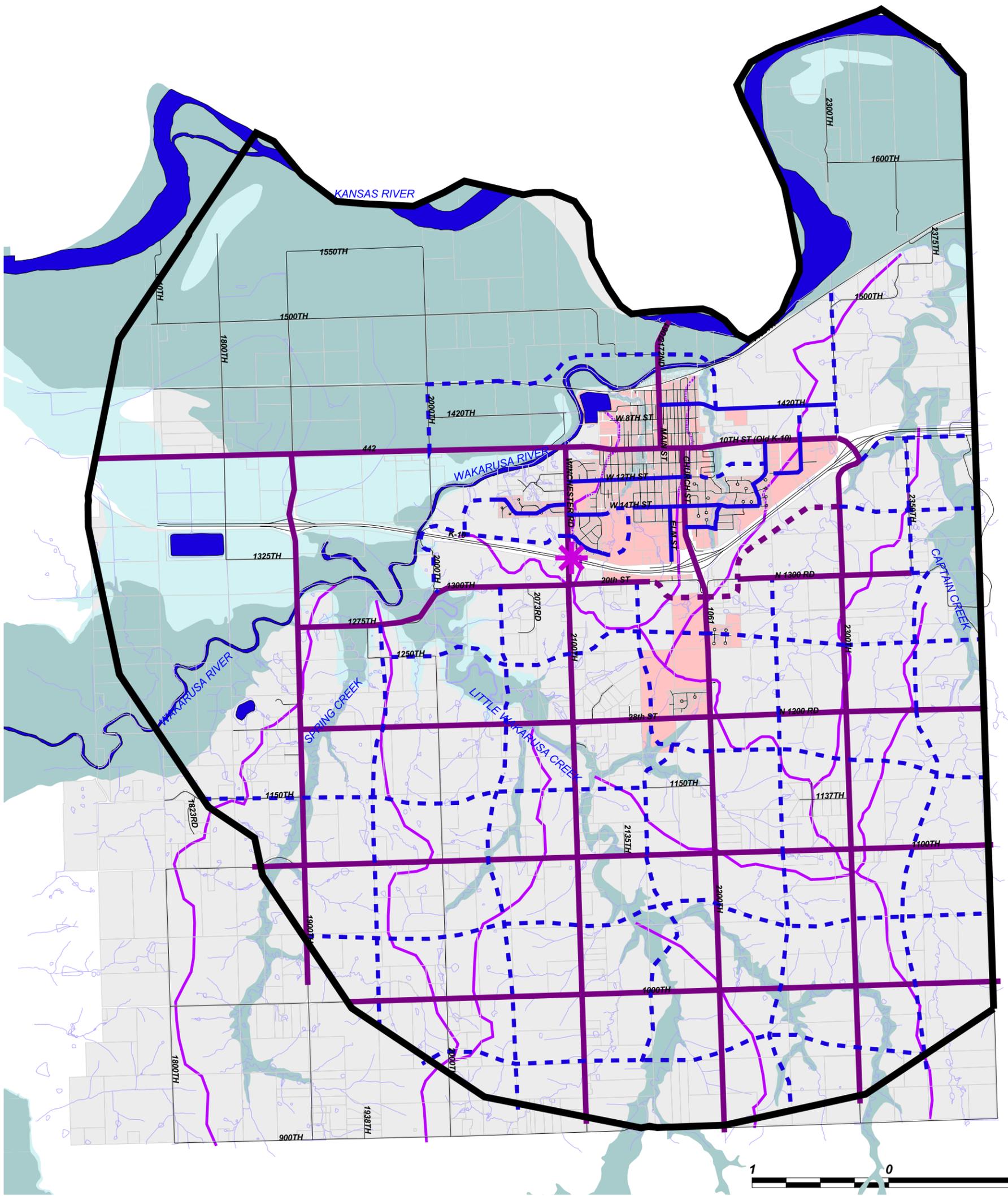
- City of Eudora Planning Area
- City of Eudora Corporate Limits
- Roads
- Water Features
- 100-year Floodplain
- 500-year Floodplain
- Future Community/Regional Park
- Future Neighborhood Park
- Trails / Paths**
 - Regional Connection
 - Local Connection
- Future Service Areas**
 - Community Park: 2.0 Mile Radii
 - Neighborhood Parks: 0.5 Mile Radii

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816-363-2696 2001-205

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NOTE: Parks are indicated by general area only and are not intended to indicate specific locations.



Map 12 Street Network Map

City of Eudora, Kansas



Comprehensive Plan December 2003

LEGEND

- | | |
|---------------------------------|---------------------------|
| City of Eudora Planning Area | Arterial Street |
| City of Eudora Corporate Limits | Arterial - Proposed |
| Unincorporated Douglas County | Collector Street |
| Roads | Collector - Proposed |
| Water Features | Future Access Improvement |
| 100-year Floodplain | |
| 500-year Floodplain | |
| Major Ridge Lines | |

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NOTE: Future access improvement as desired by the City of Eudora. Improvement requires KDOT approval.