



# Leavenworth County

## Comprehensive Plan

*Sustainably managing growth and maintaining rural lifestyles*



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# Acknowledgments

Thank you to all participants in the planning process. Your time, technical expertise, and guidance was critical to the development of the Leavenworth County Comprehensive Plan.

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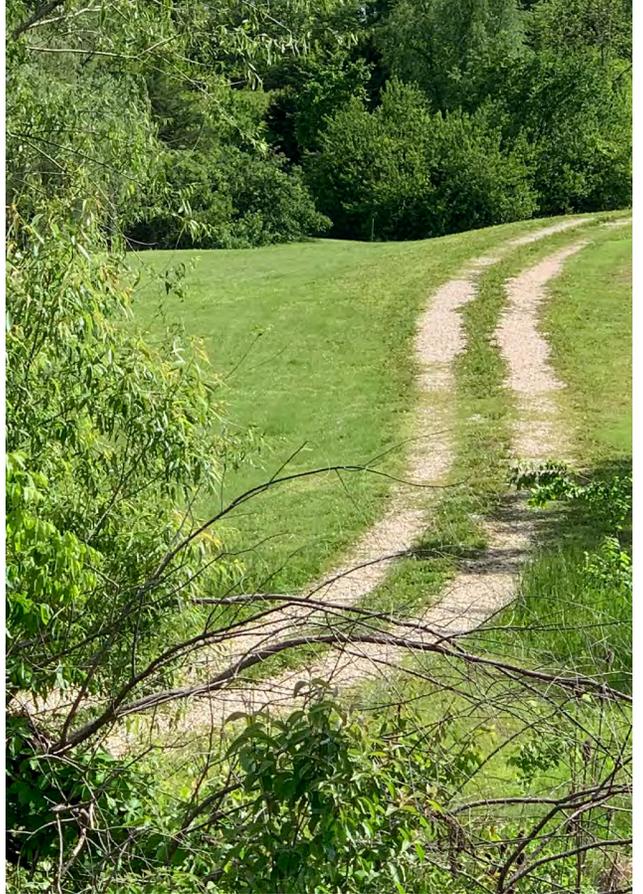
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*Appendix A - Economic and Market Analysis*

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# Section 1

# Introduction

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The Leavenworth County Comprehensive Plan (hereafter referred to as Plan) is an articulation of the county's community-driven goals and objectives for the next 10 to 20 years. Over the past year, the comprehensive planning process has engaged Leavenworth County residents and businesses through a variety of engagement exercises and events to identify issues, opportunities, and values related to land use, development, transportation, mobility, parks, open space, community facilities, and infrastructure. This input guided the creation of the Plan, and the guiding principles on the following page.

*Section 1 - Introduction* lays out the vision for Leavenworth County and discusses the guiding principles that are integrated into the Plan's recommendations. Additionally, this section sets the scene for the Plan, answering why this Plan was necessary, how the Plan will be used, and how the planning process took place.

# Vision for the Future

Leavenworth County is at a crossroads. No longer is it considered a rural county, per its federal classification. Development pressures are on the rise, yet peaceful, picturesque, rolling lands still make up most of the county land. With the last Comprehensive Plan dating back to 2008, the time is now to update the vision and goals of the county to reflect its changing nature.

## Vision Statement

Based on input gathered from stakeholders and members of the public during the public engagement process, as detailed in *Section 3 - Community Engagement*, a vision was crafted for the county. The vision is an expression of future aspirations and paints a picture of what is hoped for within the county. Each recommendation put forth in the Plan aims to achieve the vision, at least in part.

***Capitalizing on its abundance of open space, its rural heritage, hard-working residents, and its opportunities for development, Leavenworth County proactively balances urban growth and rural preservation, ensures a broad range of efficient and cost-effective government services and high quality of life for its residents, and anticipates and addresses the challenges of environmental quality, societal change, and economic competitiveness.***

## Guiding Principles

Achieving such a vision is a complex process that requires a multi-layered approach. To help guide this process, the following guiding principles have been developed. These guiding principles are the most important ideas and influences that guide development in Leavenworth County over the next 10 to 20 years. The principles should be the foundation of all future county planning efforts, and the Plan's more detailed recommendations aim to achieve one or more of these principles.

### Elevate and Compete

Leavenworth County is poised for future growth and development of industry and commerce, given its access to highways, rail, and water, as well as its location on the edge of the Kansas City metropolitan area. This Plan sets a course for economic and transportation development that will lead to timely infrastructure development, balance industry and agriculture, and provide the foundation for well-paying jobs of all types. This Plan clearly defines Leavenworth County's role and potential in the region, elevating its strengths and mitigating its weaknesses.

### Preserve and Sustain

Leavenworth County is predominantly agricultural/rural in nature. Even as industry and commerce has developed, the landscape is still defined by large expanses of rolling farmland and open space. To the extent possible, all new residential and commercial growth should be in municipalities or their growth areas. This Plan recognizes this character and seeks to maintain it through managed growth and development policies. The county also contains or is bordered by many environmental and ecological assets, such as Stranger Creek, the Kansas River, and the Missouri River. This Plan strives to capitalize on these assets, but also fully preserve the resulting ecological benefits.

### Communicate/Coordinate

Leavenworth County is a mosaic of cities woven together by the rural and agricultural fabric of the county. This Plan recognizes this fabric and aims to preserve the unique identity of each community by coordinating the location, type, and design of future development and land use decisions with local goals. The county will establish consistent and modern lines of communication with each community and countywide residents to achieve transparency and enhanced public engagement in decision-making.



**Note that Leavenworth County adheres to all local, state, and federal regulations (environmental and otherwise) and supports all private efforts to preserve and conserve natural areas and the agricultural heritage of the county.**

# Comprehensive Plan Overview

**A comprehensive plan is a community effort.** Many months, and sometimes years, of work go into the development of a strong, consensus-built comprehensive plan. People of all walks and stages of life work together to review the strengths and weaknesses of their community and develop a plan to bolster strengths and mitigate insufficiencies. They collaborate to develop a plan that presents a holistic vision for all aspects of the community and directs actions to realize the vision. Their work results in a comprehensive plan that is realistic in its reflection of the current condition, yet hopeful the presented vision can be achieved. The comprehensive plan is then adopted as a foundational document that will direct the growth of the community in the coming years.

**A comprehensive plan is inherently hopeful.** Comprehensive plans see the best in a community and plan wisely for what the community can do with its available resources. Simultaneously, comprehensive plans call the community to strive for what is best and sets challenging goals for itself. This unified vision is a reminder and a line in the sand to hold the community responsible for its actions. The comprehensive plan creates goals, strategies, plans, policies, programs, and projects for land use, transportation, housing, and more.

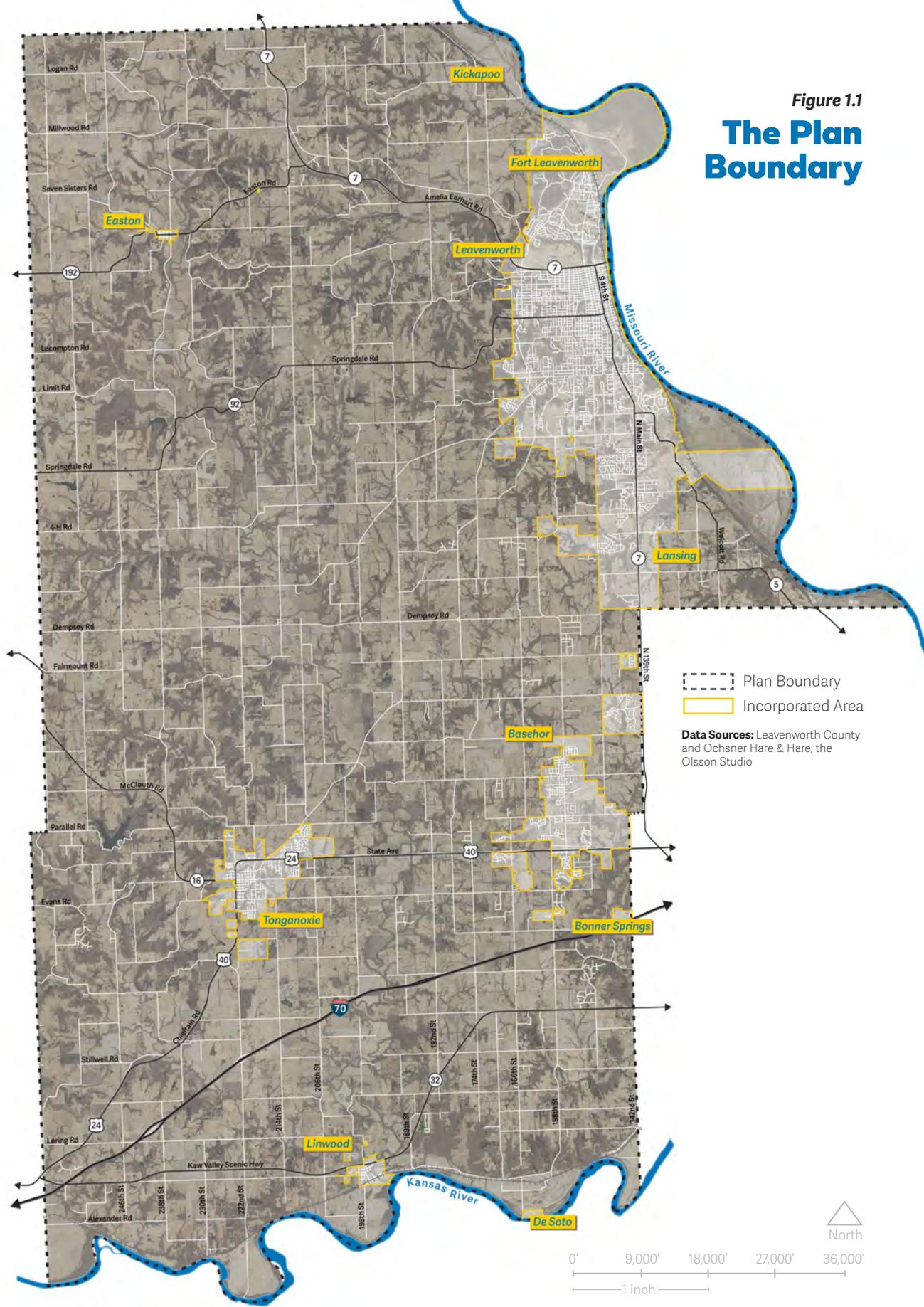
**A comprehensive plan is a living document.** Such a document must adapt to changing circumstances in and around the community. The world does not stop changing and static documents do not work when planning for the future. Comprehensive plans must meet the current needs of the community and be able to evolve as needs vary in the future. The comprehensive plan acts as the basis for how the community approaches a multitude of topics as they work to pinpoint the values and goals of the community. As the community grows, so will the comprehensive plan.



## What is a Comprehensive Plan?

At its core, a comprehensive plan is a vision for the future at a community scale. Comprehensive plans are created by the community and for the community to record shared goals and desires for themselves and their fellow community members. A comprehensive plan examines what a community is, where it came from, and creates a vision for the future. This vision guides the growth and development of the community for the next 10 to 20 years.

**Figure 1.1**  
**The Plan Boundary**



The Comprehensive Plan provides policy guidance for all of unincorporated Leavenworth County, and balances the needs of the various incorporated municipalities, clarifying their growth management areas.

# The Why

Leavenworth County must proactively plan for growth, rather than reacting. This Plan is a way for the county to bring residents around a common vision and promises consistency for residents, developers, and businesses.

The last Comprehensive Plan was written in 2008 and must be updated to meet the new challenges and opportunities currently facing Leavenworth County. Over the past decade, society has evolved and technology has changed at a faster rate. These shifts have caused changes in expectations, values, and way of living throughout Leavenworth County. This update will reflect the shifting priorities to better equip the county in this ever evolving atmosphere. This Plan will set the tone for resiliency within the county.

The Plan brings a new level of consistency and accountability to Leavenworth County. This Plan guides the direction of development and redevelopment within the county. The Plan, as it is supported by the community, will help all residents and stakeholders in Leavenworth County. Approvals of development and community budgets should be based off the goals and vision established in this Plan. This leads to consistent application of the regulations and policies in Leavenworth County. Residents can trust that development will proceed according to the zoning and land use recommendations shown in the Plan. The development community will be able to predict what type of development and where that development will be accepted within the county.

## Legal Basis for Planning

The purpose and content of this Plan was prepared in accordance with Kansas Statute, which authorizes counties and county officers:

*"...to prepare and adopt plans and land use regulations with multiple advisory bodies so as to bring unity, consistency, and efficiency to the county's planning efforts. Such plans and regulation shall be designed, in accordance with the present and future needs of the county and shall promote the public health, safety, morals, comfort, convenience, prosperity, and general welfare and protect the land, air, water, natural resources, and environment and encourage their use in a desirable manner and insure efficient expenditure of public funds and conserve and protect the values of property under jurisdiction of the county" (K.S.A. 19-2956).*

Drafting and revising a comprehensive plan is one of the main ways in which county officials accomplish the aforementioned statute goals:

*"The planning commission, with the approval of the Board of County Commissioners, may make or cause to be made a comprehensive plan for coordinated development of the county in the manner, and for the purposes, provided by this act" (K.S.A. 19-2958).*

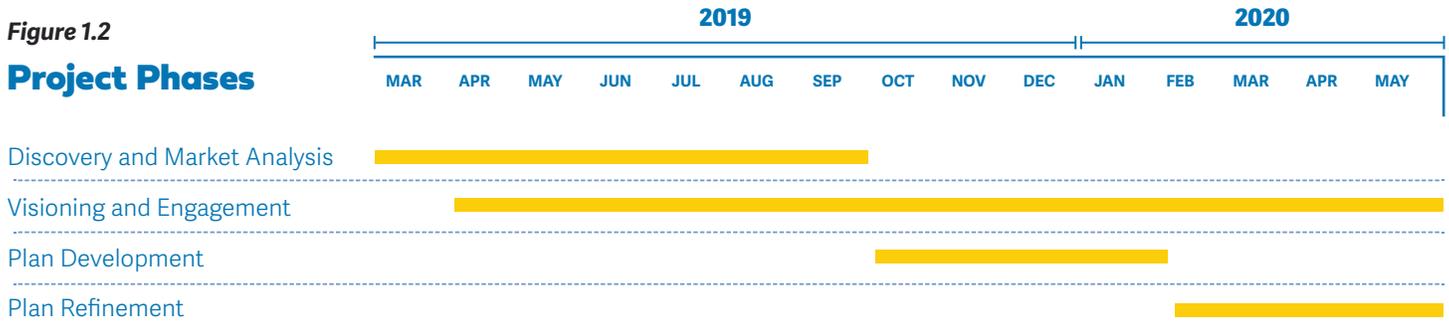
Once this document and the Future Land Use Map 2020 are signed by the Chair of the Planning Commission, attested by the County Clerk, and placed on file in the County Clerk's office, the requirements of K.S.A. 19-2958 are fulfilled.

This Plan addresses each of the following subjects mentioned in the excerpt of K.S.A.19-2958 below. This Plan is the Board of County Commissioners' recommendations regarding:

1. The general location, extent, and relationship of the use of land for agriculture, residence, business, industry, recreation, education, public buildings, and other community facilities, major utility facilities, both public and private, and any other use deemed necessary;
2. Population and building intensity standards and restrictions and the application of the same;
3. Public facilities including transportation facilities of all types, whether publicly or privately owned, which relate to the transportation of persons or goods;
4. Public improvement programming based upon a determination of relative urgency;
5. The major sources and expenditure of public revenue including long range financial plans for the financing of public facilities and capital improvements, based upon a projection of the economic and fiscal activity of the county, both public and private;
6. Utilization and conservation of natural resources; and
7. Any other element deemed necessary for the proper development or redevelopment of the area.

# Planning Process and Timeline

The Leavenworth County Comprehensive Plan development process used a five-step program that included assessing existing conditions in the county, identifying issues and opportunities facing the county, formulating a clear vision for the future of the county, establishing guiding principles, developing and evaluating alternative plans, policies, and programs, and preparing the final plan recommendations in the form of this document. *Figure 1.2* demonstrates the timeline of this planning process.



# Document Organization

This document is organized into seven sections, detailed as follows.

## Section 1 - Introduction

This section presents an introduction to the Plan, with a description of the Plan’s purpose, vision, and timeline.

## Section 2 - County Profile

This section describes the current state of Leavenworth County, including its history, existing plans and studies, current and projected demographics, market potential, and physical, natural, and regulatory conditions.

## Section 3 - Community Engagement

This section presents a summary of the input received from the community through a variety of engagement tools, both in-person and online.

## Section 4 - Land Use and Development Plan

This section identifies the preferred and appropriate land uses and development areas throughout the county.

## Section 5 - Transportation and Mobility Plan

This section provides recommendations to ensure the county’s transportation network (all modes) is of high quality and can safely and efficiently move all user types throughout the county and its regional destinations.

## Section 6 - Community Facilities and Infrastructure Plan

This section provides a framework for coordinating, supporting, and enhancing community facilities and services throughout the county. This section seeks high-quality facilities and services for all county residents.

## Section 7 - Implementation Plan

This section presents specific actions to achieve the recommendations of the previous sections.

# Section 2

# County Profile

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Long-range planning must be founded on an understanding of a community's past and present. *Section 2 - County Profile* presents a summary of the analysis of the current state of the county, including a look into its history. This section acknowledges the importance of well-informed recommendations and strategies that properly respond to existing realities.

*Section 2 - County Profile* provides an overview of the county's place and role within the region and its history, other regulating and guiding plans, demographic and economic trends, and physical and natural environment.



**Left:** Leavenworth Jail, Leavenworth, KS 1879 (Kansas Historical Society)

**Right Top:** 5th Street, Leavenworth, KS 1867 (Library of Congress)

**Right Bottom:** Main Street, Linwood, KS 1910 (Kansas Historical Society)

# Regional Setting and History

Leavenworth County is located in the northeastern corner of the State of Kansas and is part of the Kansas City Metropolitan Statistical Area (MSA), a 14-county area surrounding both Kansas City, Missouri and Kansas City, Kansas. Leavenworth County is approximately 469 square miles in area and bordered by Atchison County to the north, Douglas and Jefferson Counties to the west, the Kansas River and Johnson County on the south, Wyandotte County to the east, and the Missouri River to the northeast.

The county is physically and economically well-connected to the region. The county has access to the Kansas City MSA, as Interstate 70 (I-70) travels through the southern portion of the county and Interstate 435 (I-435) is close to the eastern border of the county.

Leavenworth County supports the economic health of the region; the American Community Survey (ACS) estimated that 30 percent of the county's population worked outside the county in 2017. The Mid-America Regional Council (MARC) estimates that, with no other support from entities within Leavenworth County, the federal government entities and facilities located within the county generate a multi-billion dollar investment in the Kansas City economy each year.

In 2013, MARC estimated that Fort Leavenworth, the Dwight D. Eisenhower Veterans Affairs Medical Center, the United States Penitentiary, and others, combined, create a \$4.94 billion economic asset for the greater Kansas City region.

Leavenworth County is historically significant to Kansas, as it contains the oldest towns and settlements in the state. The City of Leavenworth is the "First City of Kansas," the oldest town in the state, and was founded in 1854. It was incorporated in 1855 while Kansas was still a United States Territory. For a time in the 1800s, Leavenworth was the largest city in Kansas. The development of the county and the City of Leavenworth is linked to Fort Leavenworth, which is the third oldest military installation in the nation, and the oldest military installation located west of the Mississippi River. The Fort was established in 1827, a few decades before the Town of Leavenworth was incorporated. Both the fort and city have provided the foundation of growth for the county during its long history.

Even before the foundation of Leavenworth, the Lewis and Clark Expedition traveled up the Missouri River and, on July 2, 1804, stopped at a location now considered to be within the current city limits of Leavenworth.

As one of the original counties of the State of Kansas, Leavenworth County is one location where the fight over whether Kansas would be a free state or a slave state took place, as the Territory of Kansas tried to gain admittance into the United States (U.S.). The county witnessed pro-slavery advocates cross the Missouri River in attempt to influence Kansas to vote in favor of slavery many times, but the residents of the, then, Kansas Territory were able to persevere and bring the territory into the Union as a free state. The leaders of Leavenworth submitted a draft of the Kansas Constitution, which was deemed too radical in its anti-slavery stance by the legislature and ultimately rejected during the constitutional convention in 1859.

Before and after the Civil War, Leavenworth County was known as a manufacturing center. Manufacturers produced stoves, mill and mining machinery, steam engines, wagons, carriages, furniture, shoes, pumps, sap, bridges, boilers, and mechanical musical instruments according to a report to the Board of Directors of the Kansas State Historical Society in 1916. The presence of these manufacturers helped Leavenworth become the most populated county in Kansas until the 1880s.

## Leavenworth County Cities

### Basehor

Basehor was founded in 1889 and incorporated as a city in 1965. The first individuals to own land, upon which Basehor now stands, were Thomas Salem and Mary Towne. This couple bought the land from the railroad in 1873 and sold it to Ephraim Basehor on January 9, 1874. In 1889, Ephraim platted the land and began building the town site, dedicating the town on November 30, 1889. The 2018 ACS estimates Basehor's population to be 6,194.

### Bonner Springs

Bonner Springs was settled in 1812, platted in 1855, and incorporated in 1898. In the 1880s, Philo Clark platted the town site and renamed the area Bonner Springs. Philo Clark became the first mayor when the city was incorporated. The 2018 ACS estimates Bonner Springs' population at 7,804 people. Bonner Springs is part of Wyandotte, Leavenworth, and Johnson counties.

### De Soto

De Soto is a city within two counties, Johnson and Leavenworth. De Soto was founded in 1857 and named after the Spanish explorer Hernando de Soto. The city saw modest growth in its population from the 1860s through the 1940s when the Sunflower Army Ammunition Plant was built to support the war effort. De Soto had grown from 400 people to over 1,000 in less than a year. The city has continued to grow modestly since the plant closed in 1948 and today is a bedroom community for the Kansas City MSA to the east and Lawrence MSA to the west. The 2018 ACS estimates De Soto's population at 6,443 people.

### Easton

Easton was established in 1855 and incorporated in 1903. Despite its small size, Easton has a lengthy history within the county, seeing multiple fights associated with the question of slavery before Kansas entered the Union. During its early years, Easton lost its general store when it was "destroyed by border ruffians" in 1856. The 2018 ACS estimates Easton's population at 260 people.

### Lansing

Lansing was incorporated as a city in 1959, yet its roots reach back to the 1860s when the state penitentiary was built in 1867. The prison attracted a small population that began building homes and businesses. In 1878, ninety acres of land were platted and the Town of Lansing was created. Incorporation was delayed, twice by the Leavenworth County Commissioners, over the next one hundred years, but after an organized effort in the late 1950s, the city was incorporated in 1959. The 2018 ACS estimates Lansing's population at 11,964 people.

### Leavenworth

Leavenworth is the county seat and the oldest continuous settlement in the county. The city was founded in 1854 and incorporated the next year. Leavenworth became the county seat after a lengthy fight and multiple elections over the course of years. The conflict centered around the question of slavery. Leavenworth was led by members of the "Free State" faction, while the Kickapoo and Delaware Townships were led by pro-slavery factions. Leavenworth lost three separate elections to become the county seat, yet appealed the third election to the District Court on the basis of election fraud. The court overturned the election results and made Leavenworth the county seat. The county seat has remained unchanged since. The 2018 ACS estimates Leavenworth's population at 36,062 people.

### Linwood

Linwood was established in 1867 and incorporated in 1895. The town was platted on both sides of Stranger Creek, near its mouth at the Kansas River. The 2018 ACS estimates Linwood's population at 391 people.

### Tonganoxie

Tonganoxie was established in 1866 when 40 acres of property owned by Magdalena Berry was platted. A flour mill was built and operated early in Tonganoxie's history. Today, 5,524 people are estimated to live within the 2,350 acres of the city, per the 2018 ACS estimates.

# Past Plans and Studies

## Leavenworth County Comprehensive Plan (2008)

The current Leavenworth County Comprehensive Plan was adopted in June 2008 and has since served as the official policy document to guide present and future growth, development and redevelopment, land use patterns, and infrastructure improvements in the county over a 20-year planning period. In addition to these areas of focus, the 2008 Leavenworth County Comprehensive Plan established a long-term community vision and goals to ensure the inevitable growth and development stayed true to local values.

At the time of the current comprehensive plan's adoption, population was expanding and anticipated to continue, placing additional pressures on infrastructure capacity, physical land use patterns, community well-being, natural resources, and the overall aesthetics of Leavenworth County. The efforts of this planning process also coordinated with local municipalities and planning institutions to ensure recommendations were appropriate from the neighborhood level to a regional scale.

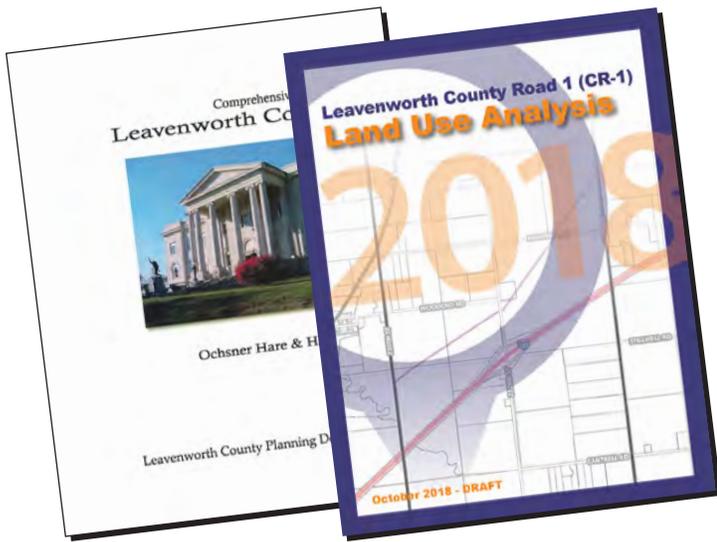
Several significant issues were at play at the time of the 2008 plan's adoption that remain relevant during this current comprehensive planning effort, including:

- Enhance transportation connectivity to increase access to the Kansas City metropolitan area while enhancing mobility countywide;
- Maintain the desired feel and character in the rural parts of Leavenworth County with rising suburbanization and urbanization;
- Preserve agricultural resources and viability, alongside other natural resources; and,
- Provide a variety of housing choices at varying price points while honoring the legacy of historic sites and structures.

The primary focus of the 2008 plan was land use. The overall land use goal centered on achieving compatible physical and economic coexistence of rural residences, agriculture, and the growing cities. Harmony between expanding urban areas and dedicated farmlands was to be achieved primarily through the preservation of resources, clustered development, land use buffers, and adequate infrastructure. Through proper planning and land use controls, the plan promised to guide future land use patterns within Leavenworth County in a way that maintained the rural and agriculture heritage while providing for economic opportunities as the development pressures continued. The 2008 plan set forth 12 implementation program priorities. The following table summarizes how these priorities were or were not implemented.

**Table 2.1**

Implementation Program Priorities Review Summary (2008 Comprehensive Plan)	
Implementation Program Priority	Status and Commentary
Develop interlocal agreement with the cities	<b>Not accomplished:</b> Lack of political will; in 2018-2019 Basehor attempted to develop an agreement, however, their City Council did not adopt the agreement.
Form Public Utilities Commission (PUC)	<b>Not accomplished:</b> Staffing issues and building codes committee took precedence; however, there will be a PUC organized by the end of 2020.
Develop County Road 1 interchange master plan	<b>Accomplished:</b> CR-1 land use plan adopted in 2019; county is pursuing the possible rezoning of the corridor.
Amend zoning codes to match comprehensive plan	<b>Partially accomplished:</b> Developed guidelines for family farmstead exceptions; however, other than that, and creating development guidelines for the CR-1, political will has lacked.
Rezone the county to match comprehensive plan	<b>Not accomplished:</b> Lack of political will and infrastructure to support some of the zoning districts.
Develop a parks and recreation department	<b>Not accomplished:</b> Lack of political will.
Create road standards with Public Works Department	<b>Partially accomplished:</b> Public Works Department updating road standards; however, trail or scenic parkways standards likely not included.
Manage the floodplain	<b>Partially accomplished:</b> Floodplain Manager reviews development within the floodplain to ensure it meets or exceeds our floodplain regulations.
Support the solid waste and recycling programs	<b>Partially accomplished:</b> Solid Waste Committee meets quarterly.
Develop standards for multimodal transportation	<b>Not accomplished:</b> Lack of political will and funding issues; Leavenworth County Transit Plan (2018) completed in coordination with MARC and RideKC, but no implementation of the plan to date.
Design and construct county gateways	<b>Not accomplished:</b> Historically, this was not a priority for Planning Staff and was not brought to the Commissioners' attention
Review the comprehensive plan annually	<b>Accomplished:</b> The comprehensive plan is reviewed every year.



## Leavenworth County Road 1 Land Use Analysis (2018)

Due to a partnership amongst Leavenworth County, the City of Tonganoxie, and the Kansas Turnpike Authority (KTA), a land use analysis was necessary to form a future vision for the County Road 1 (CR-1) corridor upon completion of the CR-1 and I-70 interchange. The Leavenworth County Road 1 Land Use Analysis studied the existing land development conditions within the six-mile study area located between Tonganoxie's southern limits and Kansas Highway 32 (K-32) in Leavenworth County. After establishing the baseline conditions of land use, demographics, development patterns, and infrastructure, and completing a public engagement process, recommended options for future land development within the CR-1 corridor were created, alongside design guidance.

Overall goals for the CR-1 corridor planning process included the following:

- Ensure future development patterns protect and preserve natural resources;
- Align existing roadway and public utilities infrastructure with proposed development;
- Improve the corridor's scenic and rural residential character;
- Concentrate commercial, industrial, and/or a mix of uses at targeted activity centers (e.g., primary roadway intersections/interchanges); and,
- Generate economic development interest in the study area.

Two future land use concepts culminated from the CR-1 study, Concept A and Concept B, described as follows.

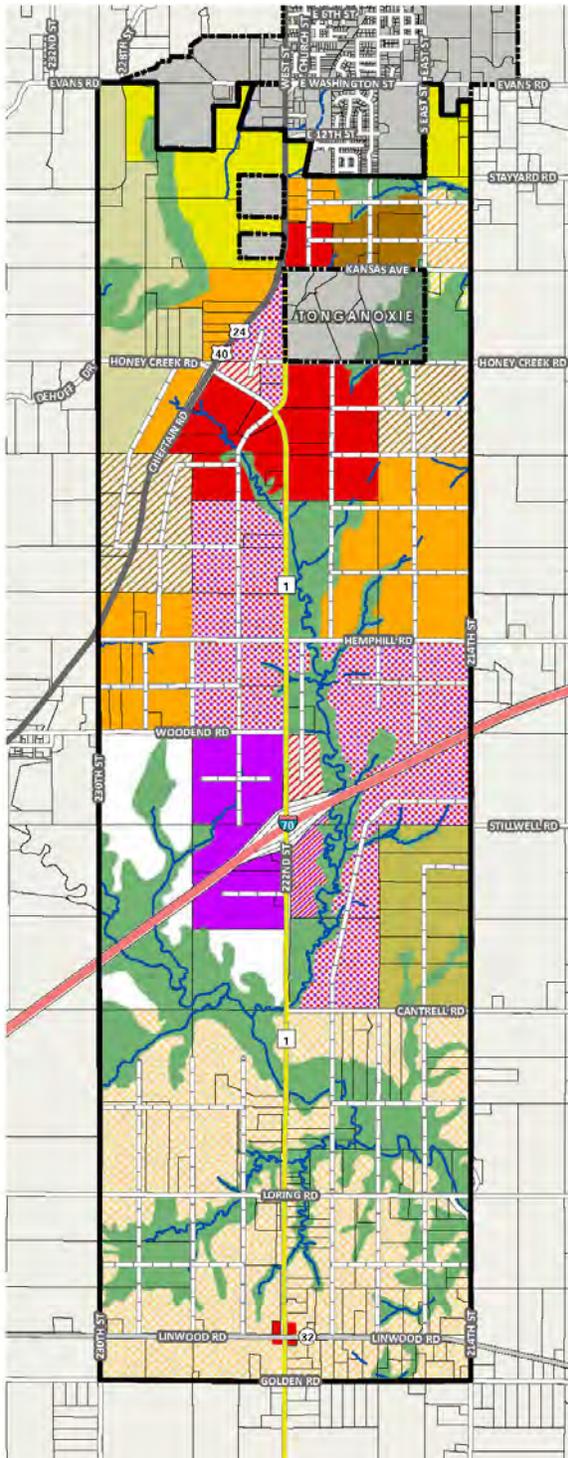
**Concept A:** Considered the optimistic approach, the future land development in Concept A is based on the goals and strategies desired by the public, and a range of land use development categories from open space and agricultural preserve to high density residential and medium industrial. This concept, based on population projections alone, may take more than 40 years to realize. This is the preferred concept from this planning process.

Key features of Concept A include primarily mixed uses east, northeast, and southeast of the I-70/CR-1 interchange, with open space designated along the entirety of Stranger Creek, as seen in the figure on the following page. Medium intensity industrial uses are proposed west of this interchange. South of Cantrell Road, the area is almost exclusively reserved for open space, except for the intersection of CR-1 and Linwood Road, which is slated for commercial. North of the I-70 and CR-1 interchange exhibits much higher density of uses compared to south of the interchange, with a wide range of land uses including commercial, varying residential density developments, and mixed use/mixed use cluster.

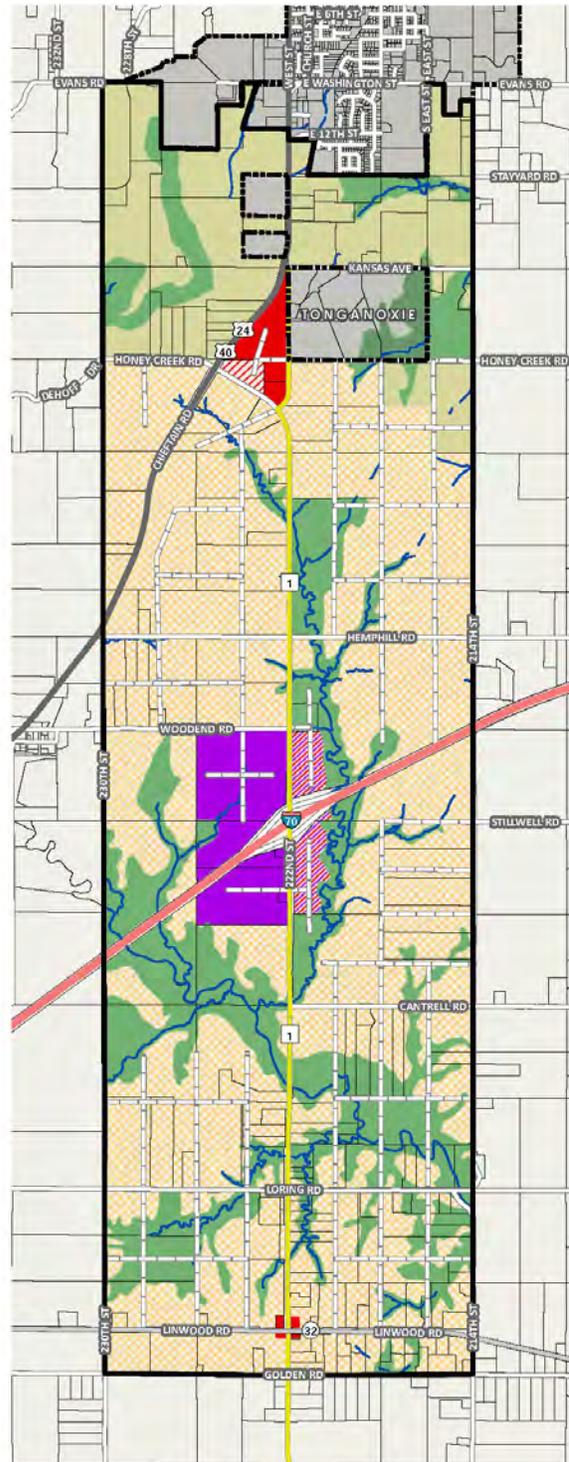
**Concept B:** Coined as the conservative approach, this concept is projected to take 20 years to achieve. It includes a different land development pattern than Concept A, but still utilized similar land use types.

Concept B takes a much different approach to land use development patterns, leaving almost the entire CR-1 study area designated to rural residential and open space, as shown in the figure to the right. North of Honey Creek Road, the residential areas proposed are slated for residential estate, which would include larger lots than the higher density residential areas proposed in Concept A for this same area. At the I-70/CR-1 interchange, medium industrial and mixed use are proposed identically as they are to the other concept, as well as the commercial proposed at the intersection of Linwood Road and CR-1. The primary difference between the approaches is that Concept A proposed much more development compared to Concept B.

In addition to analyzing land use within the study area, design guidance was provided to ensure a certain look and feel for the CR-1 corridor as it experiences growth and development. Design guidance was provided for buildings and lots, open spaces, circulation, parking, signage, and landscape and buffering. This design guidance is also intended to supplement the standards applied in the CR-1 Special Development District (SDD), which is an area within the CR-1 corridor that spans approximately from Honey Creek Road on the north to Golden Road on the south, and from 230th Street on the west to 214th Street on the east.



**Future Land Use Concept A**  
(Leavenworth County Road 1 Land Use Analysis)



**Future Land Use Concept B**  
(Leavenworth County Road 1 Land Use Analysis)

- Agriculture Preserve
- Commercial
- Commercial Cluster
- Large Lot Residential
- Medium Industrial
- Low Density Residential
- Low Density Residential Cluster
- Medium Density Residential
- Medium Density Residential Cluster
- High Density Residential
- High Density Residential Cluster
- Mixed Use
- Mixed Use Cluster
- Open Space

- Commercial
- Commercial Cluster
- Medium Industrial
- Mixed Use Cluster
- Open Space
- Residential Estate
- Rural Residential

## Lansing 2030: A Vision for Tomorrow Comprehensive Plan (2014)

The City of Lansing sits in the eastern part of Leavenworth County and is the second most populous city in the county. In October 2014, the City of Lansing adopted the Lansing 2030: A Vision for Tomorrow Comprehensive Plan, which was guided by the vision of creating a “vibrant, growing community in a safe and attractive environment that consists of quality residential neighborhoods, a superior education system, and strong viable business interests; and provides a variety of community services and activities which promote individual growth, family unity, and spirit of community.”

Since previous updates of the comprehensive plan, prior to 2014, significant development had occurred in the City of Lansing leading to the 2014 update, including residential, commercial, and industrial development, alongside major street and public utility improvements. This development, coupled with population growth, merited an update to the comprehensive plan, which focused on four major categories: land use, transportation, community facilities/services, and future growth.

**Land Use:** The increase in population since the previous update created a need for housing, which led to the predominant land use type being residential, specifically single-family. With the aging population, the trend in residential development is anticipated to change from single-family homes to higher density residential development, including townhomes, apartment complexes, and dedicated senior housing institutions.

Another factor the City of Lansing addressed regarding the increasing population, was to grow its existing retail establishments. According to a market study the city conducted, Lansing residents do not have their retail needs met within city limits, and thus are forced outside of Lansing to meet these needs. This economic loss was addressed by establishing some new businesses; however, the comprehensive plan indicates that a greater emphasis must be placed on retail establishments as it proceeds with redevelopment and revitalization efforts along Main Street.

**Transportation:** The Seven and Nine Mile Creeks are significant factors when it comes to transportation planning within the City of Lansing, as well as Leavenworth County, as they can only be crossed by bridge, restricting the number of north-south connections within the city. Further, Lansing’s Main Street is also U.S. Highway 73/Kansas Highway 7 (K-7) which generates average daily traffic counts of over 25,000 vehicles, greatly impacting the development opportunities, as well as non-vehicular access along this primary thoroughfare.

**Community Facilities/Services:** This section of the plan addresses the parks and recreation system, public safety, utilities, community and activity centers, library education, and other public facilities. The City of Lansing seeks to improve existing community facilities and services while providing space for additional development of this type as it is described as a primary way to attract more visitors, as well as future residents to increase its tax base.

**Future Growth:** The future of Lansing is to remain primarily residential, especially west of Main Street/Highway 73/K-7. There are clearly defined commercial, business, and mixed use corridors along Main Street and East Eisenhower Road (adjacent to the City of Leavenworth’s southern boundary) outlined in the Future Land Use Map, addressing the need for increased retail. Enhancing and revitalizing the development along these existing major thoroughfares allows the city to preserve natural resources while capitalizing on the areas suitable for development. It should be noted that the comprehensive plan does not just desire development for the sake of development, but rather aspires to create high-quality growth patterns with a focus on revitalization of older areas of the city.



## U.S. 24/40 Corridor Study (2007)

The U.S. Route 24/40 (U.S. 24/40) Corridor Study was adopted in 2007 and amended in 2008 as a partnership amongst the cities of Basehor and Tonganoxie, Leavenworth County, the Kansas Department of Transportation (KDOT), and MARC. The corridor area encompassed one mile on either side of U.S. 24/40 from Honey Creek Road on the west to K-7 on the east. The purpose for the study was to protect and preserve the transportation investment in the corridor area through thoughtful land use and transportation planning and management principles. The public engagement process informed other purposes for the project, including a desire to maintain a high level of mobility and safety on U.S. 24/40, to preserve the rural feel of the roadway, protect the Stranger Creek corridor and incorporate recreational uses, and to put a plan in place to allow for orderly economic growth within the corridor area. Lastly, the study process included design guidelines to safeguard the aesthetic quality of the corridor in the face of development pressures.

A corridor economic study and market assessment indicated that the number of business establishments, employment opportunities, and size of the labor force outpaced Leavenworth County and the Kansas City metropolitan area, demonstrating the economic importance of the corridor. To maintain and grow the economic development opportunities within the corridor area, improvements to the U.S. 24/40 were necessary as transportation access has a direct impact on an area's opportunity to retain and attract new businesses.

The presence of natural resources played a significant role in the development of recommendations and policies. Not only did the public process indicate a strong desire to preserve and enhance natural features within and surrounding the corridor area, planning for future roadway networks are inherently dependent on the environment in which they are being constructed. Preservation of the viewsheds and floodplain associated with Stranger Creek also contributed to the maintenance of the rural character that was important to those living and traveling in the corridor area.

The study used transects to illustrate future development areas, access management standards, and urban design guidelines for the corridor. Although these transition zones differ from zoning, they were reflective of the long-range land use plans for the county and cities. The corridor was subdivided into five transects, ranging from least developed T1 (Natural Zone) to the most developed T5 (City Center Zone). Generally, the most developed/urbanized areas are planned for in and surrounding the City of Tonganoxie. The central part of the U.S. 24/40 corridor, approximately between 208th Street and 166th Street, is proposed for natural areas and rural long-term development patterns. From the City of Basehor to the eastern corridor area, density increases with more suburban and urban development patterns proposed.

A basic major street plan considered the supporting road network and major access points along with potential future connections. Due to limits in funding, interim improvements to the corridor recommended elements to address safety issues with rising traffic volumes such as relocating and/or adding signals, widening the U.S. 24/40 Highway for a center turn lane or median, removal of median breaks, shared or consolidated driveways, and additional turn lanes. A refined travel demand model was also developed, and showed only incremental increases in traffic for 2030.

A traffic safety analysis identified where safety modifications should be concentrated throughout the corridor. After comparing collision rates with the statewide averages, each type of section was over the state average. These findings support the application of medians, driveway reductions, and access management practices recommended in the plan.

Multimodal aspects of the corridor are limited. While there are paved shoulders on both sides of the highway, bicyclists are not encouraged along the corridor. Existing right-of-way was inventoried to better understand the limitations of widening the corridor. While sufficient right-of-way exists in the four and five lane sections, areas with less than four lanes will require additional right-of-way. As developments are proposed in these areas, dedicating needed right-of-way will be more reasonable.

To implement the plan, the study charged local agencies to adopt an interlocal agreement to formalize the partnership of the entities that created this study, to execute the implementation action plan, to further explore the greenway trail system acquisition and implementation options, and to secure funding resources for the plan. This interlocal agreement was put into place for 20 years and is still in force at the time of this document. The following items have been completed:

- Added section to KDOT's Access Management Policy regarding the addition of the U.S. 24/40 planned corridor;
- Permitted access on the corridor by KDOT in various locations;
- Added a traffic signal at the Tonganoxie High School intersection (U.S. 24/40 and Main Street);
- Added a traffic signal at the intersection of 158th Street and U.S. 24/40;
- Added an auxiliary lane at 142nd Street and U.S. 24/40; and
- Installed turn lanes at 1423rd Street and U.S. 24/40.

## K-7 Corridor Management Plan (2006)

The K-7 Corridor Management Study was the result of a two-year effort with KDOT, MARC, KTA, and neighboring communities to complete a comprehensive study of the K-7 Corridor from 223rd Street in Spring Hill, north to Kansas Highway 5 (K-5)/Muncie Road in Leavenworth. Project objectives included:

- Determining facility type;
- Developing access requirements and street network system;
- Determining right-of-way preservation needs;
- Developing a phased implementation plan given lack of funding; and
- Executing memorandums of understanding (MOU).

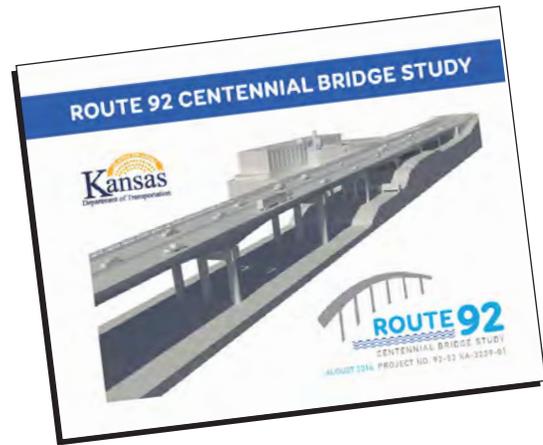
Following input on future land uses from the surrounding communities, a traffic forecast was developed resulting in a recommended freeway facility for the corridor. While not all communities agreed completely with the freeway facility, everyone agreed with the importance of preserving right-of-way needed for future roadway widening and potential interchanges.

Limited funding does not allow for the facility to be completed as of now, but it will be critical to make interim improvements in accommodating future growth in traffic. These interim improvements included elements such as adding traffic signals and turn lanes where future interchanges are proposed, reducing access, and preserving land for enhancements.

Implementation of the plan was broken into MOUs where roles and responsibilities were developed with appropriate partner agencies and communities in mind. Additionally, a K-7 Corridor Review Committee was created, made up of KDOT representatives and local communities. The committee is tasked with meeting to review the plan and evaluate progress or any issues regarding land development or compliance with the plan.

## Route 92 Centennial Bridge Study (2016)

KDOT completed a study in August 2016 on the aging Route 92 Centennial Bridge. This bridge crosses the Missouri River, connecting Leavenworth County and Platte County over the state line. The study examined the existing conditions of the bridge, including the bridge conditions, multimodal transportation network, traffic characteristics, and environmental features. According to the findings, along with the forecasted conditions, the study concluded that the bridge should be replaced. A handful of locations for new bridge corridors were selected and cost estimates were completed. The study also suggested tolling as a source of revenue. Next steps included a location for the new bridge, design recommendations, and costs. The project was halted in 2017 due to budgeting.



## 5-County Regional Transportation Study (2013)

KDOT, MARC, and the Lawrence-Douglas County Metropolitan Planning Organization completed this two-phase study in March 2013 to assess the transportation needs of the fastest growing region in the State of Kansas to guide sustainable enhancements to the regional transportation system. Douglas, Johnson, Leavenworth, Miami, and Wyandotte counties were included in the study. Phase one assessed the multimodal transportation needs for the five counties, with a large emphasis on stakeholder outreach and public input. As a result of the outreach, five primary themes emerged and were used to guide the study recommendations:

1. Create a multimodal transportation system that provides choice and supports economic vitality of the region;
2. Focus on moving people and freight rather than on moving vehicles;
3. Invest in a transportation system that promotes the region's long-range vision and community goals and objectives;
4. Seek to maximize the vitality of social, economic, and environmental system systems when making transportation investments; and
5. Maintain and invest in the existing transportation system.

Phase two prioritized the region's needs. Three stakeholder groups provided guidance throughout this phase: the Stakeholder Advisory Panel, the Corridor Strategies Working Group, and the Travel Demand Model Technical Committee. Seventeen key transportation corridors throughout the five counties were evaluated. The following Leavenworth County corridors were analyzed:

**K-92 Corridor:** Kansas highway K-92 and Missouri highway M-92 connect Fort Leavenworth to Kansas City International Airport. The corridor contains the Centennial Bridge, which crosses the Missouri River and connects the two states. This corridor is significant because Fort Leavenworth is one of the largest single users of the airport and this route is the primary access point. Recommendations for this route include an incident management plan for the Centennial Bridge, widening the bridge, and implementing a toll in accordance with the recommendations of the toll feasibility study.

**I-70 Corridor:** I-70 is a major east-west route through the State of Kansas and operates as a toll facility from the western border of Leavenworth County through the K-7 and I-70 interchange and passes by many local attractions, in addition to leading to Kansas City to the east, Topeka to the west, and beyond. Development along this corridor continues to be anticipated, and the recommendation strategies align as such. Areas of focus for recommended strategies include improving safety and traffic flow and increasing use of bus services and carpooling.

**K-7 / US-73 / US-169 Corridor:** Also designated as US-73 in Leavenworth County, K-7 is a north/south corridor that connects four of the five counties in the study along the western edge of the Kansas City metropolitan area. This route changes in capacity and speed limits as it moves south towards Olathe, but in Leavenworth, it features many traffic signals and intersections, reducing the capacity of the highway and increasing travel times. Recommended strategies for the portion of K-7 in Leavenworth County include implementing a transit service that connects to existing services in the Kansas City metropolitan area.

**K-5 Corridor:** K-5 splits from K-7 in Leavenworth County and travels southeast to connect to I-435. The winding, two-lane road has low speeds and low traffic levels. The recommended strategy for the corridor is to conduct a study for a potential realignment between K-7 and I-435.

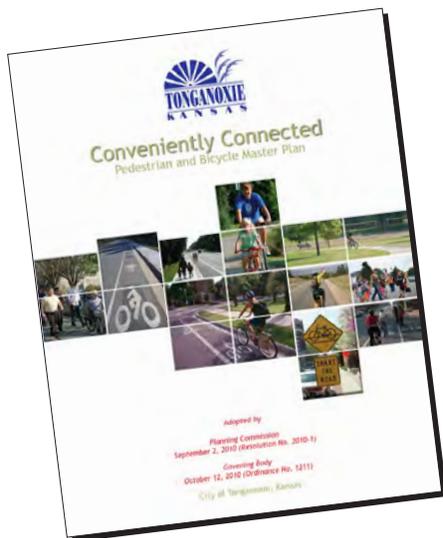
**U.S. 24/40 Corridor:** The U.S. 24/40 corridor serves rural Leavenworth County, connecting Douglas County to Bonner Springs and Village West. Increasing development and anticipated growth in Bonner Springs and Village West influenced the recommendations for the corridor to support a higher traffic capacity. In addition, U.S. 24/40 provides an alternative east/west route to I-70 that avoids tolls. It will continue to demand a growing traffic capacity.



## Conveniently Connected: Pedestrian and Bicycle Master Plan (Tonganoxie) (2010)

In Tonganoxie, planning efforts were made to review their roadway network and evaluate how to better accommodate bicyclists and pedestrians. The adopted Conveniently Connected: Pedestrian and Bicycle Master Plan defines complete streets as “designed and operated to enable safe access for all users (pedestrian, bicyclist and motorists) of all ages and abilities along and across the street.”

According to the plan, complete street modifications were made to the local roadway network designations as well as identifying locations for future greenway trails, and greenway parks. For each roadway functional classification, modified street standards were recommended, such as appropriate bicyclist, pedestrian, and sidewalk facilities. Additional elements considered in the design guidelines for complete streets included drainage, on-street parking, landscape, street furniture, and expanded bicycle and pedestrian accommodations.



## Greater Kansas City Regional Bikeway Plan (2015)

The Greater Kansas City Regional Bikeway Plan presents a regional network of bikeways, with over 2,000 miles of on-road and off-road facilities spanning eight counties in the bistate region. Benefits of the network include safe, alternative transportation networks, reductions to auto dependency and emissions, and health benefits from increasing opportunities for physical activity. The plan was created over a year and included public engagement, input from city and county officials, open house workshops, and online mapping to identify and prioritize important corridors.

The plan recommendations are as follows:

- A prioritized network of regional bikeways to support regional and local planning and investment in active transportation;
- Regional planning and coordination to help implement the plan by creating and sustaining necessary partnerships;
- Data collection and technical capacities to update and maintain GIS information on constructed, programmed, and planned bikeways and trails; accurate user counts; and crash data;
- Education and encouragement campaigns to raise public awareness of bikeway and trail resources in the region and educate the public about safe driving, walking, and cycling behaviors;
- Enforcement efforts to allow all users to share a safe roadway system and address roadway safety issues; and
- Encouraging national designation applications to support communities that apply for Bicycle Friendly Community and Walk Friendly Community recognition.

At the time of the plan's development, Leavenworth County had 27.2 Share the Road miles and 16.3 miles of shared use paths. The plan proposes a total of 136 miles of regional bikeways for Leavenworth County. Proposed bicycle corridors through the county run west to east crossing the Centennial Bridge into Platte County, and south through Tonganoxie to Douglas County, through Basehor to De Soto, and into the Kansas City metropolitan area. The plan further distinguishes the corridor on the Centennial Bridge across the Missouri River as high priority. Leavenworth County routes are part of a larger conceptual vision for the Lewis and Clark Route, an approximately 165-mile route connecting northern portions of Leavenworth, Platte, and Clay counties.

## Leavenworth County Transit Plan (2018)

MARC, in partnership with the region's four transit agencies – Kansas City Area Transportation Authority (KCATA), Johnson County Transit, Unified Government Transit, and IndeBus – are currently updating the RideKC Regional Transit Plan through the SmartMoves 3.0 initiative. A major component of the SmartMoves 3.0 initiative is connecting areas with limited existing transit service that have a growing need for access to jobs and activity centers. Leavenworth County, and specifically the City of Leavenworth, is a growing activity center due to the expansion of the business park in southern Leavenworth.

Short-term and long-term alternatives for improving transit operations were developed and evaluated. From these alternatives, a preferred strategy was identified to meet the needs in the most cost-effective manner.

Two transit service alternatives were developed and evaluated, but ultimately Alternative 1 was chosen. Alternative 1 focused on meeting the need for travel within the City of Leavenworth. This alternative serves the community's transit dependent population including older adults, persons with disabilities, and low-income households. The service was designed to provide access to medical and social service providers, shopping, educational opportunities, and other public services and facilities such as libraries and community centers.

Alternative 1 represented the most promising strategy for addressing near-term public transit service needs in the Leavenworth-Lansing area. It can effectively serve the intra-community transportation needs of the transit dependent population within the service area, can be operational in a very short period of time, is adaptable to changing conditions and needs, provides transit access to most of the City of Leavenworth, and can be expanded to include Lansing. This service also has the potential to grow in the future, depending on ridership patterns. There is the possibility to convert this service into flex or fixed-route service.

However, there are needs that are not effectively met or not met at all by Alternative 1, particularly the need to connect Leavenworth County to the regional transit system. This need can only be met through the introduction of a connector service such as Alternative 2. This is a need that, while identified through discussions with stakeholders and through survey data collected from the public, appears to be a lower priority in the near-term. Long-term, as the regional transit network is improved and expanded, including Alternative 2 as part of a long-term transit development strategy for Leavenworth County and the Kansas City region should be considered.

The recommended near-term transit service strategy identified for Leavenworth County involves the introduction of a flexible, on-demand service covering a defined area of the City of Leavenworth. The service would operate using passenger vehicles with a 12 to 20 person capacity. Trips would need to be requested by users in advance. This service would be available Monday to Friday from approximately 6:00 a.m. until 6:00 p.m.

The long-term transit strategy includes a connector service between the City of Leavenworth and the Village West retail/entertainment district in western Wyandotte County. From this point, passengers could make connections to the regional transit network.



# Land Use and Zoning

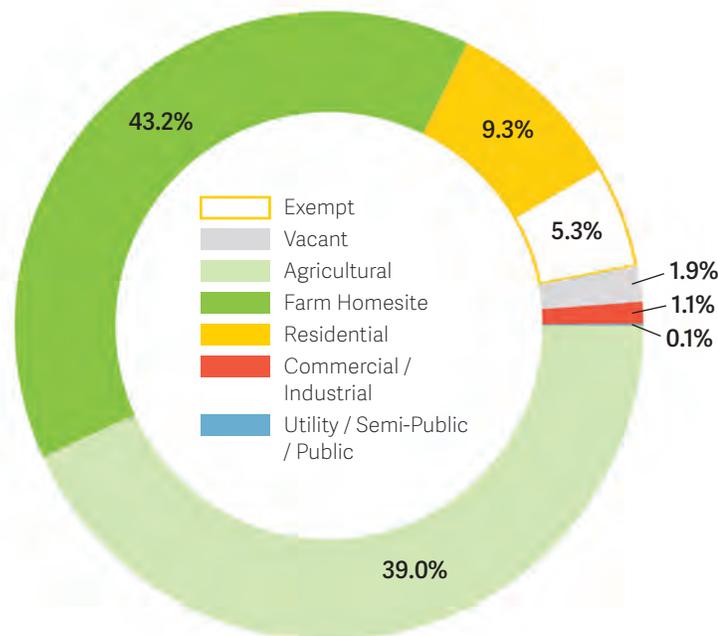
## Land Use

Land use – now and in the future – will, in part, define the character of the county. Compared to other counties in the Kansas City MSA, Leavenworth County is unique, as the county is an agricultural-based community. In fact, 235,000 acres of land in Leavenworth County is used for agricultural purposes. Eighty-two percent of the land available within the county is used by residents to produce food or raise animals.

Figure 2.1 shows the percentage of acreage breakdown for land uses within the county. Figure 2.2 shows the distribution of land uses within the county. The definition of each land use is provided below:

- **Agricultural:** Farming and forestry
- **Commercial and Industrial:** Service, retail, office, manufacturing, processing, fabrication, and/or packaging uses
- **Exempt:** Religious facilities, governmental, and military uses
- **Farm Homesite:** Property used as a residence that also produces plants or animals
- **Vacant:** Unoccupied land with few to no structures and no primary use
- **Residential:** Homes, both single-family and multi-family
- **Utility/Semi-Public/Public:** Governmental, utilities, and educational uses

Figure 2.1 Existing Land Use Breakdown



## Zoning

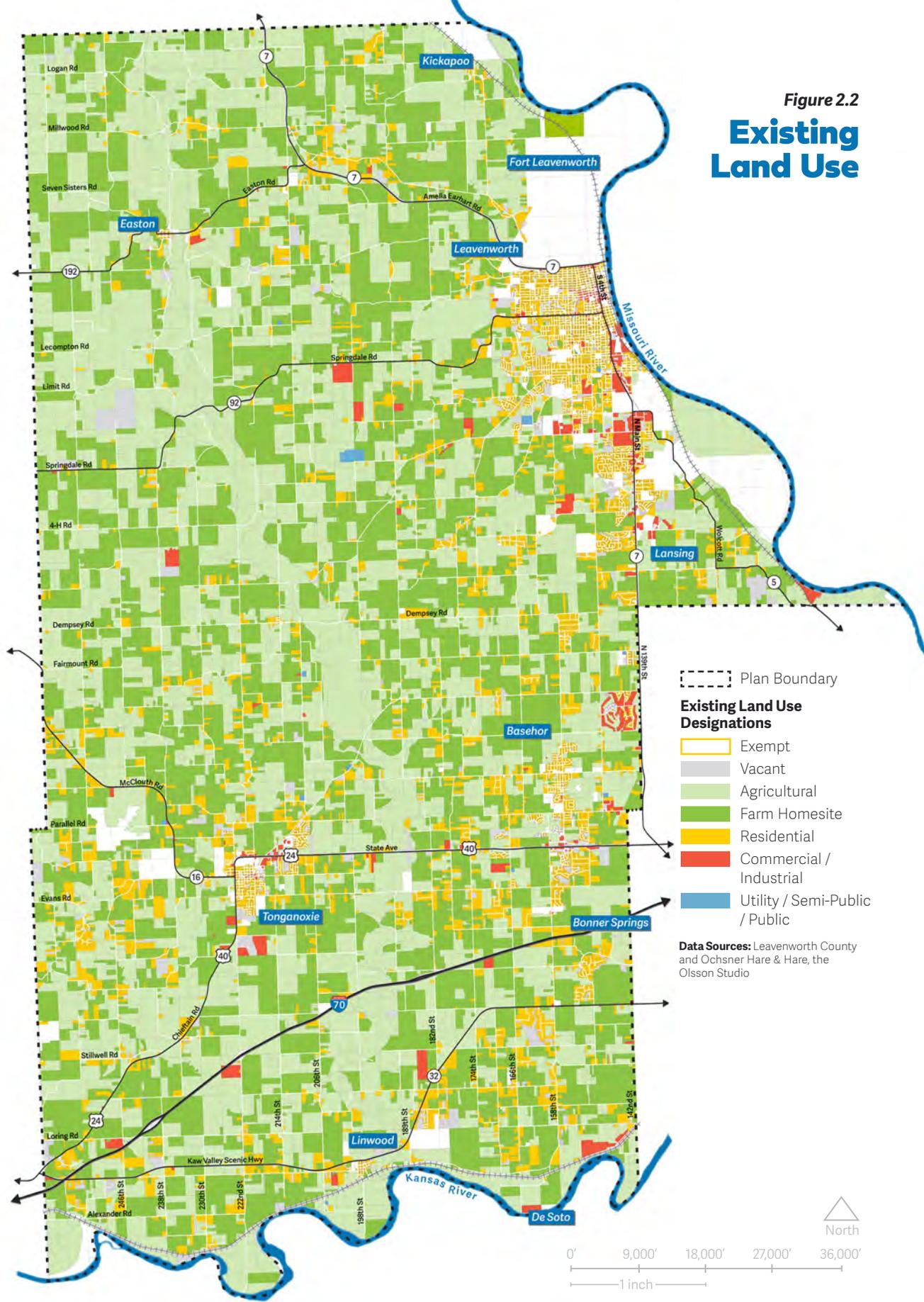
Leavenworth County uses an official zoning map and subdivision regulations to regulate land usage, the intensity of those uses, and the interactions between various land uses.

Zoning regulations exist to regulate development to protect the health, safety, prosperity, and general welfare of Leavenworth County residents.

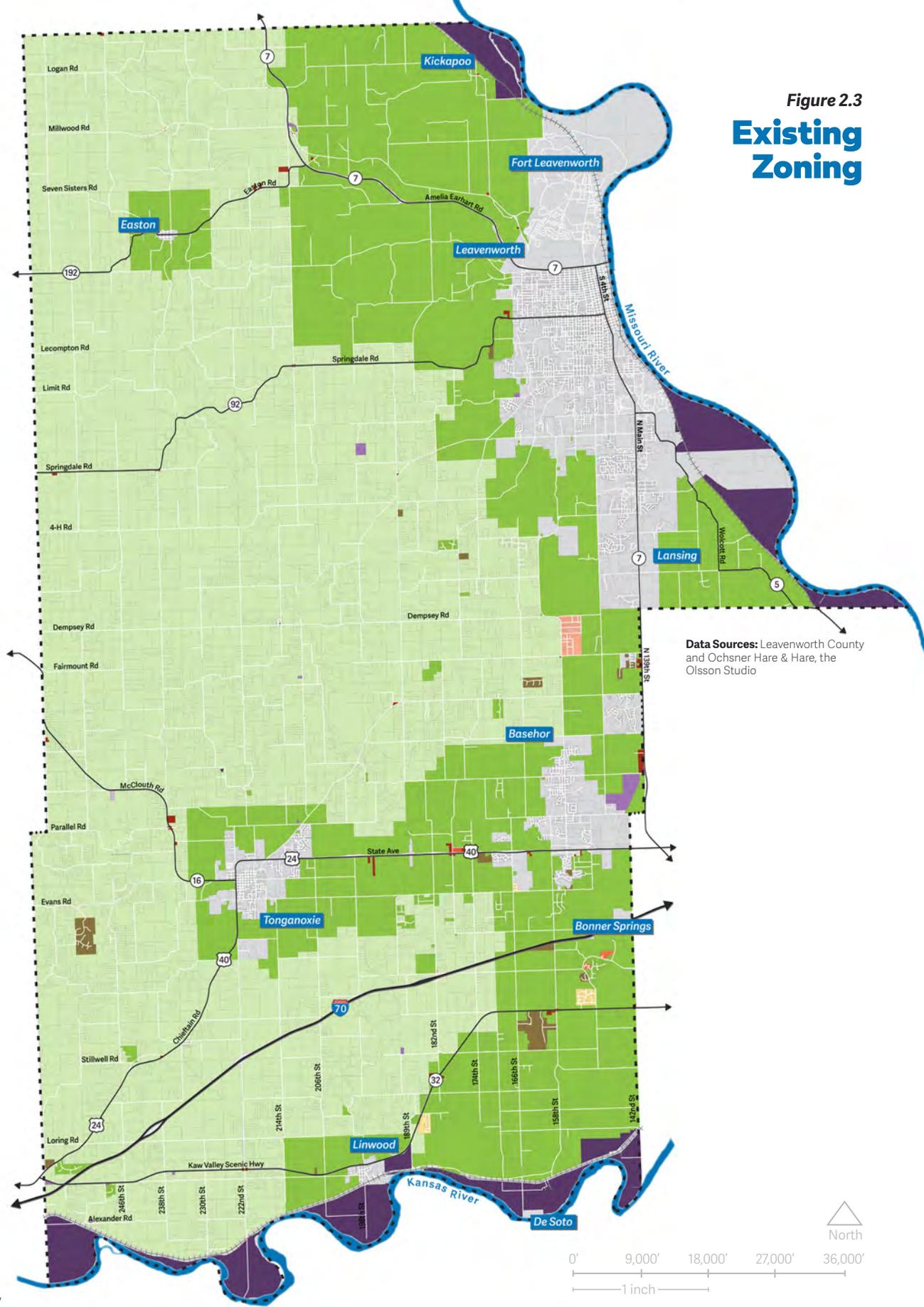
Leavenworth County is unique in that it has little difference in its zoning types. Over 95 percent of the county is zoned as a rural zoning designation. The county's zoning allows for the rural land to be used simultaneously as agricultural and residential, which supports the high percentage of agriculture usage mentioned prior.

Figure 2.3 shows the distribution of zoning districts within the county. A definition for each zoning district is provided on page 19.

**Figure 2.2**  
**Existing Land Use**



**Figure 2.3**  
**Existing Zoning**

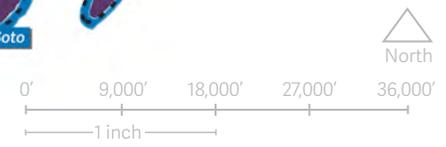


**Data Sources:** Leavenworth County and Ochsner Hare & Hare, the Olsson Studio

--- Plan Boundary

**Existing Zoning Districts**

- |                           |                               |                                   |                                     |
|---------------------------|-------------------------------|-----------------------------------|-------------------------------------|
| B-1 Neighborhood Business | I-2 Light Industrial          | R-1(15) Single-Family Residential | RR-2.5 Agricultural and Residential |
| B-2 Limited Business      | I-3 Heavy Industrial          | R-1(43) Single-Family Residential | No County Zoning                    |
| B-3 General Business      | PUD Planned Unit Development  | R-2 Single-Family Residential     |                                     |
| I-1 Limited Industrial    | R-1 Single-Family Residential | RR-5 Agricultural and Residential |                                     |



# Zoning Districts

## R: Rural - Agricultural and Residential

- RR – 2.5 (2.5 acre minimum)
- RR – 5 (5 acre minimum)
- RR – 40 (40 acre minimum)

Rural zoning is intended to allow for farming on property while also allowing residential uses on the same land.

## R-1: Rural - Single-Family Residential

- R-1(10) (10,000 square feet minimum)
- R-1(15) (15,000 square feet minimum)
- R-1(43) (43,560 square feet minimum)

R-1 is intended for low density single-family residential development. Land uses that are compatible with single-family dwellings, such as educational facilities, farms, and public uses are all allowed by right within this district. This zoning allows a maximum of four units per acre on property zoned R-1.

## R-2: Single-Family Residential

R-2 is intended for single-family residential development. Land uses that are compatible with single-family dwellings, such as educational facilities, farms, and public uses are all allowed by right within this district. Seven to eight units per acre are allowed on property zoned R-2.

## R-3: Two-Family Residential

R-3 is intended for single-family attached dwelling residential development. Any land uses allowed in R-1 or R-2 are also allowed within this district. R-3 zoning allows a maximum of seven or eight units per acre on property zoned R-2.

## R-4: Apartment Residential

R-4 zoning is designed to support the widest range of residential options available, including apartments. R-4 zoning allows the development of 28 to 29 units per acre on R-4 zoned property.

## B-1: Neighborhood Business

B-1 zoning is intended to support the development of any use allowed in R-4 zoning and the development of a number of business types.

## B-2: Limited Business

B-2 zoning is intended to support a stable and wide variety of local retail and office developments.

## B-3: General Business

B-3 zoning is intended to support the widest and most intense commercial uses, including retail, business, and office uses.

## I-1: Limited Industrial

I-1 is for a developing stable or redeveloping area representing light industrial uses and having a relatively high intensity of use and land coverage.

## I-2: Light Industrial

I-2 is for a developing stable or redeveloping area representing light and heavy industrial uses and having a high intensity of use and land coverage.

## I-3: Heavy Industrial

I-3 is for a developing stable or redeveloping area representing heavy industrial uses and having the highest intensity of use and land coverage.

## PUD: Planned Unit Development

PUD is intended to allow creative uses of land by creating a zoning district tailored for each property's specific use and land coverage. The developer will negotiate the allowed uses and the zoning requirements with the county staff members, Planning Commission, and Board of County Commissioners in order to create a development unique to Leavenworth County.

# County Facilities and Services

Essential services and facilities are provided by the government that safeguard public well-being. Included in these essential services and facilities are fire and police protection, community facilities, schools, parks and recreation facilities, utilities, and solid waste management. These services are foundational to a sustainable and vibrant community. They provide space and services for the residents to maintain the quality of life residents expect as they choose to live in Leavenworth County. Community facilities should work in harmony as they encourage social cohesion and a better quality of life for all residents of the county.

It is essential to understand what and where community facilities are within the county, as these facilities help to facilitate growth and increases in quality of life. Such facilities need to be developed in a thoughtful and measured way to provide the adequate level of service for all residents within the county. The development pattern, economy, health, and safety of the county will all be affected by the location and quality of community facilities throughout the county.

## County Buildings

Public buildings are essential to the life and health of many community facilities. The following is an overview of buildings used by Leavenworth County to provide services for its residents.



**County Courthouse:** The Leavenworth County Courthouse is located in the City of Leavenworth at the corner of Walnut and 3rd Streets, just south of downtown Leavenworth and immediately west of the Justice Center. This courthouse was built in 1911 on the foundations of the original courthouse that was damaged by a significant fire in 1911. Today, the courthouse contains most county administrative departments, including Administration, Appraiser, Clerk/Election, Board of County Commissioners, Emergency Management, GIS, Planning and Zoning, Public Works, Register of Deeds, Treasurer, and Surveyor.



**Justice Center:** The Justice Center was built in 2000 and houses the Leavenworth County Sheriff's Office, Leavenworth (city) Police Department, First District Court (Kansas), Juvenile Detention Center, and all city and county judicial offices.



**County Annex Building:** Leavenworth County operates an Annex Building located on U.S. 24/40 in Tonganoxie in order to better serve Leavenworth County residents who live in the southwest region of the county. There are limited services provided to the public through the Annex. The facility also houses an Emergency Medical Services unit and a Sheriff's Office substation.

## County Facilities and Services

**Capital Improvements:** The county maintains a Capital Improvement Program (CIP) through the Public Works Department to meet demand for services, as the county's population grows. The CIP funds are used by the county to invest in public roads, bridges, and limited stormwater projects in the public right-of-way.

**Sheriff's Office:** The Leavenworth County Sheriff's Office serves the county by maintaining peace and security through law enforcement services. The department maintains three bureaus: Operations, Administrative, and Detention.

**Water Services:** Water is a vital utility that needs to be available to all residents. Leavenworth, Lansing, and Tonganoxie all maintain a water department for their residents and a limited service surrounding their jurisdiction. For residents who do not live in the municipal service areas, they connect to one of several Rural Water Districts (RWD) if they do not have access to a well on their property. According to the Kansas Rural Water Association, multiple RWDs serve Leavenworth County, including those discussed in the Utilities subsection of this section.

**Fire Protection:** Residents must also count on fire protection services in order to protect their family and property from danger. Leavenworth County has 12 fire departments that provide emergency response to the residents of their districts. The county does not have an official fire department, but instead allows the residents to create and maintain a number of volunteer fire departments as needed.

**Emergency Medical Services (EMS):** Leavenworth County is served by an EMS department whose mission is to provide quality, responsive, and cost effective pre-hospital advanced life support care and transport to Leavenworth County citizens. The Leavenworth County EMS was established in 1976 by a voter referendum, which granted the county rights to own, operate, and collect taxes, from county residences, to provide an emergency medical service. EMS is a department within county government and provides services to the entire county.

**Schools:** There are six different school districts within Leavenworth County, including:

- Basehor-Linwood Unified School District
- Easton Unified School District
- Fort Leavenworth Unified School District
- Lansing Unified School District
- Leavenworth Unified School District
- Tonganoxie Unified School District

These school districts operate 25 different schools and serve the estimated 14,000 students in Leavenworth County. There are also a number of private schools that operate within Leavenworth County.

- Xavier Catholic School operates in the City of Leavenworth and offers classes for children ages kindergarten through eighth grade.
- St. Paul Lutheran School operates in the City of Leavenworth and offers classes for children ages kindergarten through eighth grade.



# Transportation

The transportation network for Leavenworth County consists of a range of roadways that span from controlled access interstates to low-volume dirt roads and major railroads. The rolling terrain of the county, combined with the presence of the Missouri River on the eastern limit of the county and the Kansas River on the southern limit, and the built restrictions of I-70 and railroads, creates a rural county grid network that is often disjointed, unlike many counties in Kansas located further to the west. The transportation network within the county is provided by Leavenworth County, as well as by KTA, KDOT, local municipalities, the Union Pacific Railroad, and BNSF Railway.

## Interstates

I-70, which is operated by KTA, crosses the south portion of Leavenworth County. This limited-access toll road has one interchange within Leavenworth County at 222nd Street, located several miles south of the City of Tonganoxie.

## Highways

KDOT maintains several U.S. and state highways throughout Leavenworth County. Many of these facilities share multiple designations of both U.S., state, and even city streets. The KDOT facilities, and their state classification, are briefly described below. It should be noted that KDOT roadway classifications do not necessarily correspond to the county's roadway classification.

- **U.S. Route 73 (U.S. 73)/K-7:** Designated as a Principal Arterial by KDOT, this route runs primarily north and south through Leavenworth County. Starting in the City of Leavenworth and continuing south, this route is a multilane roadway that ultimately provides access to I-70, and the cities of Bonner Springs, Lenexa, and Olathe, Kansas.
- **U.S. 24/U.S. 40:** Designated as a Minor Arterial by KDOT, this route runs primarily east and west through the county and Tonganoxie.
- **Kansas Highway 92 (K-92):** Designated a Major Collector by KDOT, this route runs primarily east and west through the county through the City of Leavenworth and provides access over the Missouri River.
- **Kansas Highway 192 (K-192):** Designated a Minor Arterial by KDOT, this east and west route provides access to Easton to U.S. 73/K-7.
- **Kansas Highway 16 (K-16):** Designated a Minor Arterial by KDOT, this route extends west from Tonganoxie.
- **K-32:** Designated a Minor Arterial by KDOT, this route runs primarily east and west through the southern portions of Leavenworth County.

## River Crossings

The K-92/Centennial Bridge crossing is the only crossing of the Missouri River in Leavenworth County. To the south there are two crossings of the Kansas River: on 166th Street providing connection to DeSoto; and on 222nd Street providing access to Eudora.

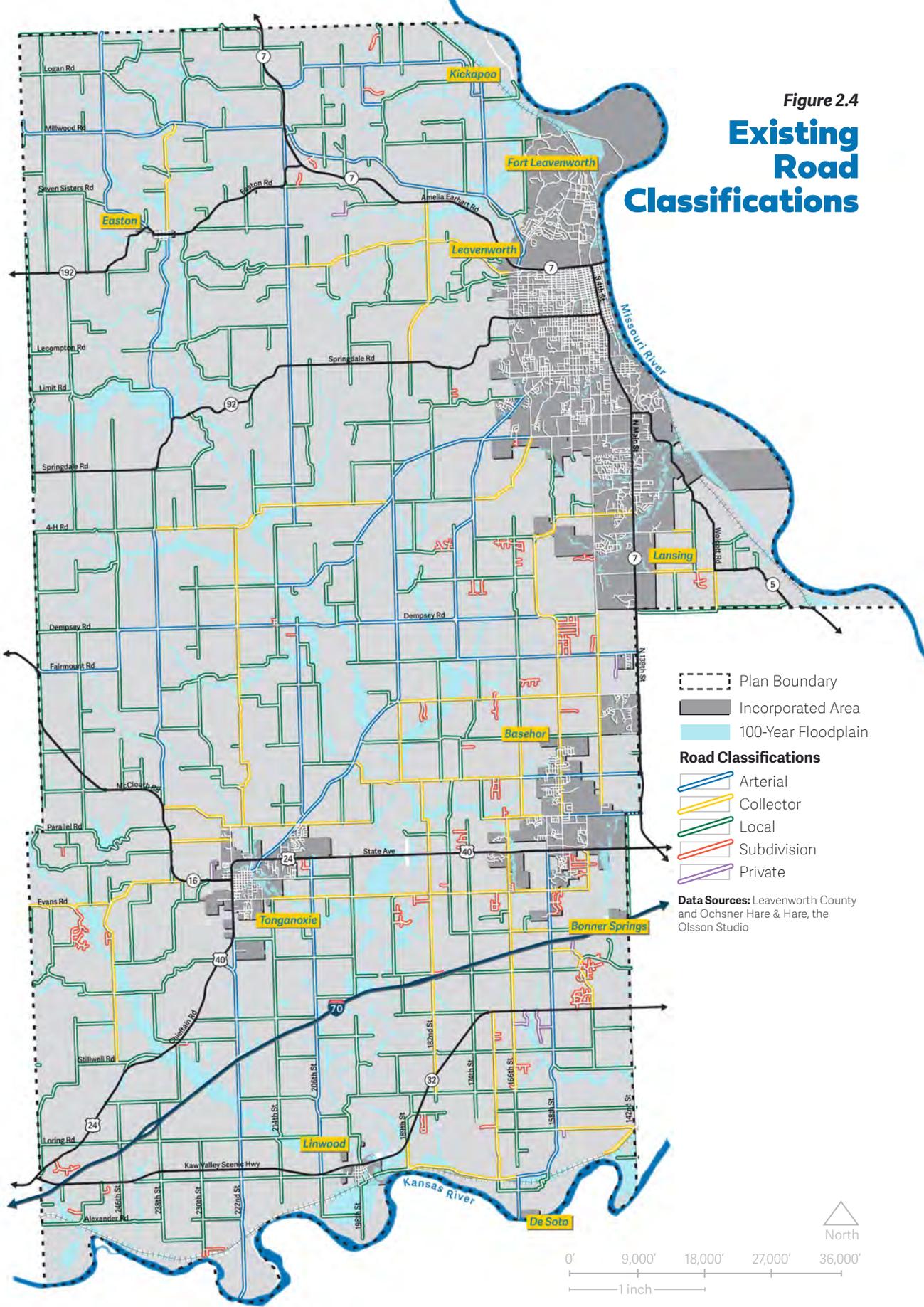
## County Road Classifications

The county roadways, located outside of municipal jurisdictions, have been previously classified and are shown on *Figure 2.4*. These roads are primarily two-lane facilities with narrow right-of-way measuring 40 feet in width. The roadways are classified as the following:

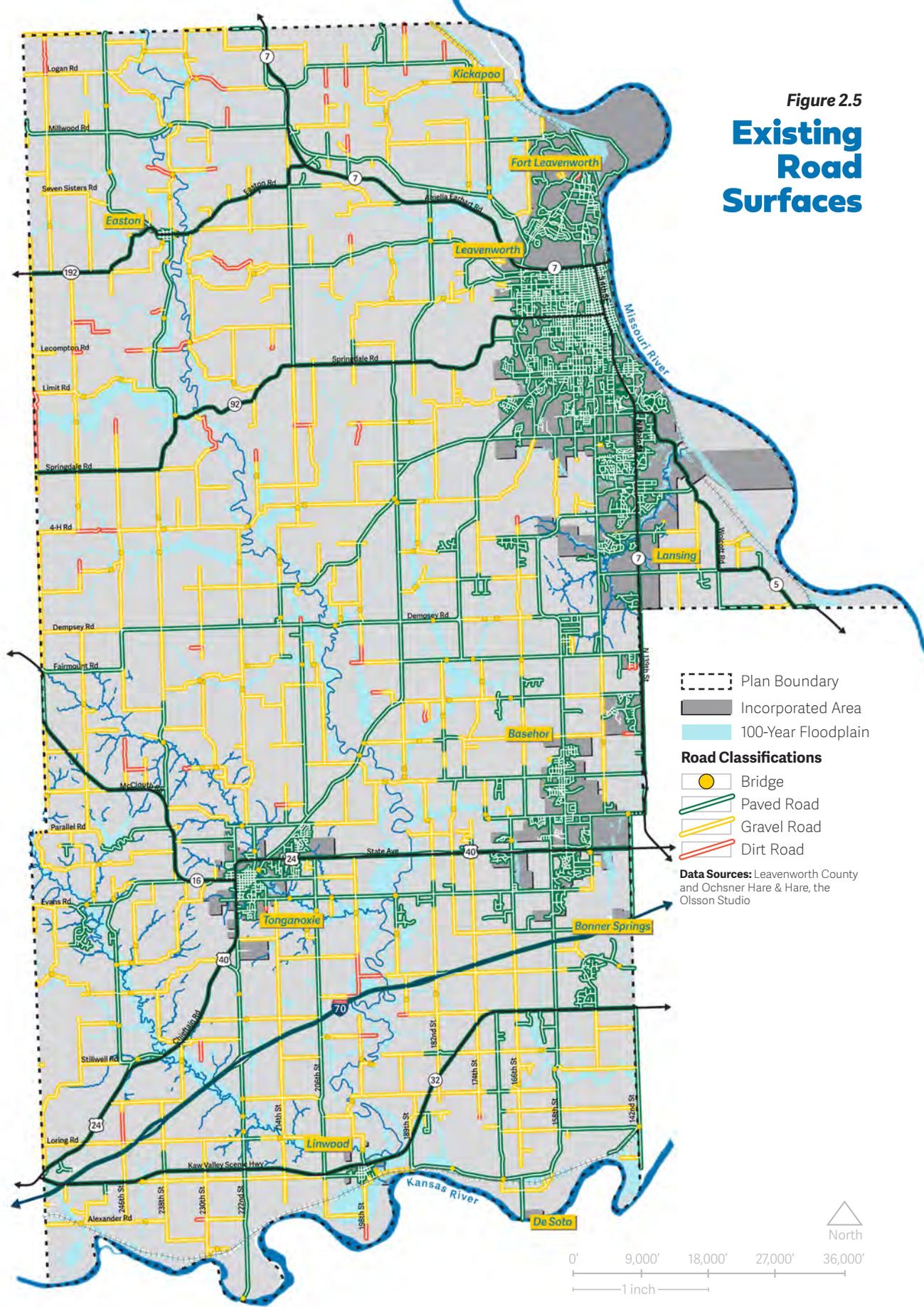
- **Arterials:** These roadways are higher-capacity roadways whose primary focus is to provide connection between communities and to higher classified state facilities (interstates and major highways/expressways). These are typically paved roadways.
- **Collectors:** These roadways are often lower-capacity facilities that provide access from local roadways and properties to arterials. These roadways can be either paved or gravel roadways.
- **Local Roadways:** These facilities primarily serve adjacent land and development only with the highest amount of access and generally represent the lowest volume roadways in the county. These facilities can be paved, gravel, or even dirt roads.
- **Subdivision Roadways:** These facilities are roadways within a platted subdivision.
- **Private Roadways:** These facilities are owned and maintained by a private individual, organization, or company, rather than by a government. Unauthorized use may be considered trespassing.

As described, the surface treatment for county roadways may be paved, gravel, or dirt roadways. The various surface treatments that exist currently in Leavenworth County are shown on *Figure 2.5*.

**Figure 2.4**  
**Existing Road Classifications**



**Figure 2.5**  
**Existing Road Surfaces**



## Pedestrian, Bicyclist, and Transit User Facilities

Although surface roads providing service to motorists are often the most utilized and discussed transportation method – especially at the county-wide scale – there are other forms of transportation that are pertinent to consider. These additional transportation modes include bicycling, walking, and using transit.

**Pedestrian and Bicyclist Facilities:** As shown on *Figure 2.6*, most of the county is a bicycle and pedestrian facility desert. The cities of Tonganoxie and Basehor have existing shared use paths, although in each city they are concentrated to one area. The City of Leavenworth has the most robust bicycle and pedestrian network, with existing shared use paths, shared lane markings, and some trails dispersed throughout city limits.

*Figure 2.6* also illustrates planned trails, which would address the lack of facilities countywide, while providing linkages to existing options within each city. This planned trail system is part of MARC's MetroGreen Regional Greenway System, which is part of a larger effort to incorporate more passive and active recreation facilities to relieve congestion and provide more travel mode options.

The definition of each pedestrian, bicyclist, or recreational facility is provided below:

- **Outdoor Recreation Facility:** Facility for biking, boating, hiking, swimming, etc.
- **Sport Facility:** Courts and fields for basketball, baseball, football, volleyball, golf, tennis, etc.
- **Existing Shared Use Path:** Wider sidewalks that support multiple recreation and transportation modes, such as walking, bicycling, or inline skating; typically run parallel to a roadway
- **Existing Marked Share the Road Route:** Shared lane markings and signage denoting a designated bike route; vehicles and bikes ride in the same lane, until it is safe for vehicles to pass the bikes
- **Existing Trail:** Wider paths that support multiple recreation and transportation modes, such as walking or bicycling; typically do not run parallel to a roadway
- **Planned Trail:** Future planned trail, designated in MARC's MetroGreen Regional Greenway System
- **Planned Bike Route:** Future planned bike route, designated in MARC's Greater Kansas City Regional Bikeway Plan.

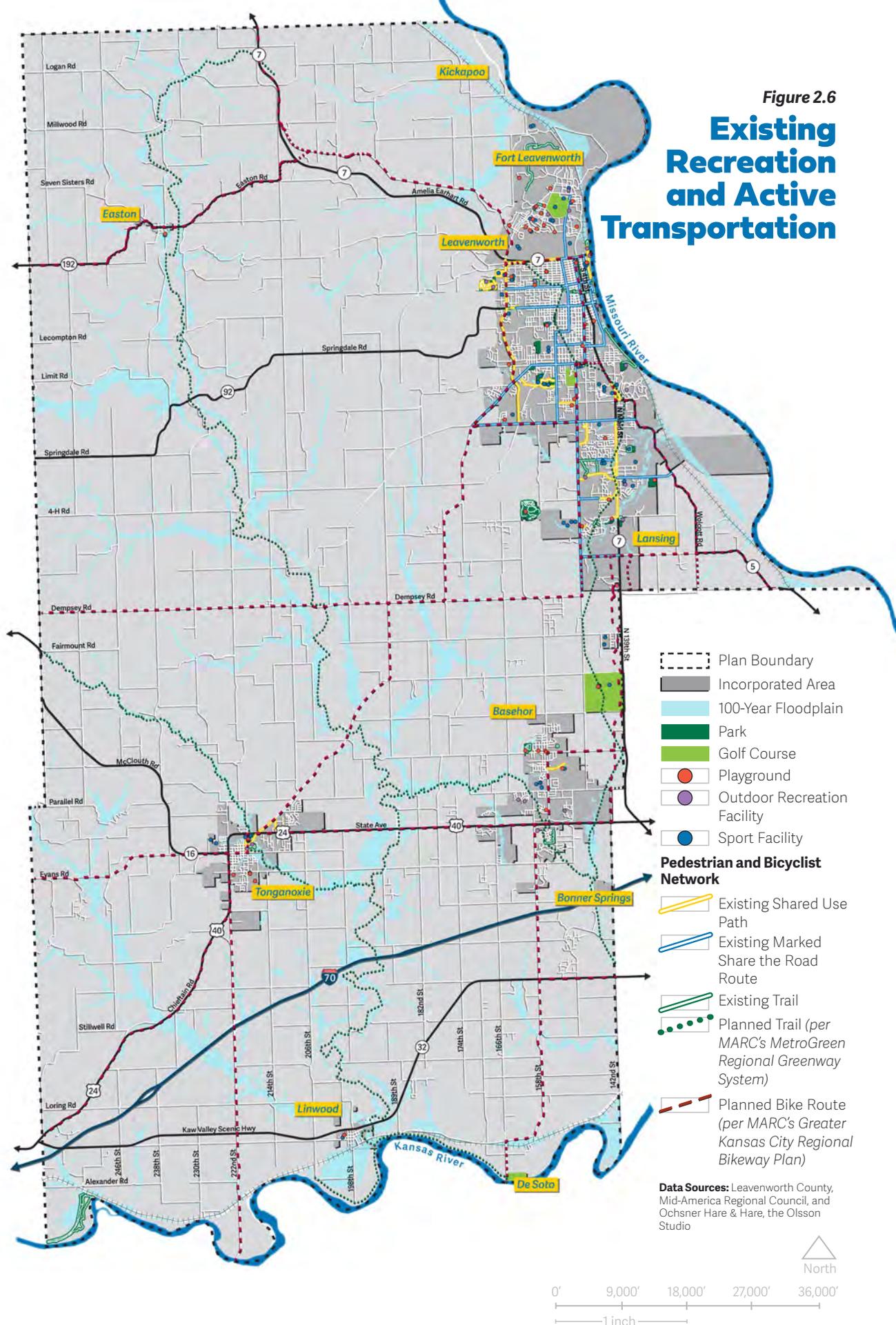
**Transit User Facilities:** The transit system for Leavenworth County was recently studied by KCATA to understand the existing state of transit and the future needs. There are currently no transit routes that operate within Leavenworth County. The closest option is Route 113 (Leavenworth Road), which offers service to and from the Legends Outlets and the 47th and State Avenue Park n' Ride.

Following a public engagement process and stakeholder meetings, a preferred transit strategy for Leavenworth County was formed. In the near term, the most promising strategy to address public transit service needs is within the Leavenworth-Lansing area. It must be noted that Leavenworth County's Council on Aging, supported through tax dollars and an arm of the county government, currently provides meals and transportation to seniors within the county.



Figure 2.6

# Existing Recreation and Active Transportation



# Environmental Features

The natural features present within Leavenworth County are illustrated in *Figure 2.7*, the most prominent of which is the floodway and floodplain stretching north and south across the length of the county. The following subsections detail the current state of each environmental feature present and how they interact with and influence Leavenworth County.

## Floodplain

A 100-year floodplain is present along all the major waterways of the county, including: Three, Five, Seven, and Nine Mile Creeks; Stranger Creek; Tonganoxie Creek; and the Kansas and Missouri Rivers. The tributaries of each of these primary waterways also have associated floodplains. Floodways run within the Kansas and Missouri Rivers, as well as Stranger Creek, aiding during flood events to mitigate water damage.

Historically, Leavenworth County has been subject to severe floods, most notably in 1993 when the Missouri River crested to a peak of 35.4 feet. Nearly 20 years later, Leavenworth County experienced another notable flood event when the Missouri River crested close to 30 feet. The most impacted areas from both the 1993 and 2011 flood events included Fort Leavenworth, and the cities of Leavenworth and Lansing. More recently, all of Leavenworth County experienced flooding in 2019 when heavy rainfall flooded both the Missouri River and Stranger Creek.



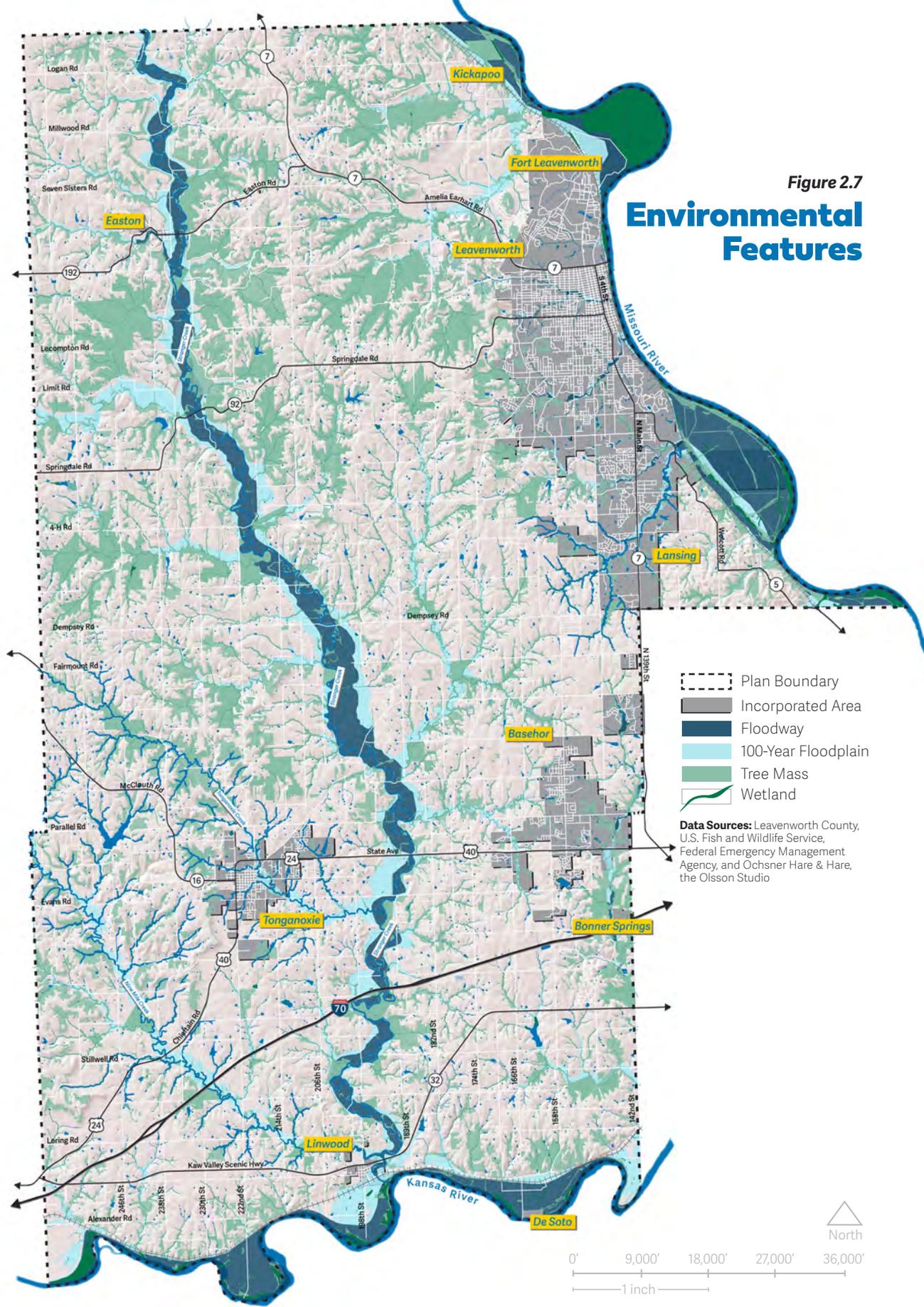
## Floodplain vs. Floodway

The 100-year floodplain is the land area covered by the floodwaters of the 100-year flood. The 100-year flood has a one percent chance of annual occurrence and is the standard for requiring the purchase of flood insurance and regulating development in flood prone areas.

The floodway is the channel of the waterbody and adjacent land that cannot be developed and must be free of obstructions to ensure the 100-year floodwaters can be conveyed downstream.



**Figure 2.7**  
**Environmental Features**



## Watersheds

A watershed is an area of land that drains to a common body of water, including nearby creeks, streams, rivers, or lakes. Watersheds are sometimes referred to as drainage basins or catchments and are determined based on topography. Watersheds impact the water quality in the water body(ies) that it surrounds because the water picks up debris and other contaminants from urban areas as it drains into the water system.

With an abundance of water resources countywide, Leavenworth County lies within several watersheds, as described below.

- **Stranger Creek:** Much of the Stranger Creek watershed lies within Leavenworth County, flowing through Basehor, Easton, and Linwood. The watershed covers 232,869 acres, covering the western, central, and southern parts of Leavenworth County.
- **Headwaters Stranger Creek:** Located north of the Stranger Creek watershed, Headwaters Stranger Creek covers the northwestern portion of Leavenworth County.
- **Salt Creek:** This watershed includes the northeastern part of Leavenworth County, namely Fort Leavenworth. It spans an area of 28,834 acres and covers a portion of the Missouri River.
- **Fivemile Creek:** Fivemile Creek watershed covers parts of Leavenworth County, and the Cities of Lansing and Leavenworth. It covers an area of 5,945 acres, also including a segment of the Missouri River.
- **Brush Creek:** Covering the southeastern portion of Leavenworth County, the Brush Creek watershed spans 13,504 acres. This watershed also encompasses a portion of the Missouri River.
- **Kansas River:** This watershed is the largest of any watershed that includes Leavenworth County, covering an area of 311,187 acres, although only within a southeastern sliver of the county.

## Waterbodies and Wetlands

As mentioned previously, there are several prominent water features in Leavenworth County, including: Three, Five, Seven, and Nine Mile Creeks; Stranger Creek; Tonganoxie Creek; and the Kansas and Missouri Rivers. A brief description of each waterbody and where they flow is provided as follows:

- Three, Five, and Seven Mile Creek are all concentrated in the eastern portion of Leavenworth County and flow east before merging with the Missouri River.
- Nine Mile Creek spans the southern half of Leavenworth County, flowing south toward the Kansas River. Another Nine Mile Creek flows through and to the south of Lansing.
- Tonganoxie Creek flows south through the City of Tonganoxie before flowing east to meet Stranger Creek.
- Stranger Creek spans the entire length of the county from north to south, ultimately merging with the Kansas River on the southern border of Leavenworth County.
- The Kansas and Missouri Rivers effectively define the southern and eastern boundaries of the county and represent the largest water systems that interact with Leavenworth County.

In addition to these streams, creeks, and rivers, there are waterbodies, including ponds, dispersed countywide. Wetlands often accompany these water bodies and flowing features as these two environmental features share many traits. Wetlands are concentrated along the Missouri and Kansas Rivers, however area also found dispersed throughout the county. Along the Missouri and Kansas Rivers, the wetland types include freshwater forested/shrub wetland and freshwater emergent wetland.

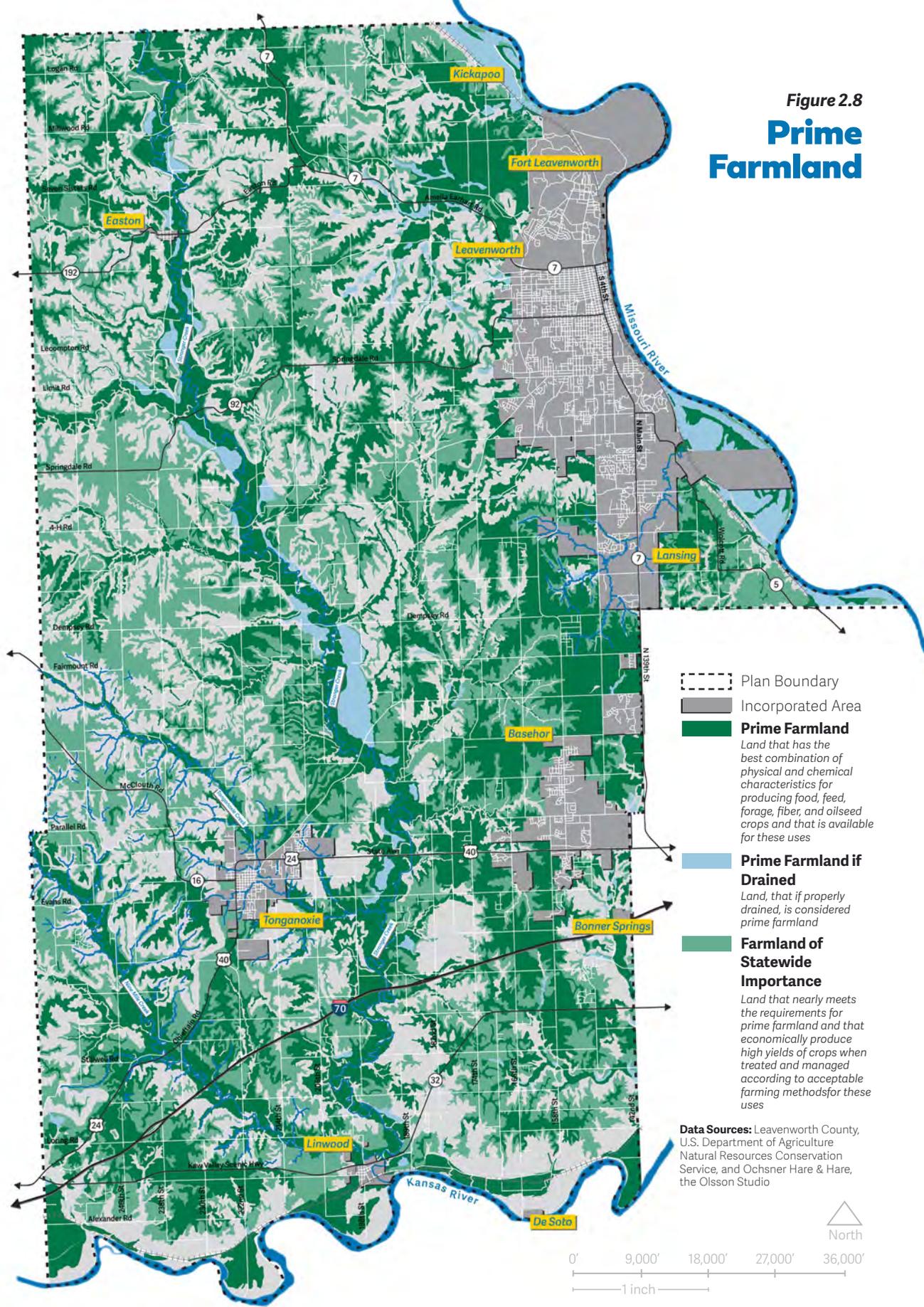


### Freshwater Emergent Wetlands vs. Freshwater Forested/Shrub Wetland

Freshwater emergent wetlands are characterized by erect, rooted, herbaceous water-loving plants, excluding mosses and lichens. This vegetation is present for much of the growing season, most years. Generally, this wetland type is dominated by perennial plants, maintaining a similar appearance year after year.

Freshwater forested/shrub wetlands are characterized as a forested swamp. Considered a woody wetland, surface water is present only for brief periods during the growing season.

**Figure 2.8**  
**Prime Farmland**



## Soil

Leavenworth County is agriculturally rich, as illustrated by the soil types on Figure 2.8. Prime Farmland is concentrated primarily around water features as flowing water bodies and wetlands lend themselves to adding high quality nutrients to nearby soils. Unsurprisingly, Prime Farmland if Drained is also found adjacent to water features; however, is concentrated more so along major water routes, namely Stranger Creek and the Missouri River. Dispersed throughout the rest of the county are Farmlands of Statewide Importance.

# Utilities

To ensure the proper infrastructure for future development or redevelopment, it is necessary to review the existing utility infrastructure within the county, as shown in *Figure 2.9*.

## Stormwater

Stormwater runoff is generated from rain and snowmelt events that flow over land and are conveyed to downstream waterbodies. In urban areas, impervious surfaces, such as paved streets, parking lots, and building rooftops, generate large amounts of stormwater runoff that is collected in underground collection systems and swiftly conveyed downstream. In rural areas, stormwater runoff generally flows over pervious ground and is partially intercepted by forested areas and infiltrated into the undisturbed soil, generating less runoff than urban areas.

Urbanization has changed land uses across the county and is proceeding at a rapid pace. The creation of impervious surfaces profoundly affects how water moves following storm events, the amount of runoff generated, and quality of water that is conveyed downstream. Stormwater systems, broadly defined as the highest point in the watershed that generates stormwater runoff to the downstream receiving waterbody, require management to plan for stormwater runoff and protect natural resources. Management of these systems is challenged by local jurisdictional boundaries that do not align with watershed boundaries, requiring larger entities, such as counties, to coordinate efforts (e.g., flood damage mitigation and reduction, water quality protection and improvement, and infrastructure maintenance and replacement).

Leavenworth County is situated uniquely between two major rivers. The county is primarily located in the Kansas-Lower Republican River watershed, except for the northeast corner that drains north and east to the Missouri River. These two major watersheds can be further subdivided into smaller watersheds (or subwatersheds) that drain toward the Missouri River, as previously discussed.

Portions of the county's watersheds have had flood risk mapped through the Federal Emergency Management Agency (FEMA) National Flood Insurance Program. The predominant existing land use in Leavenworth County is agricultural, at approximately 43 percent of the total county area. While agricultural land use tends to produce less runoff when compared to commercial or residential land use, ongoing development in Leavenworth County will produce increased levels of runoff requiring updates to define areas at risk of flooding.

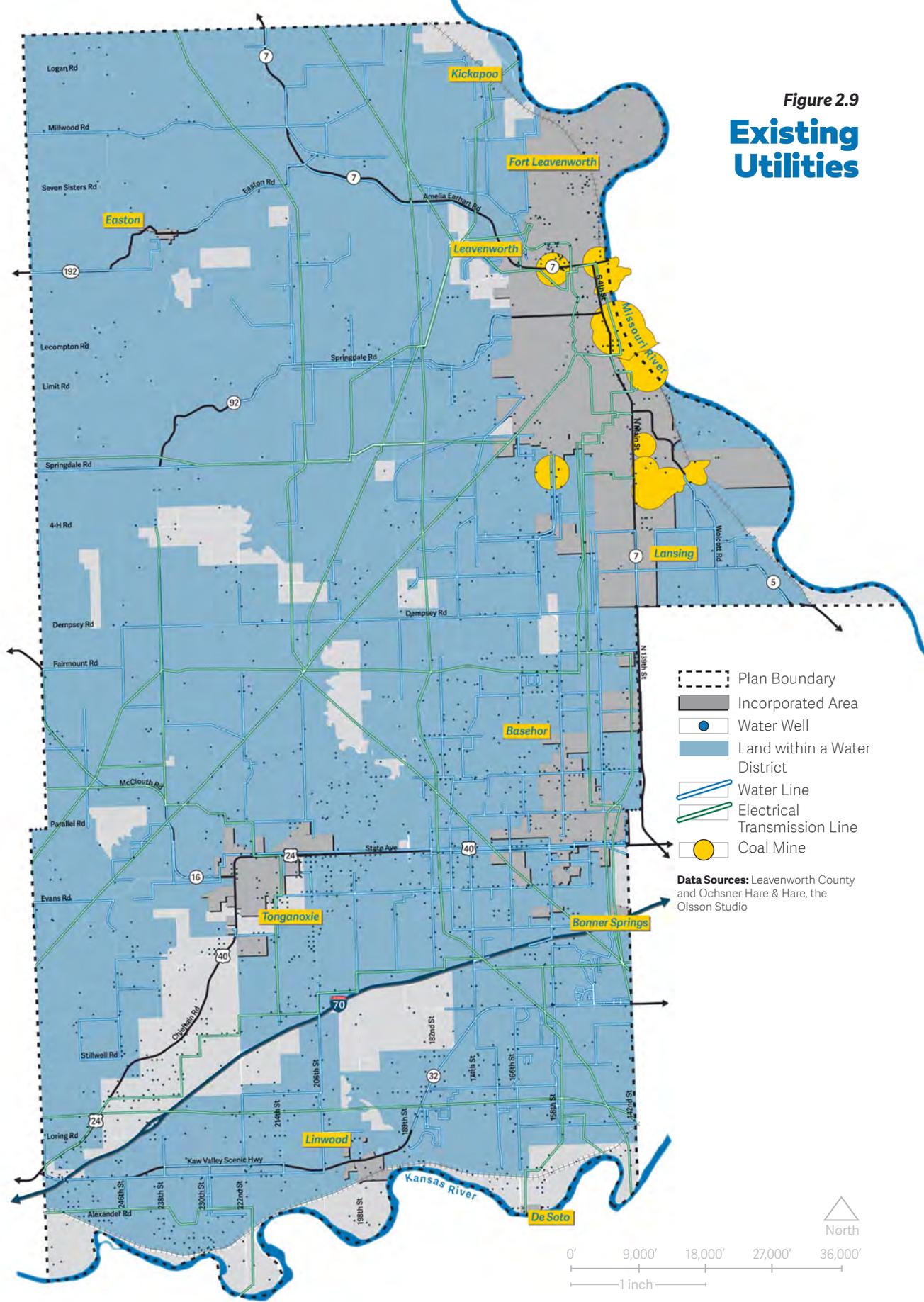
The Kansas Department of Health and Environment (KDHE) has identified several streams, including Stranger Creek, within Leavenworth County with a high level of pollutants from both point (attributable to a single source) and non-point (not attributable to a single source) sources contributing to poor water quality. Ongoing monitoring and data analysis efforts will better define the water impairments and solutions to be brought forth to improve water quality.

The extents, adequacy, age, and condition of stormwater infrastructure with Leavenworth County is relatively unknown; a countywide or watershedwide inventory of infrastructure is not available. Such an inventory and condition assessment would assist the county in planning for maintenance, future development, and eventual replacement of the infrastructure, as will be discussed further in *Section 7 - Community Facilities and Infrastructure Plan*. Tools such as a Geographic Information System (GIS) database can be used to collect data and store information to be used as part of the county's asset management system.

Infrastructure that is not maintained and replaced as it reaches the end of its design-life can contribute to poor collection and conveyance of stormwater runoff, increased flood risk, and can pose a safety hazard to the public. Examples of safety risk can include bridge and culvert collapses and flooding of upstream buildings.



**Figure 2.9**  
**Existing Utilities**



## Water

For Leavenworth County, water providers in the form of RWDs are present within the unincorporated areas and cover most of the county. In general, the RWDs' distribution systems are within private utility easements held by the utility, public utility easements, and public rights-of-way.

Water systems that consist of more than 10 service connections or regularly serve more than 25 individuals every day are considered public water systems. Such systems are regulated by KDHE.

For smaller systems (residential and commercial), Leavenworth County has developed and adopted the Leavenworth County Sanitary Code. This code establishes a number of items including: administration of the system, permits, licenses, inspections, investigations, enforcement proceedings, appeals, violations, and penalties. Chapter five of the code covers water supply regulations, the key item of which is the different types of service and the associated options:

- For residential tracts of land five acres or greater, the domestic water can be obtained from a well. For tracts of land less than five acres, the water must be supplied by a public water supply.
- For commercial tracts, the preferred source is a public system, however if a tract of land is 10 acres or greater, the system must meet state regulations. For tracts of land less than 10 acres, the water must be treated, and processed supply must be used.

For most of the unincorporated area of the county, water is available or supplied by RWD. Thirteen RWDs are within the county, including:

- Atchison Co. RWD #06 – AT-06
- Consolidated Water District #1
- Jefferson Co. RWD #12 – JF-12
- Jefferson Co. RWD #13 – JF-13
- Leavenworth Co. RWD #01 – LV-01
- Leavenworth Co. RWD #01C – LV-01C
- Leavenworth Co. RWD #02 – LV-02
- Leavenworth Co. RWD #05 – LV-05
- Leavenworth Co. RWD #06 – LV-06
- Leavenworth Co. RWD #07 – LV-07
- Leavenworth Co. RWD #08 – LV-08
- Leavenworth Co. RWD #09 – LV-09
- Leavenworth Co. RWD #10 – LV-10

These RWDs utilize several options to obtain water for their system, including their own production and purchasing water from other public supply sources.

There are also six other public water supply systems, including:

- Leavenworth Waterworks
- Fort Leavenworth
- Tonganoxie - city-owned and operated
- Linwood - city-owned and operated
- Lan-Del Water District
- Suburban Water Service

Typically, the goal of a RWD is to only supply potable water for consumption within their service area. They do not strive to supply water for fire protection, as is the case for water systems inside incorporated areas.

## Wastewater

For most of the unincorporated areas of the county, the sanitary sewer system consists of individual on-site treatment systems. At the state level, these systems are regulated by KDHE. Additionally, the county has developed and adopted the Leavenworth County Sanitary Code. This code establishes a number of items including: administration of the system, permits, licenses, inspections, investigations, enforcement proceedings, appeals, violations, and penalties. Chapter two of the code covers regulation of public sewage disposal systems and private sewage disposal systems. Chapter two also covers the following components of these systems: septic tanks, aerobic disposal systems, mound systems, privies, holding tanks, and other systems, as well as regulations for installers, disposal contractors, and designers.

Chapter three addresses regulations for public and/or community sewage systems for larger developments and a higher density of residences (lots less than two-and-one-half acres).

## Solid Waste

The final piece of the regulation associated with sanitary sewer is chapter six, which regulates septic waste haulers. For the incorporated areas, a sanitary sewer collection system and treatment system exists that is regulated by KDHE.

## Power

Electrical providers are present within the unincorporated county, but the county does not operate these utilities. The county does routinely coordinate capital improvement projects with the providers regarding utility relocations. Providers are primarily regulated by the Kansas Corporation Commission or by state statute. In general, providers are physically located within private utility easements held by the individual provider, public utility easements, and public rights-of-way to provide necessary services.

Unincorporated Leavenworth County is served by two providers: Freestate Electric Cooperative, Inc. and Evergy. In 2018, Kansas City Power and Light and Westar Energy, Inc. merged to form Evergy. The merger was completed by the end of 2019. Commonly, distribution for electrical power can be via transmission lines, utility poles, and underground conduit. Power providers are discussed in detail below.

**Freestate Electric Cooperative, Inc. (Freestate):** Freestate generally provides service in the central and western areas of the county. Freestate's infrastructure currently meets the needs of the county and the company performs regular upgrades and maintenance to their infrastructure. Freestate utilizes a capital improvement program to plan for growth in their service territory and recognizes future growth within the county.

No major infrastructure improvements are planned for the utility in the short- or long-term within the county. Freestate has not reported any trending issues when providing new service due to growth, nor do they have any current concerns when working with the different jurisdictions regarding public improvement projects that may require relocation efforts to existing infrastructure.

**Evergy:** Evergy generally provides services for the central, southern, and eastern regions of the county. Evergy's infrastructure currently meets the needs of the county. Evergy performs routine inspections on all its infrastructure to identify maintenance needs and utilizes a long-term electrical load forecast. As electrical load increases, capital improvement plans are developed for new/updated infrastructure to increase capacity.

No major infrastructure improvements are planned for the utility in the short- or long-term within the unincorporated county, nor are there any trending issues when providing new service due to growth.

## Natural Gas

Atmos Energy and Kansas Gas Service are the two natural gas providers within the county. Atmos Energy serves the majority of the county except for a portion in the northeast part of the county, where service is provided by Kansas Gas Service. In addition, both Atmos Energy and Kansas Gas Service share a common band within the county located from the southwest corner of the county to the northeast corner of the county, which is approximately three miles wide. Atmos Energy and Kansas Gas Service distribute gas through an existing underground pipe system. Some clients in rural areas may not be served by the providers' distribution infrastructure. Such residents and businesses utilize on-site natural gas tanks. Providers are described in more detail below.

**Atmos Energy:** Atmos Energy reports that their current infrastructure meets the present needs of the county and is in good condition. Atmos Energy does have a master replacement plan for the entire state of Kansas, which is updated on a regular basis. Upcoming projects within the county are planned, but will be limited in scope. Long term, most of the steel mains and vintage plastic mains will be replaced. The schedule of existing infrastructure replacement is subject to change with ongoing routine inspections. When opportunities for growth are presented, the provider considers infrastructure investment on an individual basis.

**Kansas Gas Service:** Kansas Gas Service reports that their current infrastructure meets the present needs of the county and is in good condition. No short- or long-term infrastructure improvements are planned; Kansas Gas Service does not utilize a master plan. When opportunities for growth are presented, the provider considers infrastructure investment on an individual basis.

## Telecommunications

With regard to the county, telecommunications include cable television, internet, and telephone. For the purposes of this subsection, wireless communication was not discussed due to the lack of infrastructure in the public right-of-way required for operation.

Telecommunication lines are present underground and aboveground on electric provider utility poles. Improvements that require electrical utility pole relocations commonly impact telecommunication infrastructure. AT&T, Centurylink, and Midco are the primary providers for cable television, internet, and telephone within the county. AT&T is generally in the southwest, central, and northwest portions of the county; Centurylink is generally in the northwest and south portions of the county; and Midco is generally located south of Lansing to south of I-70 and from Tonganoxie to K-7. Midco also services Linwood and the surrounding Linwood area. Providers do routine inspections and maintenance on existing infrastructure and all providers have capacity for new customers.

# Demographic and Market Profile

An analysis of Leavenworth County's demographics and economic and market trends was performed to better understand the existing state of these topics within Leavenworth County, as well as a selection of its neighboring counties. The topics studied include an analysis of the county's general demographics, employment, housing, retail market, office market, industrial market, and tourism market trends.

This analysis is one part of the preliminary planning process performed to inform future planning discussions and establish the necessary background information to develop market-viable recommendations. Information obtained through the Economic and Market Analysis (see *Appendix A*) is also folded into this section to provide a comprehensive picture of Leavenworth County's demographic and market profile.

Trends are discussed using data from the 2000 and 2010 U.S. Census and the 2013-2017 ACS. The 2013-2017 ACS data reflect a five-year estimated average based on surveys conducted by the U.S. Census Bureau during that time. Throughout this section, the 2013-2017 data are labeled as 2017 to not confuse the "2013-2017" with a data trend over time, but rather a specific point in time.

## Demographics

Located at the urban fringe of Kansas City, Leavenworth County's growth is influenced by trends beyond its borders. As the Kansas City region continues to grow, the county is anticipated to experience accelerated population and job growth, heightened residential and commercial development activity, and increased demands for municipal and transportation services. To provide context, demographic information for Leavenworth County neighbors, Johnson, Wyandotte, and Platte (Missouri) counties, has also been provided.

### Population

Like its peer counties, Leavenworth County has experienced population growth, up 15.5 percent since 2000. Population growth has outpaced both the State of Kansas and the U.S., particularly in the 1980s and 2000s. Since 1980, the county has added over 26,500 residents, putting its current population at 79,359 (2017). From 2019 to 2040, Leavenworth County's population is forecast to increase by over 19,000 residents.

**Table 2.2**

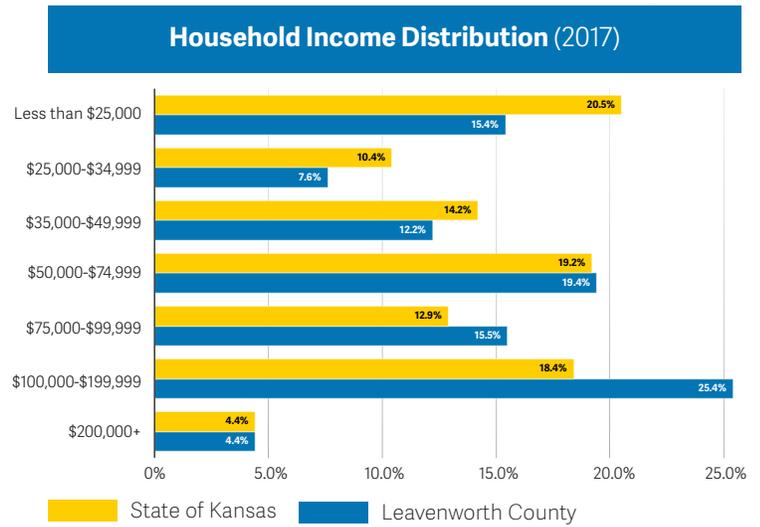
Demographic Summary (2000, 2010, and 2017)				
<b>Leavenworth County, KS</b>	2000	2010	2017	% Change (2000-2017)
Population	68,691	76,227	79,359	15.5%
Households	23,071	26,447	27,233	18.0%
Average Household Size	2.69	2.63	2.69	0.00%
Median Age	35.6	37.4	37.3	4.8%
Median Household Income	\$71,747*	\$85,651*	\$72,581*	1.2%
<b>Johnson County, KS</b>	2000	2010	2017	% Change (2000-2017)
Population	451,086	544,179	578,797	28.3%
Households	174,570	212,882	224,248	28.5%
Average Household Size	2.56	2.53	2.56	0.00%
Median Age	35.2	36.4	37.3	6.0%
Median Household Income	\$91,641*	\$85,651*	\$84,085*	-8.2%
<b>Wyandotte County, KS</b>	2000	2010	2017	% Change (2000-2017)
Population	157,882	157,505	163,227	3.4%
Households	59,700	58,399	59,355	-0.6%
Average Household Size	2.62	2.67	2.73	4.2%
Median Age	32.5	32.8	33.7	3.7%
Median Household Income	\$50,378*	\$44,727*	\$44,346*	-12.0%
<b>Platte County, MO</b>	2000	2010	2017	% Change (2000-2017)
Population	73,781	89,322	96,899	31.3%
Households	29,278	36,103	38,147	30.3%
Average Household Size	2.49	2.45	2.52	1.2%
Median Age	35.9	38.4	38.2	6.4%
Median Household Income	\$83,281*	\$76,608*	\$76,910*	-7.7%

\*Note: Median household income figures have been adjusted for inflation (2019).

## Household Income

Leavenworth County's median household income well exceeds that for Kansas, with a lower rate of households earning less than \$35,000 and a greater rate of high-income households (\$75,000 to \$199,999). Leavenworth County's household income levels suggest the ability to support above average retail sales per capita, housing values, and rents. Despite maintaining a higher median household income compared to state and nationwide averages, compared to Johnson and Platte counties, Leavenworth County incomes are lower. Refer to *Figure 2.10* for additional information.

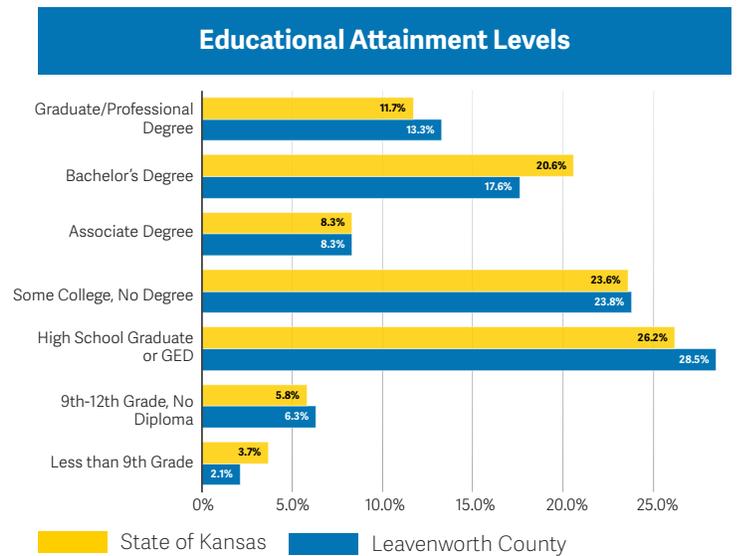
Figure 2.10



## Educational Attainment

Above average educational attainment levels create opportunity to generate higher income levels, retail sales, housing values, and professional occupations, all of which translate to above average demand for professional office space. Educational attainment levels for Leavenworth County compare to that for Kansas with 30.9 percent of the population holding a bachelor's degree or higher, compared to 32.3 percent statewide, as seen in *Figure 2.11*.

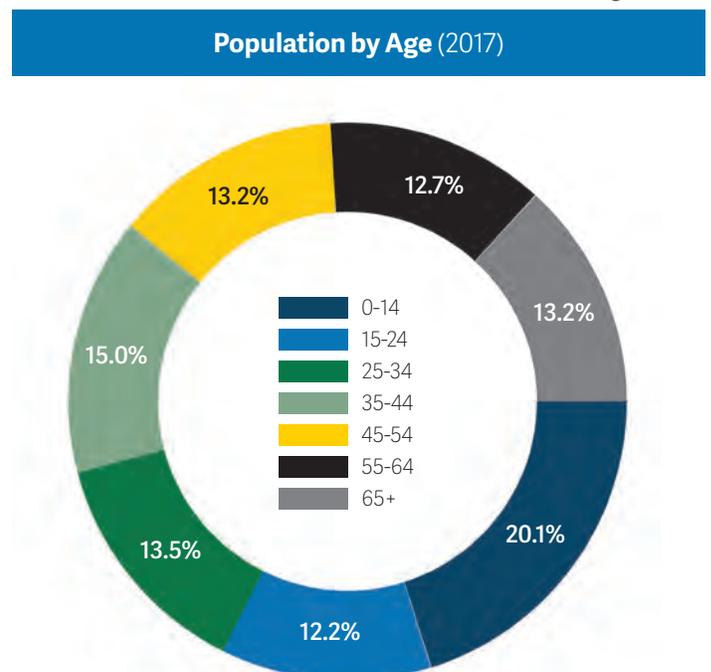
Figure 2.11



## Age

Comprising one-fifth of the population, children ages 0-14 are the largest age group in Leavenworth County, as seen in *Figure 2.12*. Each age group demands different goods, services, housing, and entertainment options. With the generally even age distribution, Leavenworth County must accommodate a wide variety of housing choices, retail services, food and drink establishments, and professional services.

Figure 2.12



**Table 2.3**

## Race and Ethnicity

Alongside the population growth from 2000 to 2017 came changes in the makeup of the county, as referenced in *Table 2.3*. Specifically, the Asian alone population segment increased nearly 63 percent over this time. Others decreased, including Black or African American (-1.4 percent), American Indian and Alaska Native (-1.2 percent), and Native Hawaiian and Other Pacific Islander (-59.1 percent). Despite these changes, White alone still comprises most of the population (83.0 percent).

Racial Makeup (2000-2017)			
Leavenworth County, KS	2000	2017	% Change (2000-2017)
<b>Total Population</b>	68,691	79,359	13.4%
White alone	57,824	65,828	13.8%
Black or African American alone	7,160	7,057	-1.4%
American Indian and Alaska Native alone	510	504	-1.2%
Asian alone	730	1,188	62.7%
Native Hawaiian and Other Pacific Islander alone	91	37	-59.3%
Some other race alone	853	1,340	57.1%
Two or more races	1,523	3,405	123.6%

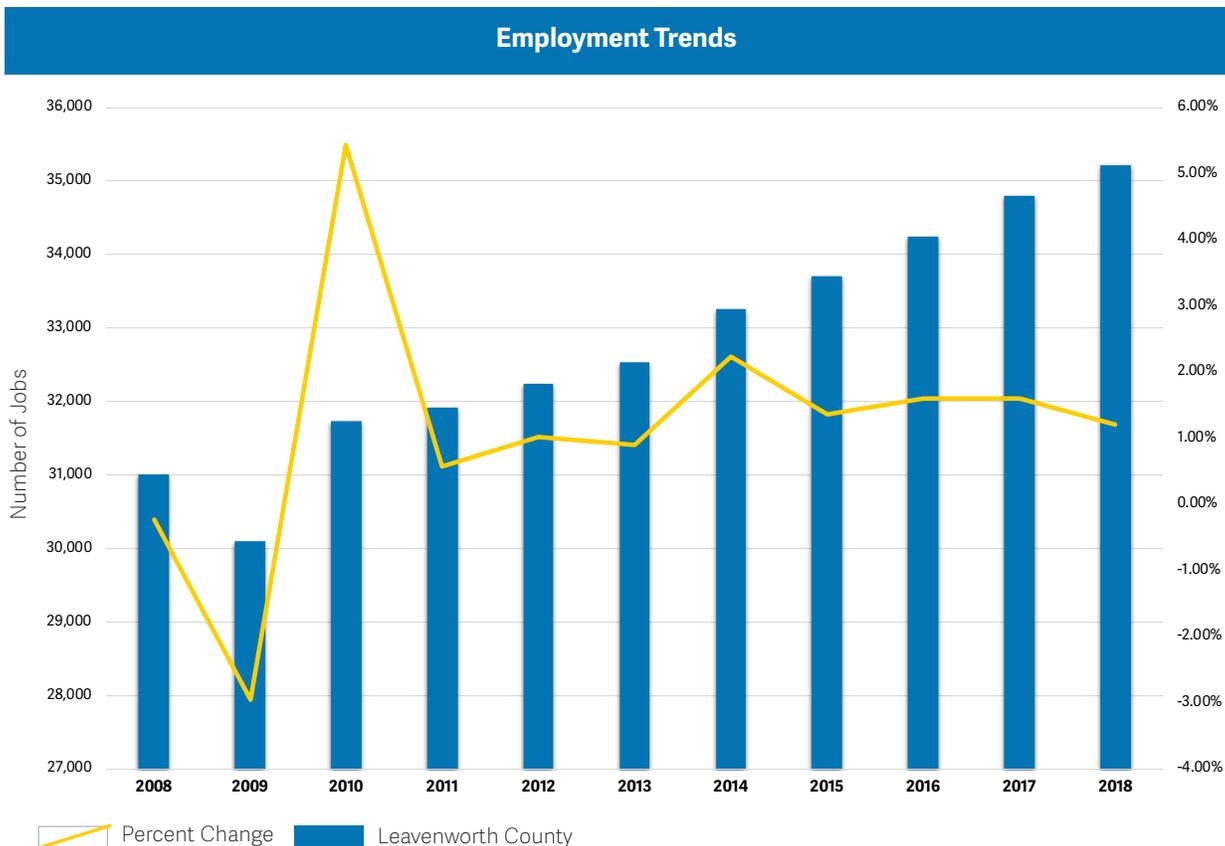
## Employment

This section reviews the major employers in Leavenworth County, the employment rate and its historical fluctuations and projected growth, and the predominant job sectors.

### Job Growth Trends and Forecasts

Employment in Leavenworth County has plateaued since 2011, as seen in *Figure 2.13*, but shows signs of improvement. After peaking in 2007 with 31,086 jobs and an unemployment rate of 5.4 percent, employment hit a low in 2009 when it dipped to 30,100 jobs and experienced a nearly 2.5 percent increase in unemployment (8.0 percent total). The job market has since steadily improved, reaching 35,216 jobs by 2018 and a favorable unemployment rate of 3.6 percent. Leavenworth County is forecast to add approximately 8,500 jobs through 2040.

**Figure 2.13**



**Table 2.4**

## Major County Employers

Fort Leavenworth dominates the employer market with over 8,800 employees, as shown in *Table 2.4*. This means Fort Leavenworth employs nearly 8,000 more people than the number two largest employer, the Veterans Affairs (VA) Medical Center (685 employees).

10 Largest Employers		
Employer	Location	Number of Employees
Fort Leavenworth	Leavenworth, KS	8,821
VA Medical Center	Leavenworth, KS	685
Leavenworth USD #453	Leavenworth, KS	630
Lansing Correctional Facility	Lansing, KS	575
Lansing USD #469	Lansing, KS	430
Leavenworth County	Leavenworth, KS	405
Veterans Administration - CPAC	Leavenworth, KS	400
U.S. Federal Penitentiary	Leavenworth, KS	355
Walmart Supercenter	Leavenworth, KS	350
Northrup-Grumman	Leavenworth, KS	345

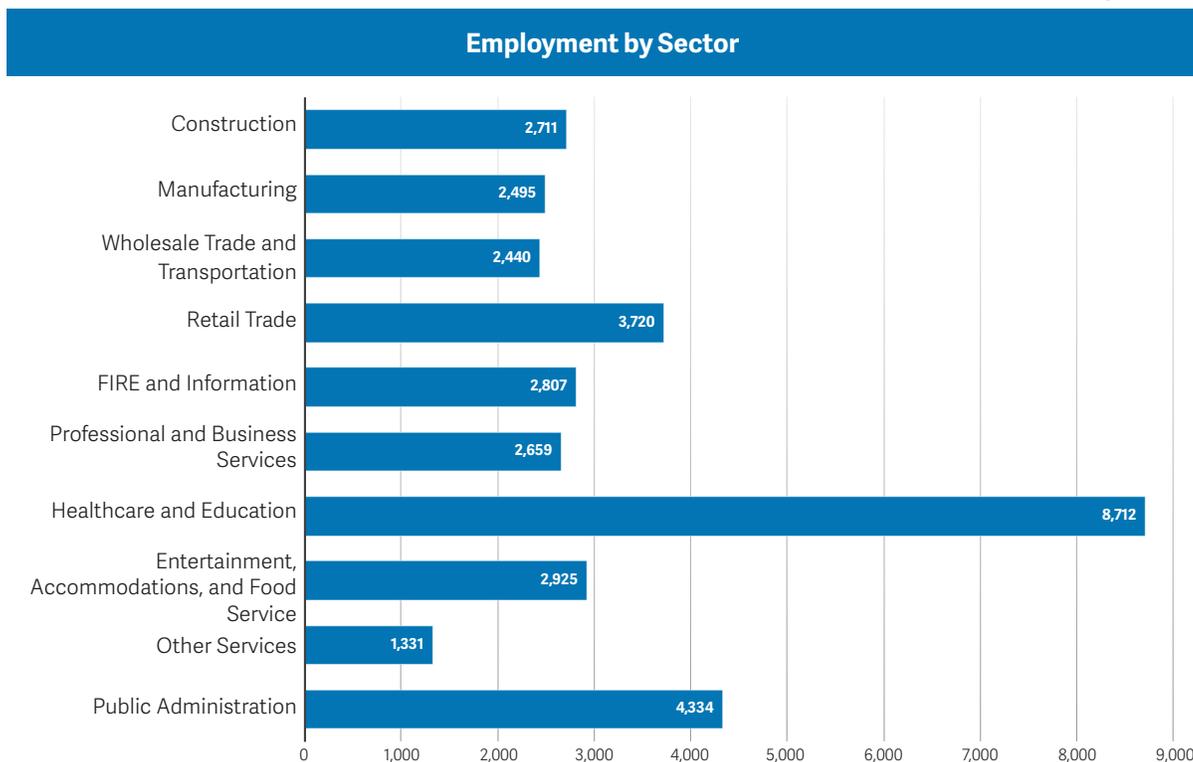
## Employment by Sector

The top five leading employment sectors in the county, as shown in *Figure 2.14*, include:

- Healthcare and Education
- Public Administration
- Retail Trade
- Entertainment, Accommodations, and Food Service
- Finance, Insurance, Real Estate (FIRE) and Information

Conversely, the county lags employment opportunities in manufacturing, professional and business services, and retail trade. As these employment sectors grow, demand for professional and medical office, retail, and industrial space will increase.

**Figure 2.14**



## Housing

This section provides an overview of housing and rental trends in Leavenworth County, diving into owner- versus renter-occupied, housing type and value, and comparisons to statewide trends.

### Housing Stock

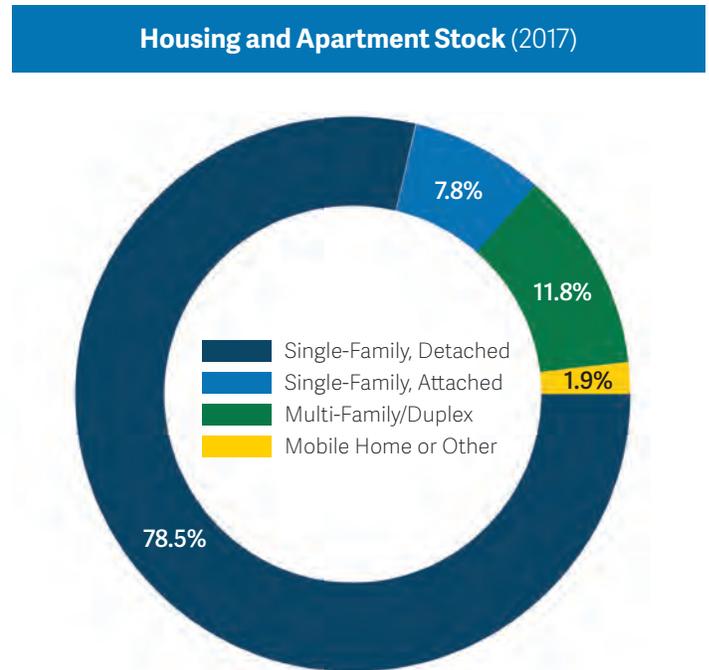
The 2000 Census reported Leavenworth County's housing stock at 24,401 dwelling units. By 2010, the housing stock increased by 17.6 percent to 28,697 dwelling units. Although more modest than the growth from 2000 to 2010, housing stock grew in 2018 to a total of 29,991 dwelling units.

Of the current housing stock, detached single-family homes account for the majority, capturing nearly 80.0 percent of the share, while multi-family housing options comprise approximately 12.0 percent, as shown in *Figure 2.15*. The county's portion of smaller multi-family housing stock, with two to nine dwelling units, is consistent with statewide averages, while larger properties with 10 or more dwelling units account for just 2.7 percent of the inventory (compared to 8.3 percent statewide).

### Apartment Stock

Over the past decade, there have been no new, large-scale (10 or more dwelling units per property) apartment properties constructed countywide. Currently, Leavenworth County has 19 large-scale apartment properties that support 835 dwelling units. From 2010 through 2014, healthy occupancy levels increased rent prices 8.0 percent; however, rising vacancy rates weakened the apartment market, ultimately causing a decline in average rent prices by 2015, as seen in *Figure 2.16*. As the market overall recovered since 2015, rents have once again been on the rise.

**Figure 2.15**



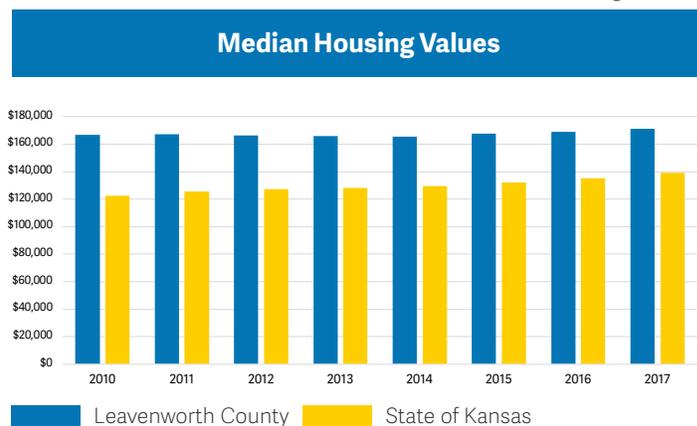
**Figure 2.16**



Figure 2.17

## Housing Values

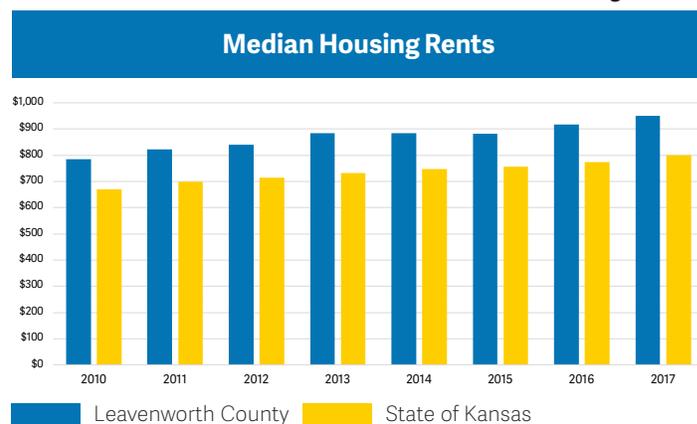
While Leavenworth County's median housing value has remained relatively flat since 2010, it has consistently exceeded the statewide median, as shown in *Figure 2.17*. In 2017, the median housing value in Leavenworth County was \$171,000 compared to \$139,200 statewide.



## Monthly Rents

Since 2010, rental housing in Leavenworth County has gained market share. From 2010 to 2017, the county's median monthly rent exceeded the statewide median, increasing 20.9 percent by 2017 (\$950 per month), as shown in *Figure 2.18*. This compared to Kansas' median rent of \$801 per month, which was 15.7 percent below the median for Leavenworth County.

Figure 2.18



## Housing Tenure

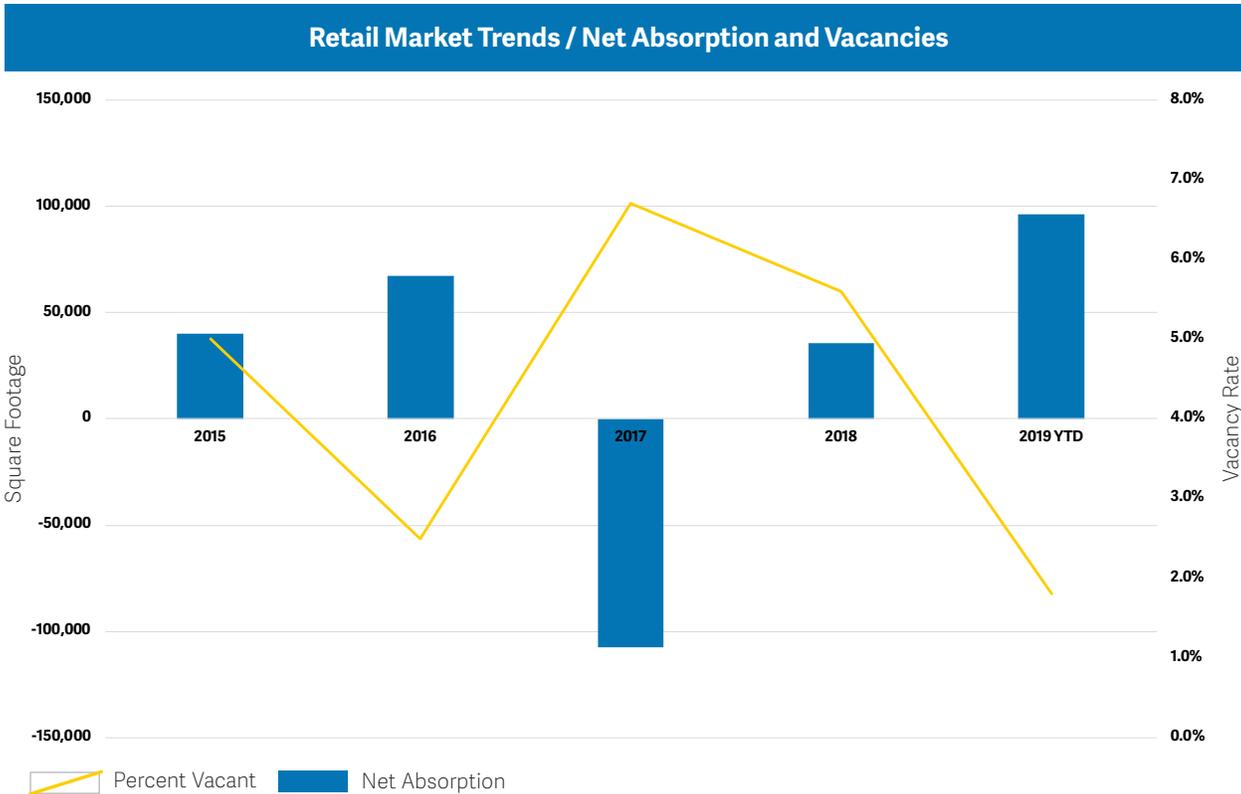
In 2010, owner-occupied units accounted for 69.4 percent of all occupied housing units. Comparatively, renter-occupied housing accounted for 30.6 percent of all units. From 2010 to 2017, the inventory of renter-occupied housing increased by ten percent, or 804 units, with the owner-occupied stock increasing just 3.6 percent (651 units). By 2017, rental housing accounted for approximately one-third (32.0 percent) of the housing stock, with owner-occupied slightly reduced to 68.0 percent from 2010 levels.

## Retail Market

The City of Leavenworth serves as the county's principal retail destination. Despite this draw, the county's retail inventory space makes up just 2.0 percent of space in the Kansas City MSA. Leavenworth County supports 31 square feet of occupied retail space per capita compared to 56 square feet per capita for the Kansas City MSA. Most of the county's inventory consists of general retail and neighborhood shopping centers.

The retail market in Leavenworth County is trending positively. From a high of 6.7 percent in 2017, the county's retail vacancy rate has reached a healthy 1.8 percent in response to escalating space absorption. During the first half of 2019, net absorption totaled 96,287 square feet. Over the past five years, the average rental rate for retail space increased by 10.7 percent to \$10.78 per square foot. Over the same timeframe, the average retail rent for the Kansas City MSA increased by 12.3 percent to \$15.65 per square foot.

Figure 2.19



### Retail Pull Factor Trends

Despite supporting a median household income that exceeds the Kansas City MSA rate, Leavenworth County suffers from considerable retail sales leakage. Since 2010, the annual pull factor has remained largely unchanged. The current rate of 0.59 indicates that the county captures retail sales at a rate equal to just 59 percent of the statewide average.

The City of Leavenworth supports a slightly higher pull factor yet still suffers from retail sales leakage. Leavenworth County's long-standing retail sales leakage is a symptom of its modest population levels, presence at the urban fringe, and proximity to larger and more diverse retail destinations in the Kansas City MSA.



#### Pull Factors

A pull factor is a measure of the strength of a community's retail trade, based on a comparison of local spending in relation to that of a wider geographic area (e.g., the state), with a measure of 1.0 representing a perfect balance. A pull factor greater than 1.0 indicates that the community is pulling in retail sales from beyond its boundaries and the balance of trade is favorable. Alternatively, a pull factor less than 1.0 indicates that the community is not capturing local shoppers and is experiencing retail sales leakage.

## Office Market

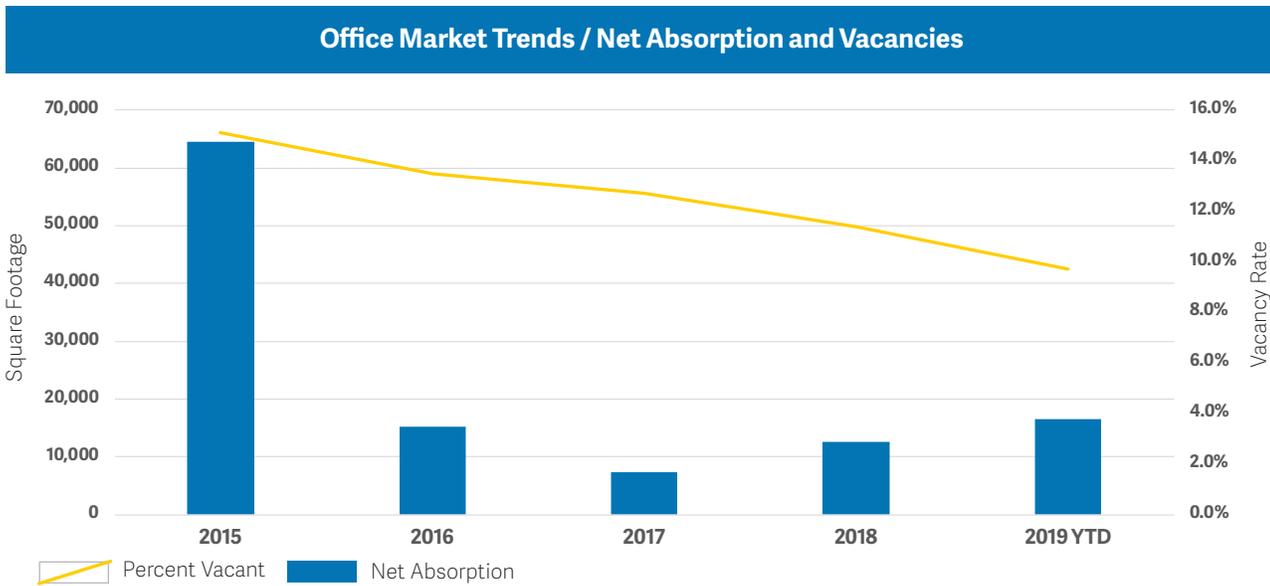
The county supports a modest inventory of professional office space, which totals almost one million square feet, or just 0.78 percent of the Kansas City MSA inventory. Class A space totals just 109,911 square feet, operating at an average rent of \$24.04 per square foot with no vacancies currently.

Since 2015, Leavenworth County has absorbed 116,175 square feet of net office space with no new construction reported. As a result of these market dynamics, the overall vacancy rate has gradually improved from 15.1 percent (2015) to 9.7 percent (second quarter of 2019). By comparison, the Kansas City MSA office market is currently operating at a vacancy rate of 6.6 percent. No new office space is currently under construction within Leavenworth County. Vacancies are forecast to remain stable over the next several years.

### Class A Office Space

The Building Owners and Managers Association classifies office space into three categories: Class A, Class B, and Class C. Class A office buildings have the “most prestigious buildings competing for premier office users with rents above average for the area”. Class A facilities have “high quality standard finishes, state of the art systems, exceptional accessibility, and a definite market presence.”

Figure 2.20

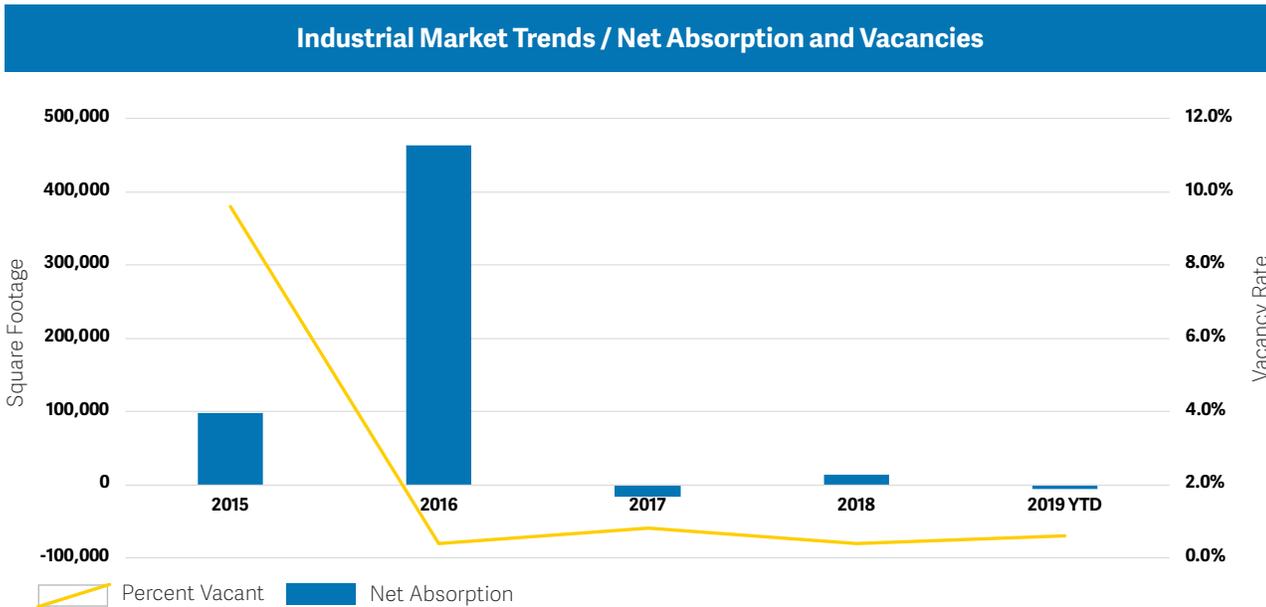


## Industrial Market

The inventory of industrial space totals 4.2 million square feet, of which 3.6 million square feet is warehouse space. Since 2015, the county has absorbed one-half million square feet of industrial space with a total new supply limited to just 81,000 square feet. With such limited supply of new industrial space, the vacancy rate has been less than one percent since 2016.

Adding to this trend, the average rental rate for industrial space has increased by 6.6 percent to \$4.72 per square foot since 2015. During the same time, the average industrial rent for the Kansas City MSA increased by 6.9 percent to \$5.29 per square foot.

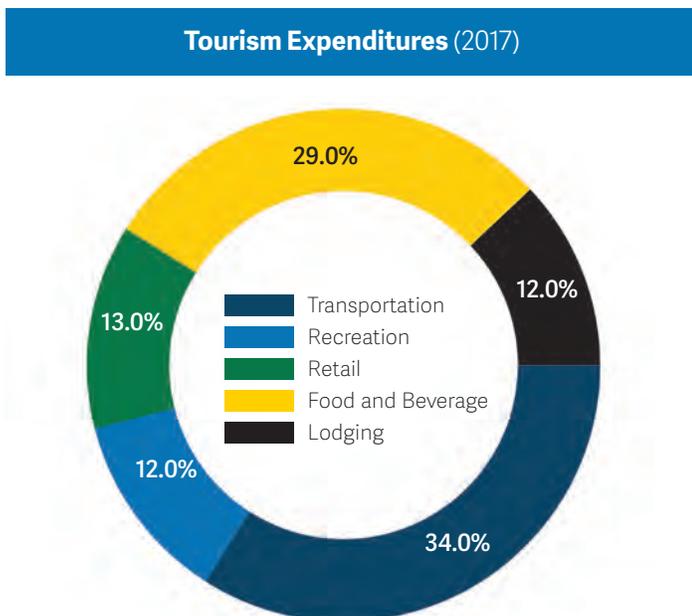
Figure 2.21



## Tourism Market

Tourism expenditures in Leavenworth County increased 36.7 percent from 2013 to 2017, reaching \$58.6 million. In 2017, tourism expenditures were led by transportation (\$19.7 million), followed by food and beverage (\$17.0 million), and retail (\$7.77 million), as illustrated in Figure 2.22. As a result of growing tourism expenditures, tourism-related employment increased from 720 jobs (2013) to 884 jobs (2017).

Figure 2.22



## Section 3

# Community Engagement

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Community engagement is the true lifeblood of the planning process; without it, the Plan may not reflect the needs, wants, and desires of those directly impacted by the Plan. At its most basic level, community engagement is a conversation between one group of people that has the technical knowledge to help problem solve and another group of people that has the on-the-ground, real world knowledge of a place. The conversation must be collaborative in nature, engaging, personal, and involve much listening. In the end, a strong plan is developed with the community, not just for it. As a blueprint for the county's future, it was critical that as many county residents and users were involved in the development of the Plan as possible. Through multi-phased engagement efforts, involved collaboration with the community took place to discuss the ideas and priorities that became the recommendations put forth in this Plan. The following section summarizes both that process and its outcomes.

Each engagement activity provided attendees with the opportunity to share their desires for the future of the county. After each activity, comments and conversations that took place were documented and analyzed for incorporation into concepts. This information then shaped and reshaped priorities and recommendations. The entire community engagement process is described in *Appendix B Community Engagement Summary*.

Two committees were formed for the community engagement process: the Stakeholder and Citizen Advisory Committee (SCAC) and the Technical Committee (TC). The SCAC was made up of county property owners, business owners, and other key stakeholders who have a vested interest in the future of Leavenworth County. Membership on the SCAC was open to any Leavenworth County resident interested in serving in such a capacity. The TC was made up of representatives from various county agencies that would, in part, be responsible for implementing portions of the Plan.

# Online Engagement

## Website

A website ([www.lvcountyplan.com](http://www.lvcountyplan.com)) was created to provide a landing page for anyone interested in learning about the planning process.

The website provides information on a variety of topics related to the Plan, including:

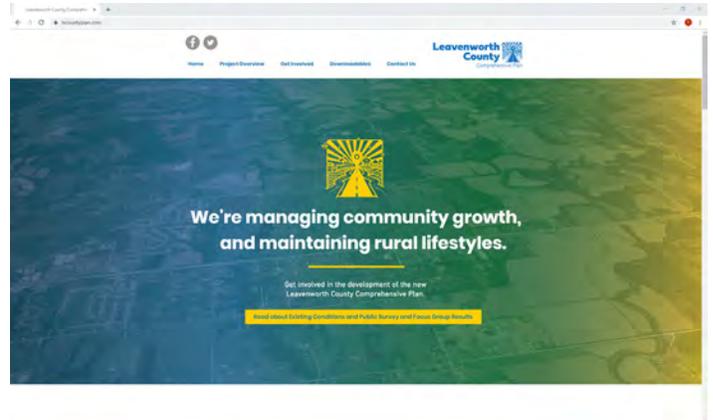
- A project overview, which details the purpose of the Plan and the goals of the planning process;
- A project timeline that shows the phases of the project;
- A listing of the different ways to engage in the planning process as a member of the public, or as a member of the SCAC or TC (e.g., public survey, focus groups, charrette, and/or public open houses);
- Project downloadables that summarize findings and/or engagement events; and
- An opportunity to ask questions or provide comments to the county.

A “lightbox” also opens within a few seconds of opening the website, asking if the viewer would like to be added to the contact list to receive project communications throughout the lifetime of the project. Various e-blasts were sent to those who opted in to email notification about the project to advertise and invite people to the public open houses.

Additionally, the website included a form to allow those interested to sign up for specific focus groups and to be a member of the SCAC.

## Social Media

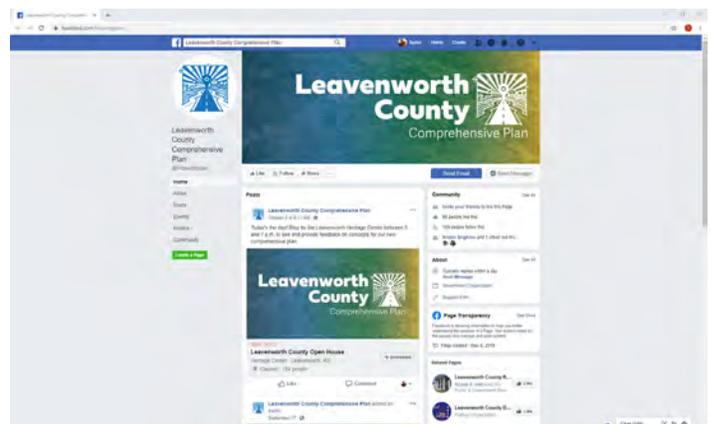
Facebook ([www.facebook.com/lvcountyplan](http://www.facebook.com/lvcountyplan)) was used to inform people about the comprehensive plan process, solicit participation in all events, and invite residents to take the online survey. Between May and September of 2019, the project’s Facebook content reached more than 26,000 unique people, for a total of 255,000 impressions.



Project website ([www.lvcountyplan.com](http://www.lvcountyplan.com))



Project website ([www.lvcountyplan.com](http://www.lvcountyplan.com))



Project Facebook page ([www.facebook.com/lvcountyplan](http://www.facebook.com/lvcountyplan))

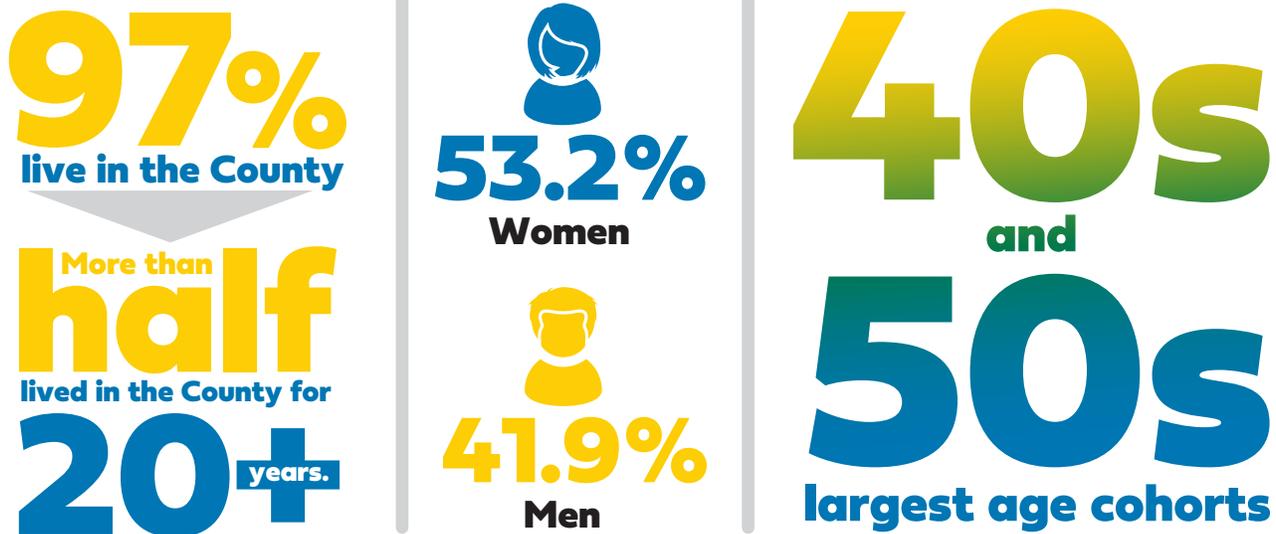
## Public Survey

As part of the community engagement process, 2,124 people took a public survey. The following text is a summary of the survey's findings; the complete survey analysis is available in *Appendix B*.

### Respondent Demographics

Survey respondents were analyzed by age, gender, employment status, and what their connection was to Leavenworth County:

- Nearly all respondents (97%) said they live in the county, with another 23.2 percent reporting they work in the county.
- The largest age groups of respondents were in their 40s and 50s, with smaller age cohorts older and younger.
- Women outnumbered men (53.2% compared to 41.9%), which is typical for online surveys.
- By and large, participants who took this survey were either employed (68.4%) or retired (23.3%).
- More than half (54.6%) of the respondents have lived in the county 20+ years, with another 20.5 percent reporting they have lived in the county 10-19 years.



### Where Respondents Live

The survey asked respondents to identify whether they lived in a city, in an urban growth area, or in a rural, unincorporated area of the county. For those who said they lived in a city or urban growth area, respondents were asked which city they live in or near. A brief summary of such findings follows.

- People who live within the city limits of an incorporated city made up 41.6 percent of respondents. Those living in an urban growth area were another 29.9 percent, and 27.3 percent live in rural, unincorporated areas.
- Leavenworth, Lansing, and Tonganoxie had more respondents who live within the city limits than in the urban growth area; Basehor, Linwood, Bonner Springs, and Easton had more respondents in the urban growth area than living inside the city limits.
- Cities had the most statistically diverse residents, in terms of age, with the largest percentage of respondents under 40 living in cities. Those in their 40s and 50s were most likely to live in the urban growth area than those older or younger, and those in their 50s and 60s were the most likely to live in rural, unincorporated areas. People in their 70s and 80s were more likely to live inside a city than in the other two locations.
- People who have lived in the county for three years or fewer were the most likely to live within the limits of a city (58.5%), while those who have lived in the county 20+ years were the least likely to live in a city (37.3%).
- New residents to the county (three years or fewer) were most likely to live in Basehor (44.7%). Of those who have lived in the county 20+ years, Leavenworth had the largest share at 33.1 percent, with Basehor at 27.7 percent and Lansing at 19.5 percent.

## Why Residents Live in Leavenworth County

By far, the most common reason why people choose to live in Leavenworth County is the county's *rural atmosphere* (69.3%). Other top responses included *to be close to family* (52.2%) and *proximity to Kansas City* (50.5%).

By age, those 29 and younger chose *to be close to family* in largest numbers (70.1%), while all other age cohorts chose *rural atmosphere* as their top reason.

When analyzed by length of residency, *rural atmosphere* was the most common reason for all groups. However, for those who have moved to the county at some point in the past two decades, *cost of living* was much more likely to be a top-three reason, while it was not a top-three reason for those who have lived in the county 20+ years.

## Controlling Growth

When asked where in the county growth should occur, most respondents chose *within cities* (63.1%), with *on the edge of existing cities* the second most common answer at 41.9 percent. In distant third was a tie between *undeveloped rural areas* and *I don't want to see growth in Leavenworth County* at 11 percent.

Respondents were also asked about growth in unincorporated areas of the county and specifically whether the county should control where new development occurs. Slightly more than half of respondents selected *yes*, with 28.7 percent choosing *no* and 20.7 percent *not sure*. The rate of response was similar by city.

However, when examined by age, younger residents were less likely to believe that Leavenworth County should control where growth occurs than older residents were. The oldest two age groups (70s and 80+) had the highest rate of people who believed the county government should control where growth occurs, with 61.9 percent of those in their 70s and 73.9 percent of those 80+ choosing *yes*.

When asked if the county should control what type of new development occurs in unincorporated areas of the county, nearly 60 percent of respondents chose *yes* (58.2%), with 25.6 percent choosing *no* and 16.3 percent *not sure*. Most of the answers on this question were fairly consistent; however, older respondents are more likely to believe the county should be able to control what type of development occurs.

Figure 3.1

## TOP 3 REASONS you live in Leavenworth County

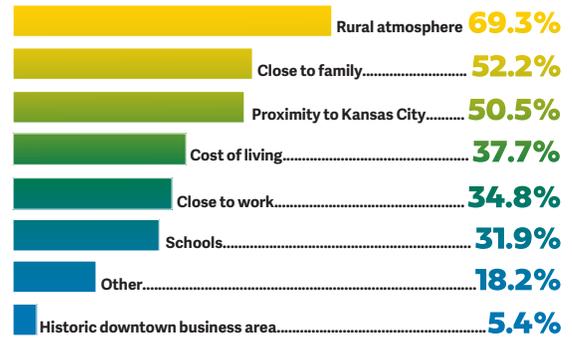


Figure 3.2

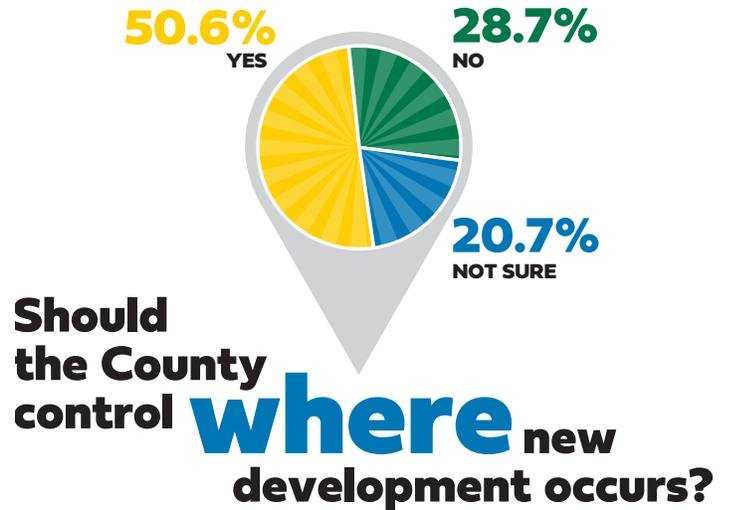
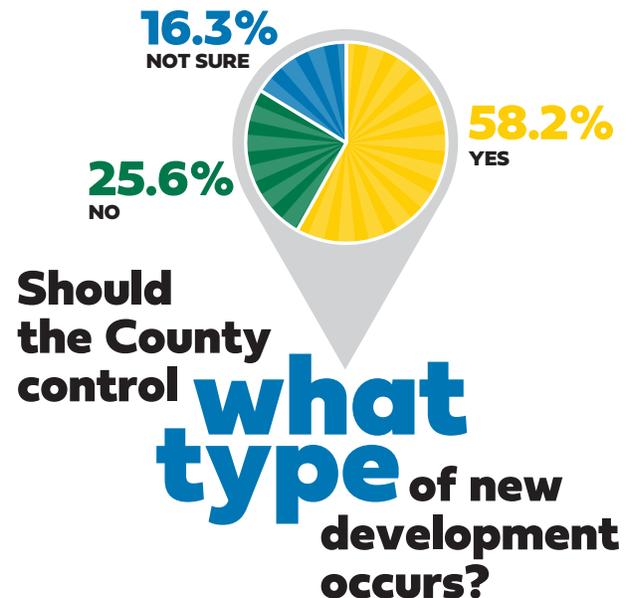


Figure 3.3



## Types of New Development

The most popular choice for types of new, desired development in nearly every group was *outdoor recreation spaces*, defined as athletic fields, parks, playgrounds, trails, open spaces, etc. Overall, 60.2 percent chose this answer, and it was the top choice for people regardless of the location of their residence (within cities, urban growth areas, or rural).

Other popular choices were *commercial development*, *suburban-style, single-family housing developments*, *agriculture*, and *mixed-use development*. *I do not support new development in Leavenworth County* received 8.9 percent of the votes.

*Outdoor recreation* was by far the most common choice of people who live within cities, with Linwood residents choosing it at the highest rate of 71.4 percent.

All age groups also chose *outdoor recreation spaces* as their top option, except those in their 70s who preferred *suburban-style, single-family housing*, and *commercial development*.

## Greatest Concerns for the County

Universally, the greatest concern respondents have for the county is the *maintenance of existing roads/construction of new roads*, with 71.1 percent choosing this from a list of options. Other top concerns included *preserving natural areas and wetlands*, *rapid residential growth in rural areas*, *lack of commercial development*, and *lack of parks, trails and outdoor recreation spaces*.

All seven cities chose the option about *roads* most commonly but had some variance between other top choices.

**Table 3.1**

Concerns by City (Ranked by Percentage)							
Options	Leavenworth	Lansing	Tonganoxie	Basehor	Linwood	Bonner Springs	Easton
Rapid residential growth in rural areas	21.2%	33.0%	36.0%	52.4%	71.4%	37.1%	50.0%
Lack of parks, trails, and outdoor recreation spaces	41.6%	47.6%	37.1%	44.1%	36.7%	40.0%	38.9%
Preserving natural areas and wetlands	38.2%	44.0%	41.6%	40.4%	61.2%	48.6%	50.0%
Maintenance of existing roads/construction of new roads	78.5%	61.9%	69.0%	62.8%	75.5%	65.7%	83.3%
Lack of commercial development (services, retail, manufacturing, entertainment, and dining options)	57.3%	53.8%	48.2%	36.5%	28.6%	11.4%	38.9%
Private property maintenance	24.1%	16.5%	15.2%	11.8%	12.2%	8.6%	38.9%
Other	11.0%	9.2%	9.1%	7.4%	10.2%	17.1%	5.6%

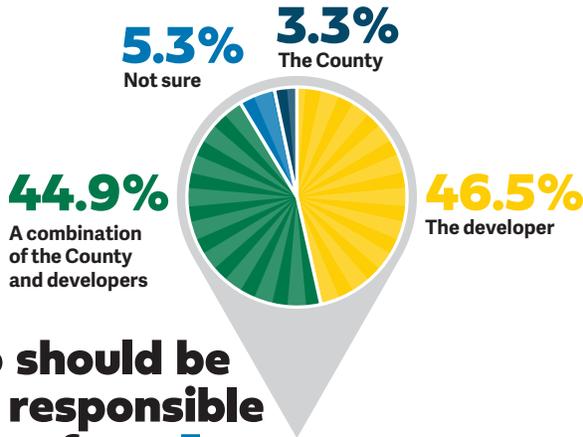
## Locating New Development Near Existing Utility Infrastructure

The large majority — 71.4 percent — chose *yes*, new developments should be prioritized near existing utility infrastructure. This answer was fairly consistent across all types of areas respondents live in (within cities, urban growth area, or rural). There was some variance by city, with Lansing having the highest percentage of *yes* responses (80.3%) and Easton the lowest (50%).

When asked who should pay for the cost of extending services such as sewers, water lines, and other utilities to new developments, respondents were clear the county should not bear this cost alone, with only 3.3 percent choosing *the county* on this question. Some are willing for the county to share costs in *some combination with developers* (44.9%), but the largest percentage said the *developers* should be responsible for the costs at 46.5 percent.

When analyzed by what type of location the respondents lived in, those in the cities preferred splitting the cost between the county and the developer (54.4%), while those in urban growth areas and rural areas believed the developer should cover the cost (52.8% and 59.8%, respectively).

Figure 3.4



Who should be responsible for **the cost** of new utilities?

## County Sewer Services

Respondents seemed unsure how to answer the questions about creating a countywide sewer program. Almost the same percentage of respondents chose *yes* (36.9%) as *no* (36.5%), and a significant number were *not sure* (26.6%). Those living in cities were more likely than the other two groups to choose *yes* (50.8% compared to 29.7% in urban growth areas and 23% in rural areas).

Respondents from Leavenworth, Lansing, and Tonganoxie were the most likely to choose *yes*, with the highest percentage of *no* responses coming from Easton, Bonner Springs, and Linwood.

By age, those in their 30s were the most likely to choose *yes*, while 41.3 percent of those 29 and younger chose *no*.

Nearly 50 percent of new residents to the county want a county sewer system, while only 33.1 percent of those who have lived in the county 20+ years do.

## Design Standards and Building Codes

Three questions dealt with whether homes built outside city limits (in an urban growth area) should have to conform to city design and building standards:

### Should residential subdivisions in unincorporated areas near a city be required to meet design/building codes?

Most respondents chose *yes* on this question (57.1%), with 29.5 percent *no* and 13.4 percent *not sure*. Those living in cities were the most supportive of this issue, while those in urban growth areas and rural areas answered it about the same (46.2% and 49.8% respectively *yes*).

The cities most supportive of subdivisions near cities being required to conform to city standards were Tonganoxie, Leavenworth, and Lansing, with Bonner Springs, Basehor, and Linwood being the least supportive.

Older respondents (60+) were more likely to support urban growth areas being required to conform to design/building standards, although younger respondents also supported the idea, just at lower percentages.

### Are you concerned that homes built in unincorporated areas of the county are not built to the same standards as those in cities?

The majority of respondents selected *no* at 58.7 percent. The gap between *yes* and *no* responses was less when looking at only those living in cities (42.5% *no* compared to 39.7% *yes*). Urban growth area and rural respondents responded *no* in larger and similar numbers — 70.5 percent of urban growth area and 73 percent of rural.

Cities in the more rural parts of the county — Basehor, Linwood, Easton, and Bonner Springs — were more likely to choose *no* on this question. The largest *yes* percentages were from Lansing, Leavenworth, and Tonganoxie.

By age, the youngest participants were least likely to choose *yes*. Those most concerned were 60+.

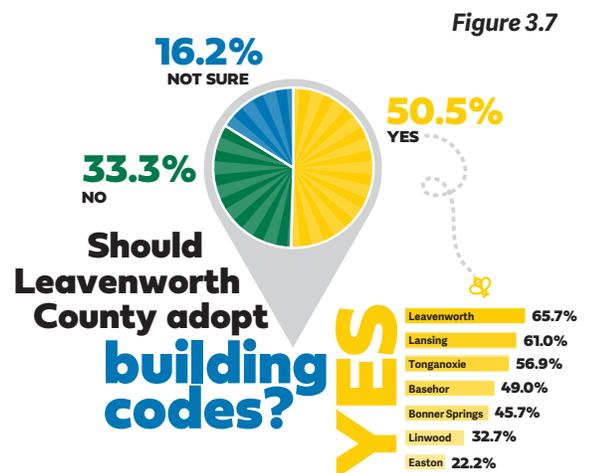
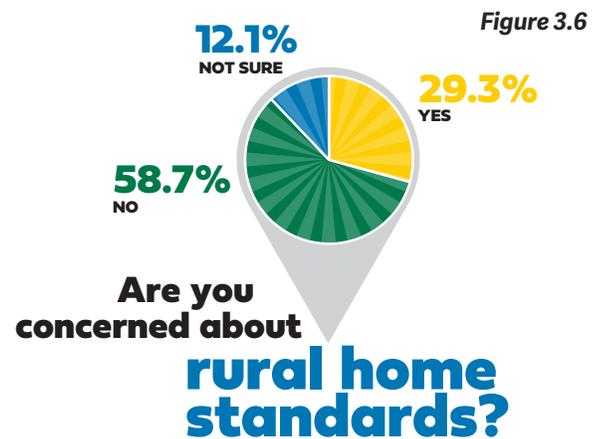
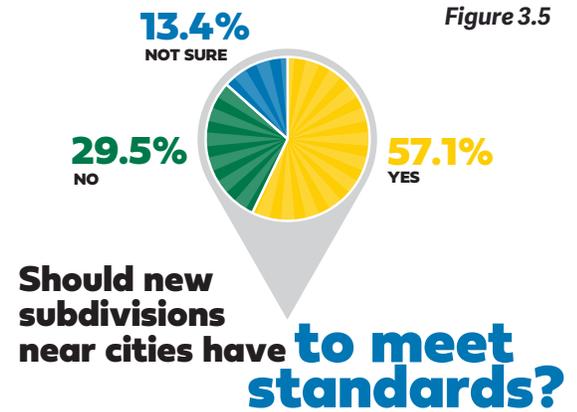
### Should Leavenworth county adopt building codes?

The majority of people chose *yes* at 50.5 percent; however, when analyzed by group, this is not a clear-cut decision. *No* responses were about one-third of the responses (33.3%) and the *not sure* responses were at 16.2 percent. It appears the county is divided on this issue.

Those in the cities were more likely to choose *yes* at 68.6 percent, while those who live in rural areas were at 34.9 percent *yes*. Specific cities in favor of building codes were Leavenworth, Lansing, Tonganoxie, Basehor, and Bonner Springs. The largest *no* responses came from Linwood and Easton.

Older residents were much more likely to support building codes than younger residents were, with those 60+ choosing *yes* at rates 62.4 percent and higher, while those 59 and younger responded *yes* at rates in the 43 percent to 48 percent range.

New residents who have lived in the county three years or fewer were the most likely to want building codes, with 57.6 percent choosing *yes*. However, there was little variance between the highest and lowest percentages on this question, indicating general agreement by length of residence. Respondents who have lived in the county seven years or more answered *yes* at rates between 47.9 percent and 49.1 percent.



# In-Person Engagement

## Visioning Workshop

### Purpose

Before a comprehensive plan can be crafted, a vision must be collectively formed. The vision sets the tone for the remainder of the planning process, offering a sturdy foundation of which the rest of the Plan can be based upon. The exercise of gathering stakeholders, community members, and city/county staff members to determine what the future should hold establishes a mutual direction for the Plan, builds trust amongst all parties, and defines the purpose for the effort at-hand.

This is why visioning serves as a critical milestone in the planning process. Not only is it the first in-person engagement opportunity, it is the time when needs, wants, and desires are expressed and the “ifs,” “buts,” and “hows” are ignored – at least for the time being. The visioning workshop is a time to dream and let go of the price tag and time constraints. The vision can only be uncovered when the concerns are discarded such that they do not cloud the results.

## Visioning Workshop Agenda

### Introduction

- Who we are (consultant team)
- Overview of Comprehensive Plan
- Project schedule

### Setting the Table

- Preliminary existing conditions
- Pep talk

### Defining Success Exercises

- Word cloud
- Needs, wants, and desires
- Impediments, obstacles, and dislikes

### Wrap-Up

- Upcoming events





## Needs, Wants, and Desires / Impediments, Obstacles, and

**Dislikes:** The second exercise asked participants to individually record their (1) needs, wants, and desires and (2) impediments, obstacles, and dislikes for the county, defined as follows:

- **Needs:** We need to address this critical issue.
- **Wants:** If we had the choice, we would choose to have this...
- **Desires:** Wouldn't it be nice if..., but if we don't get it, that's okay.
- **Impediments:** Immovable objects or obstructions that we must go around.
- **Obstacles:** Things that can be surmounted or changed (hopefully in our best interest); get in the way of what we want to accomplish (but not just a nuisance).
- **Dislikes:** Things we just do not like; tend to be nuisances and personal; do not prevent you from achieving your goals.

Once all participants had individually recorded their responses to the prompts, the planning team split everyone up into six randomized groups. Within their groups, participants cycled through each station (six stations total, one for each prompt) to review all responses and simply absorb what others had written.

Once an understanding of what everyone had recorded was established, the groups cycled through each station to pick their top three favorite responses of each category and place those responses on their own group sheet. This exercise began the narrowing process to determine which items were most important. Each group selected a spokesperson to report back their priorities to the larger group.

With group priorities identified, it was time for the planning team to digest and summarize the content of the visioning workshop. Pooling the prioritized responses from each group, a collective list of input for each of the six prompts was created, as illustrated to the right. Note that the lists are not in any sort of prioritized order.

### + Needs

- High speed internet in rural areas – not “5G”
- Improved road system
- Mental health services
- Greater economic development
- North/south major arterials through center and north county
- Adoption of building codes
- Better access to major highways
- Preserve natural beauty and resources
- Climate sensitive
- Improved utility infrastructure

### + Wants

- Parks
- Secure agriculture zones
- More law enforcement
- Pave the roads
- High speed internet in rural areas
- Better mental health access
- Preservation of open space
- New access (e.g., bridge, roads)
- Walk/bike trail systems
- Well-planned infrastructure (sewer/water/roads)
- Encourage equality (LGBTQ)
- Transportation plan for 5-, 10-, 20-year growth projections
- Rural/urban balance
- Locally owned businesses, restaurants
- Good tax base (industrial)

### + Desires

- Public areas that leverage the land – camping, fishing, mountain biking, etc.; recreational areas
- Technical education center, skilled crafts development
- Light industry that does not pollute or threaten the county's beauty
- Floodplain management
- North/south roads
- Rural community
- Tech schools
- Commercial/business/retail options
- Hiking and biking trails through wooded areas; trails connectivity
- Community center
- STEM development center for ALL ages
- High speed internet
- Building codes
- More options for recycling
- Well-defined paths of communication (government to citizens, citizens to government)

## — Impediments

- Lack of plan
- Lacking industrial tax base
- Do not let the improvements of county be hampered by fiefdoms of the cities/towns
- Leaders with personal agendas rather than community well-being goals
- County zoning as currently written
- Stranger Creek , Stranger Creek bridges, and floodplain
- Poor tax base
- “Keep it the way it is” mentality
- Lack of high paying jobs
- Internet
- Lack of economical development to offset tax base
- Idea that industry is the only type of economic development we can have
- Military fort and prisons (take away some revenue, but use roads, pay no taxes, etc.)
- Climate change
- Egos

## — Obstacles

- 12 stoplights along Highway 7
- “Good old boy” network
- Public transportation
- Lack of sewer/water infrastructure
- County administrative/staff adverse to working with cities
- Money
- Poor infrastructure standards
- Short-sighted tax policy
- Lack of high speed internet in rural areas
- Roads/terrain
- Lack of forward thinking
- City/county divided interests
- Small tax base
- Cost of infrastructure (water, sewer, roads)
- Metro access, river crossing
- Differing opinions on what is needed

## — Dislikes

- History of things happening without community input
- Incomplete business plans released (or not) to public
- Allowing developers to buy parcels outside city limits in rural areas and expecting to build high density communities
- Subdivisions in rural areas
- That cities have been given power to impose control over property owners 3 miles outside city limits without permission of land owners
- Commercial within 25-feet of residential development (in county)
- Bureaucracy
- Too many water districts
- This is people thing – lots of real provincialism, inability to cooperate among entities
- Lack of consideration for property owners’ rights
- Lack of vision
- Lack of code enforcement
- Secret deals with developers
- Leavenworth County Planning and Zoning notification process
- Lack of infrastructure in rural developments; awkward land use when all development follows the road sides
- Planning and Zoning tells you a policy and then you see others not following; inconsistent
- Friction between cities and county
- Too much commercial/industrial property in rural areas



# Focus Groups

## Overview

Ten focus groups were conducted in June 2019. Groups were organized into five primary topics, and all related to different aspects of population growth in the county. Each of the five topics was offered in the north (Easton) and south (Tonganoxie) part of the county. The topics were:

- Land Use/Zoning
- Infrastructure
- Agriculture
- Urban Growth
- Economic Development

## Participant Demographics

The focus group participants can be described as follows.

- 101 participants and 54 unique participants, with 27 people attending more than one group. Four people attended all five groups in their area.
- 33 participants in the north sessions, 68 in the south.
- 64 percent of participants had lived in Leavenworth County for 20+ years.
- 56 percent of participants lived in unincorporated areas.
- Tonganoxie was the most represented city. Cities also represented in the focus groups were: Leavenworth, Lansing, Basehor, Linwood, Easton, and Kansas City.
- Attendees were 68 percent male and 32 percent female.

## Perceptions of County Growth

### Overview:

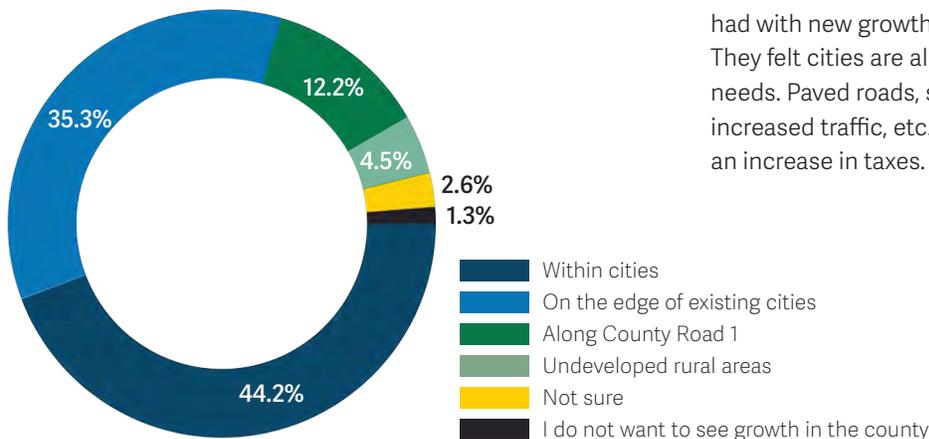
- Most groups agreed that growth was inevitable, so it needs to be controlled.
- As it is the oldest county in the state, some people were happy to see others moving to Leavenworth County and recognizing what is great about living there.
- The most common advantage to growth mentioned was that it would potentially decrease property taxes by spreading expenses among more residents.
- Northern groups were generally concerned about how growth could contribute to the loss of agricultural land, an increase in traffic on gravel roads, and loss of the natural beauty of the county due to views being obstructed by more housing.
- More of the southern participants had lived in Leavenworth County fewer than 10 years (22%), and saw themselves as part of the growth. The northern participants were more likely to be long-time residents (79% had been residents for more than 20 years), and some had family farms in the county for generations.

### Discussion:

- The general consensus seemed to be that there is the most potential for growth within existing cities like Leavenworth, where density could be increased and older buildings could be renovated and repurposed. Many participants saw a lot of potential in downtown Leavenworth for new businesses to open and more housing to be built.
- After that would come growth on the edge of existing cities; however, some people were against that as well, believing the sole focus should be within the existing cities.
- Commercial growth should be limited to where it is being specifically targeted and where it makes sense, such as along County Road 1. Many people worried that the rural areas cannot handle the traffic and infrastructure needs that come with commercial locating out in those areas.
- As far as growth out in the rural areas, people seemed to understand that one of the ways in which Leavenworth County is growing is through land being split up into 2.5- or 5-acre lots, where people from the city are moving to enjoy a rural atmosphere and scenic countryside. Infrastructure seemed to be the main issue participants had with new growth being located in rural areas. They felt cities are already prepared to handle these needs. Paved roads, sewers, fire protection, water lines, increased traffic, etc., all disrupt rural life and can cause an increase in taxes.

Figure 3.8

## Preferred Locations for Future Development



## Infrastructure

**Policies to Manage Growth:** Participants unanimously felt that the county should adopt policies to encourage residential growth in areas where infrastructure and services currently exist or are planned for.

### Gravel Roads:

- There is a general feeling, especially in the north, that gravel roads are inevitable and just part of the experience of living in a rural area.
- Traffic load should be the determining factor in whether a gravel road is paved.
- Some people also felt that school bus routes should be paved.
- As far as who should pay for road improvement, most felt the expense should be paid through a combination of developers' fees and the property taxes of the owners who would benefit from the improved road.

### North-South Connections:

- The creation of more north-south connections in the county would be great, but it is not a high priority.
- Many people have the perception that there have been several attempts to create more north-south connections through the county that have either failed or run into roadblocks.
- Many mentioned they would like to see these types of connections being planned for today so that in the future — when funding is available and the need is justified — it will be easier to put a new road in.
- It seemed that widening the roads that currently exist is more of a priority due to safety concerns (see *Other Concerns*).

### Fire Protection:

- Requiring residential subdivisions to have fire hydrants and adequate fire protection in Leavenworth County is a unanimous "yes"; however, participants understand that most rural areas do not have access to the right size of water lines, meaning this would be a substantial cost.
- Participants felt the developers should take on that cost.
- However, several people suggested that government-provided fire protection is just one of those things you may have to sacrifice to live out in the county, where response times are longer and many firefighters are volunteers.

### Countywide Sewer Program:

- Participants saw the value of a countywide sewer program, as long as future density supports it.
- The main concerns were whether the cities should be worrying about extending sewers to their urban growth districts, and whether a countywide sewer program would increase taxes. Many rural participants have septic systems that they are happy with. Others feel that septic is outdated and a sewer program would be better.

### Rural Internet Services:

- Most participants across all groups would strongly support Leavenworth County exploring ways to incentivize internet companies to provide more or faster internet services out in the unincorporated areas.
- However, some questioned whether this was an appropriate task for county workers, rather than relying on private enterprise to meet demands.
- There was a desire to see more competition among internet service providers in the county.
- Several people mentioned that they work from home on their computers, or would if they had better internet speeds.
- Farmers acknowledged that there is agricultural technology they are unable to take advantage of without internet access in their areas.

### Hiking, Biking, and Equestrian Trails:

- Overall, participants agreed county-built trails "would be nice," but are not a priority.
- Most felt that trails should be the cities' responsibility, or paid for by some kind of outside funding like a private developer or a grant, not with county tax dollars.
- There was concern about who would pay for maintenance after trails are created.
- Northern groups and some of the people who live in the unincorporated areas were concerned that trails would bring more people to the edge of their property, which could bring security issues.
- Some were intrigued by the idea of creating trails out of abandoned railroad tracks, if that is possible.
- The safety concern of bikers riding on roads and highways came up at almost every group. Participants felt that creating wider roads with bike lanes or wider shoulders was a better solution than creating separate trails for them.

## Infrastructure (Continued)

### Parks and Recreation Department:

- Southern participants all felt that more parks would be great, but may be more of a city function than the county.
- Northern participants were less open to a parks department due to concerns about where the parkland would come from and the added cost to the county to create a parks department.
- Northerners also felt that the county's population had not yet grown to a level that county parks were necessary in addition to the parks the cities already have.
- As to how a parks department could be funded, answers were split among all groups between general fund, countywide sales tax, developer fees or a combination of sources. User fees, campground fees, or club sports teams that would use the parks were also suggested possible revenue streams.

**Rural Transit Services:** None of the groups saw a need for rural transit services.

**Mental Health Services:** The majority of participants agreed that increasing access to mental health services in the county is a need. While some think the county should take the lead in exploring more services, others felt this should be the responsibility of schools, hospitals, the county health department, or Fort Leavenworth.

### STEM Education:

- For youth, all groups felt the schools are already doing an adequate job of STEM education.
- For adults, groups brought up concerns about whether there are enough technical college programs or community college programs for trades. Overall, it was not considered the county's responsibility, but a role for educational organizations.

### Community Centers:

- Majority felt there are already adequate community centers in the cities, and that most of the facilities that already exist are underutilized.
- Northerners felt money could be better spent improving existing centers, and southerners felt that in areas where community centers do not exist, libraries, churches, and other spaces have already filled that role/need.

## Agriculture

### Importance of Preserving Farmland:

- Preserving land for agriculture was of high importance to all groups.
- There were no specific areas they would like to see preserved.

### Pushing Development Toward Cities:

- Participants were unanimously in favor of the county adopting policies that push the majority of new development towards cities to preserve large swaths of farmland.
- Besides preservation of farmland, participants felt it just makes more sense to build near existing city-provided infrastructure and other services.
- Keeping growth near cities seemed like the unanimous, logical answer.

### Minimum Agriculture Zoning District:

- Most people did not support a minimum 20-acre zoning district in rural areas to protect farmland.
- The cost of a 20-acre parcel of land is high, which limits who can build out in the county.
- Many people brought up the scenario of when a farmer wants to split up their land among their children. Nearly all participants who farmed did not want the government to be able to tell them how to split up their property, because in some cases they want to give land to a child for a personal residence, and in others they want to give them land to farm. People did not like being required to keep a parcel at a five-acre minimum because it forced their child to have to maintain more land than they want and could result in land being wasted (not farmed) in the future.
- The southern group agreed that there should be a minimum, but 20 is too large. A minimum of five acres, which is the current minimum, was suggested.

### Regulating Minimum Size of Agricultural Parcels:

- It was difficult for groups to come to a conclusion as to whether the county should regulate the minimum size of agricultural parcels of land.
- Most people did not want to see agricultural land subdivided into many smaller pieces, but also felt that it is inevitable.
- Forty acres, the current agricultural land size, was seen as a lot of land and agriculture can happen on much smaller pieces of land. No one wanted to discourage these types of small-scale agricultural activities by requiring a minimum size.

## Agriculture (Continued)

### Agritourism:

- When asked whether the county should explore new possible agriculture assets that could be marketed to bring in agritourism dollars to the county, both groups turned to discussing some of the existing private agritourism activities already being done in the county. Several of the southerners felt the county needed to have some kind of regulation of these businesses, due to the road traffic they generate.
- Most people seemed to think that the county should not hinder agritourism, but no one really advocated the county actively developing and promoting new agritourism opportunities.

## Economic Development

### Reaching the County's Potential:

- All participants felt the county was not growing to meet its potential.
- Participants see Leavenworth County as a "bedroom community," which they believe is hindering a lot of potential business growth.
- However, many people do not want to lose the rural and "small-town" feel of Leavenworth County, either.
- There is a worry that Leavenworth's reputation for being anti-business is also hindering economic development.

### Satisfaction with Economic Development Efforts:

- In the north, people are dissatisfied with economic development efforts. They felt the taxpayers have funded multiple studies — such as the airport study — that ended up going nowhere. They worry their tax dollars are not being used efficiently for this purpose. One proposed solution was that economic development should be separate from the county, to avoid any political bias affecting efforts.
- In the south, there was dissatisfaction with the efforts of LCDC. Most people feel they are not including the public in their efforts and, like the north, are not seeing results they would expect for the time and money that has been put into it. The cities and the county should be working together for economic development purposes.

### Desire for More County Involvement:

- The northern group does not think the county should be more actively involved in economic development. Their reasons for objecting to more involvement were a concern that it would cost too much but produce little, and that free enterprise should be allowed to control what happens in the county.
- Alternatively, the southern group thinks the county needs to be much more involved in economic development, particularly with regard to representing the rural areas.

### Sales Tax Program for Retention, Expansion, and Recruitment of Businesses:

People would rather see a sales tax than an increase on their property taxes. However, there was concern the county does not have the tax base or enough retail business to generate adequate funds through sales tax. They were undecided as to whether this type of program would be useful.

### Tax Abatements or Incentives for Private Companies:

- Answers were mixed as to whether the county should offer tax abatements or cash incentives to private companies in order to recruit them to locate in Leavenworth County.
- Some felt these incentives would be unfair to existing businesses and that trying to create something like Legends in Leavenworth County would be pointless because people would still go to Legends to shop.
- Both groups used Legends as an example of something positive, and the southern group felt that Power and Light in Kansas City had been a great way to revitalize the downtown area through a TIF district. Both groups would be in favor of something like that happening in Leavenworth County.

### Types of New Development that Should be Pursued:

- Participants would like economic development efforts to pursue a mix of development types, including commercial, industrial, and real estate. They would like to encourage light industry that creates living wage jobs, so that people can afford to buy houses and spend money in the county.
- Focusing on clean or "green" industries was brought up as a shared value of county residents.
- Participants would also like to see shopping and entertainment, particularly chain businesses such as a Target or Chipotle, as well as businesses that encourage tourism. However, they understand that retail follows rooftops, and that the county needs more primary industries and housing first.

## Land Use and Zoning

### Building Codes in the County:

- Almost all participants felt a uniform building code in the county for new structures would be beneficial for safety and aesthetic reasons. Most were surprised that these codes did not already exist.
- Participants with farms would like to be able to build small buildings such as chicken coops without adhering to a strict set of codes, so they were in favor as long as the codes only applied to residential structures.
- When it comes to paying for a building code program, the southern groups overwhelmingly favored a combination of property owner and the county.
- The northern group mentioned that the property owner or the builder/developer should have to pay for it.

### Cities Enforcing Building Codes in the Urban Growth District:

- The southern group unanimously felt that if something is not part of a city, it should not have to obey city codes.
- The northern group was split. Some felt that if the buildings are in the urban growth district, then it makes sense to go along with the city. Others felt that allowing this would be too much government interference, and that the state designates the urban growth boundary and the state does not have a policy about enforcing codes within that boundary.

### Requiring Residential Subdivisions to Meet City Design Standards:

- Northern participants thought that the urban growth district will be part of the city soon enough, so it only makes sense to require them to meet the city's design standards.
- However, some people, especially in the southern group, felt that since residences in the urban growth boundary are technically in the county, those people would have no representation in the city government and therefore should not have to adhere to city regulations. The southern group was not in favor of enacting this requirement.

### Special Use Permits:

- Many participants felt that the special use permits were just a way for businesses to avoid zoning regulations, which interferes with planned growth.
- They felt that if there is a business that does not fit the zoning regulations in an area, there needs to be an extensive process to decide whether they are allowed a special use permit, and that right now, some businesses that have been allowed to operate under special use permits are doing so without enough consideration going into the decision.
- Some people were in favor of doing away with special use permits altogether.

## Urban Growth Boundaries

### Encouraging Residential Growth in Planned Subdivisions:

- Participants felt that residential growth needed to be planned, but that the county shouldn't necessarily be encouraging it.
- Most participants hoped that these planned subdivisions would be nearer to existing cities, and not necessarily out in the county.

**Control Where New Development Occurs:** Participants felt that the county should control where growth occurs, so that new growth is planned with the future of the county in mind. This includes working with cities to create a plan that fulfills both the county's and the cities' visions for the future.

**Control What Type of Development Occurs:** In regard to unincorporated areas, all participants agreed that the county should control what type of new development occurs, and that this should be done through zoning.

### Promote Denser Development in Urban Growth Management Areas:

Participants were in favor of denser development as long as it is not "out in the county" where things like apartment complexes don't make sense. They agree there is a need for multi-family residences.

### Actively Preserving Nature Areas:

- Preserving nature areas was extremely important to all participants, if it is done in the right way.
- Concerns included where the preserved land would come from, whether the preserved land would be taken from landowners, and whether there are any specific areas worth preserving.
- Some people mentioned that residents are choosing not to develop in areas in the floodplain anyway, so nature "preserves itself."
- Participants agreed that Leavenworth County is beautiful and they prioritize keeping the land as it is as much as possible.

## Other Concerns

**Road Safety:** Roads and road safety came up in several focus groups. One concern was that paving narrow, rural roads leads to farmers and their equipment sharing the road with people who drive above the speed limit. They would like to see strategies that help minimize the risk of accidents.

Similarly, people are biking on the narrow roads with little or no shoulder, such as Tonganoxie Road, because there are no other places for them to bike in the county. This worries many drivers in the county and several people suggested widening the roads to add a much wider shoulder for bikers to use.

**Cul-de-sacs:** Many participants were frustrated with the increase of cul-de-sacs as part of residential subdivisions. More and more neighborhoods are being created without through streets, which leads to unplanned, winding roads. They would like to see a plan created that guides developers as to what kind of roads they can build and where through streets need to be placed.

**Transparency:** Many people felt that there has been a lack of transparency from the county government in the past, which they believe has caused a lot of the issues, such as with the proposed Tyson facility. They felt that if the county had involved more residents in the planning process, conflicts could have been avoided. Several people mentioned feeling the focus groups were a good way to include them in the process.

## Planning Charrette

### Purpose and Overview

While the visioning workshop lays a sturdy foundation for what the Plan should consider and include in the final product, the charrette takes a deeper dive into specific topics of the Plan. The charrette produces a consensus-built conceptual plan (but not final!) based on iterative feedback.

Members of the public, SCAC, TC, and elected officials are brought together to ensure a clear understanding of their desires for the future of the county, to gather local knowledge related to the issues and opportunities within the county, and to build consensus around a multifaceted solution: this Comprehensive Plan. The charrette advances the creation of the Plan through conversations and responses to the data presented by the planning team. The locals' insight, combined with the planning team's expertise, focuses the Plan on preferred transportation, land use, development, and redevelopment concepts.

The charrette took place over three days, October 1-3, 2019, at the Heritage Center (109 Delaware St, Leavenworth, KS 66048) in Leavenworth, Kansas. The SCAC and TC met with the planning team multiple times in order to pass on their insight into the county's issues and opportunities and crucial aspects to the Plan.

In preparation for the charrette, the planning team created maps of the county, analyzed and evaluated the county's natural and built environments, created a project website, conducted and analyzed a public survey, summarized demographic and economic data and trends, conducted interviews with key stakeholders, and performed an in-person assessment of the county. This information provided the necessary context for the planning team to ask the right questions during the charrette to unveil the consensus-driven vision for the county.

Between each session with the committees, the public, and Leavenworth County staff members, the planning team was able to study the information given, summarize the feedback, create concepts for the plan, and/or alter the concepts according to input received. A summary of each day's activities and outcomes is provided on the following pages.

## What's the Purpose of a Charrette?

- 1 ASSEMBLE**  
Assemble decision makers, such as county staff members, elected officials, business owners, developers, property owners, neighborhood associations, and other stakeholders.
- 2 COLLABORATE**  
Collaborate with the decision makers in information sharing about the county, iterative improvement concepts, and feedback and revisions.
- 3 FINE TUNE**  
Fine tune the county land use and other improvement concepts through strategic conversations with stakeholders, the public, the county, and involved agencies.
- 4 CREATE**  
Create a community-driven, realistic plan, grounded in market and economic reality.



## Day One

The charrette started with a brief presentation detailing the charrette's purpose, process, and schedule. The planning team then presented the county's existing conditions; a breakdown and summary of the county's demographics, economic conditions, and market forces; and the public survey analysis and focus group summary.

From there, the committees completed a series of exercises generally focused on identifying the opportunities and constraints within the county.

The planning team split the committees into four groups and asked the groups to cycle through a series of stations where they prioritized the needs, wants, desires, impediments, obstacles, and dislikes compiled from the visioning workshop. The committee members were given a set of sticky dots and asked to vote on the items that they thought were the most important assessments of the county.

From there the committees were led to review and answer questions based on the existing conditions presented by the planning team. These six topics included:

- Land Use
- Transportation and Mobility
- Economic Development
- Parks, Recreation, and Quality of Life
- Infrastructure and Public Services
- Health and Wellness

These topics were arranged in stations where the groups answered specific questions related to each topic. Their responses were recorded on large post-it sheets for everyone to see. This way, each person could visibly see the thought process; this is a critical element of a charrette. The full record of all charrette exercises is included in *Appendix B Community Engagement Summary*.

In the afternoon, the Technical Committee meeting allowed for interaction and discussion between technical experts to discuss utilities, stormwater, and other infrastructure topics, and generate ideas for the Plan. This meeting provides great value to the planning team as multiple agencies, communities, and interests are represented in a singular location. The meeting allowed the planning team to ask technical questions, prior to concept generation. The discussion focused on development standards, the limitations of USDA requirements for rural water districts, and proper location for residential development within the county.



## Day Two

To begin day two, the planning team reviewed the prior day's work and compiled the information to begin generating ideas and conceptual plans for the public open house that evening. The public open house was the primary activity scheduled for day two but required the creation of initial concepts from the planning team. The planning team worked throughout the day to create these concepts. They produced a land use development map to have the public give feedback on where they thought development of any type should occur within the county as well as a transportation and connectivity map to demonstrate regional trail plans, which could connect the county to the Kansas City metropolitan area.

Prior to the public open house, the committees were brought back to preview the public open house and encouraged to stay to act as champions for the Plan by explaining and discussing the topics and ideas with the public. The two-hour public open house finished the day and resulted in much feedback from the community on the existing conditions and the future of Leavenworth County.

### Initial Transportation and Connectivity Concept

-  PROPOSED UPGRADED GRAVEL ROAD
-  EXISTING MAJOR ROADWAY
-  PROPOSED ROADWAY CONNECTION
-  PROPOSED METROGREEN REGIONAL GREENWAY SYSTEM
-  ADDITIONAL PROPOSED TRAIL CONNECTION
-  EXISTING FLOODPLAIN

### Initial Growth and Development Concept

-  PROPOSED Urban Growth Boundary
-  CENTER CITY LIMIT
-  100 Year Floodplain
-  POTENTIAL GEOGRAPHIC DEVELOPMENT AREAS

## Public Open House #1

The public open house was on October 2, 2019 from 5:00 p.m. to 7:00 p.m. at the Heritage Center in Leavenworth. The open house was advertised to the public through the Plan's Facebook account, the project website, email, a press release, and other various outlets.

The participants were greeted by a member of the planning team and given an introduction to the comprehensive planning process and directions for the evening. There were a number of stations created for the public to inspect and give feedback on. During the open house, the public had the opportunity to answer all the same questions the committees had answered the day prior. Their responses were captured in the same way and placed adjacent to the committees' answers. There was much overlap between the public's responses and the committees' responses. For a list of all responses, see *Appendix B*.

As the event was intentionally informal and did not include a formal presentation, members of the planning team were stationed around the room to clarify information, answer questions, and gather additional input through written comments and one-on-one or group conversations.

Public feedback was plentiful. While topics of interest and conversation were mixed, the necessity of improving traffic accessibility and flow, preserving agricultural lands, and properly managing growth and development in the county rose to the surface as a prominent sentiment shared by the varied groups represented at the open house.

## Public Open House #1 Stations

The first public open house was set up in a circular fashion, allowing attendees to start on one side of the room and work their way around to all the stations. Seven stations were included in the open house and a representative from the planning team was stationed at each area to answer questions and engage with attendees. The stations included:

- 1 Sign-in
- 2 Learn about the Project
- 3 What's Going on in the County?
- 4 What We've Heard So Far
- 5 Issues and Opportunities
- 6 Initial Ideas
- 7 What Did We Miss?



## Day Three

The last day of the charrette began with a review of the feedback generated during both prior days of the charrette with a focus on the ideas and content generated by the public during the open house. The planning team studied the feedback and began to integrate it into the maps and policy recommendations.

The planning team took time in the morning to discuss and deliberate over the direction and content of what would be integrated into the Plan based on the engagement activities completed throughout the earlier sessions. The conceptual future land use plan combined the interactions and public engagement and feedback gathered by the planning team.

The final session of the charrette gave the SCAC and TC a chance to review the narrowed concepts and recommendations to provide comments and direction. Attendees provided written and verbal reactions to the content as they reviewed the critical ideas and issues facing Leavenworth County and the conceptual plans.

### COMMERCIAL/BUSINESS/EMPLOYMENT

-  EXISTING
-  PLANNED
-  POTENTIAL
-  COUNTY PD 1 REZONING
-  MIXED USE

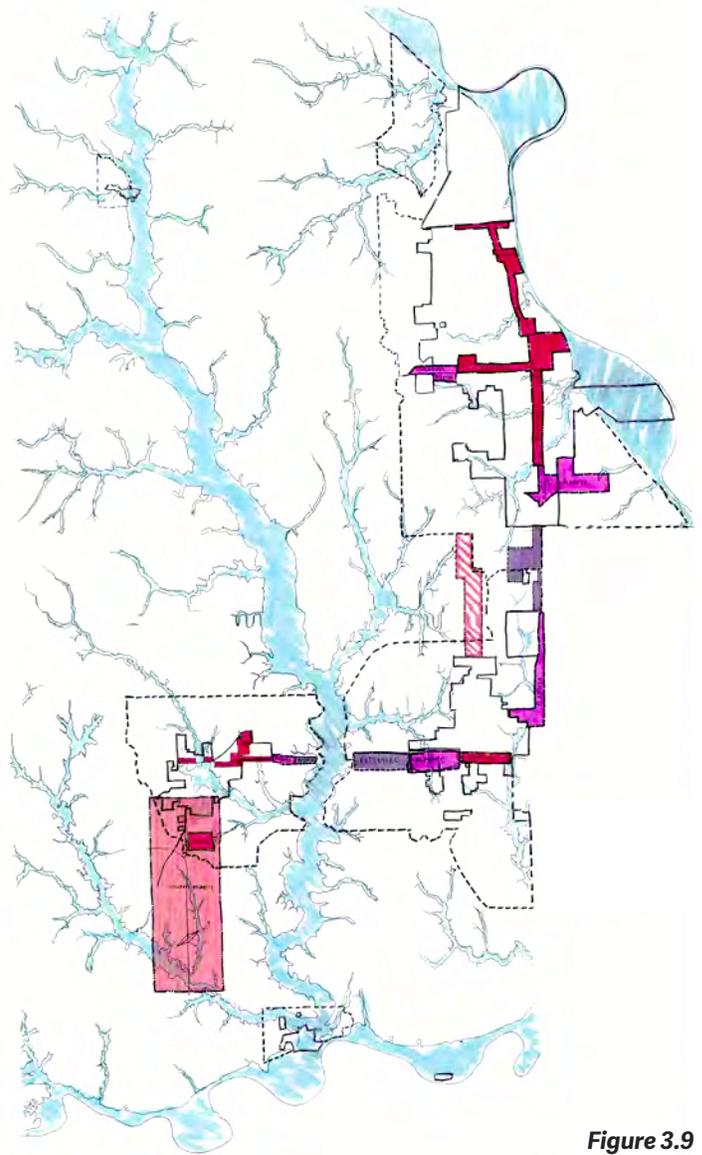


Figure 3.9

Narrowed Economic Opportunities Concept (Not Final)



- MIXED USE
- MIXED RES
- 3 UNITS/ACRE
- MIN. 2.5 ACRE
- RESIDENTIAL ESTATE - MIN. 5 ACRE
- RURAL AG.

- PROPOSED UPGRADED GRAVEL ROAD
- EXISTING MAJOR ROADWAY
- PROPOSED ROADWAY CONNECTION
- PROPOSED METROGREEN REGIONAL GREENWAY SYSTEM
- ADDITIONAL PROPOSED TRAIL CONNECTION
- EXISTING FLOODPLAIN

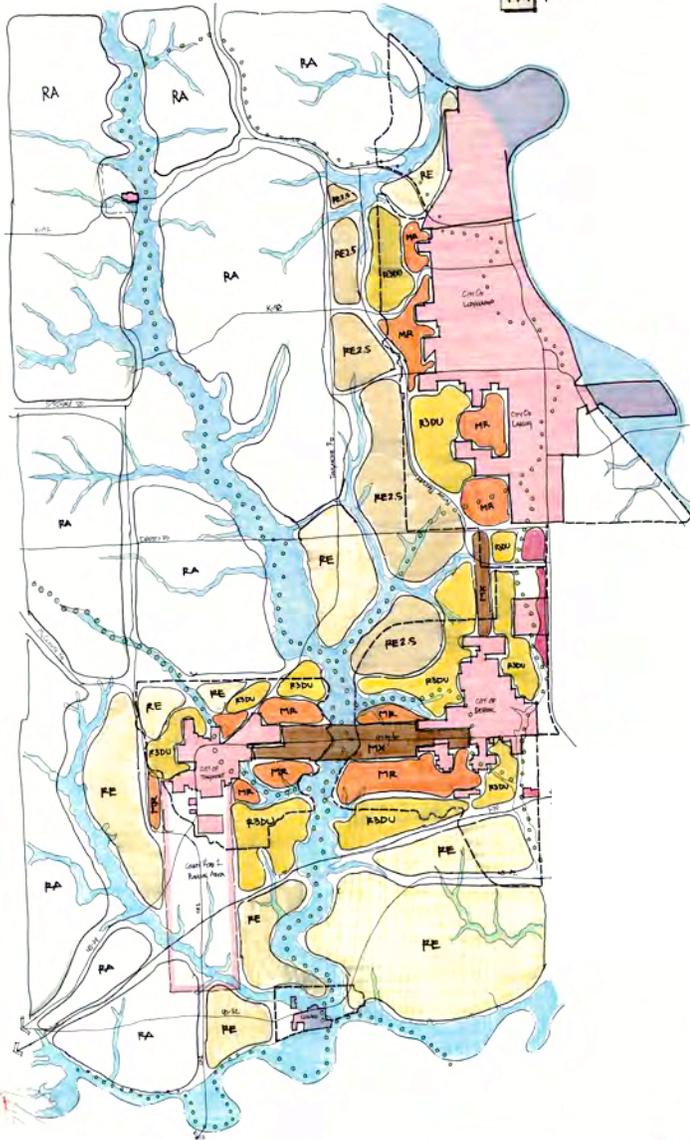


Figure 3.10

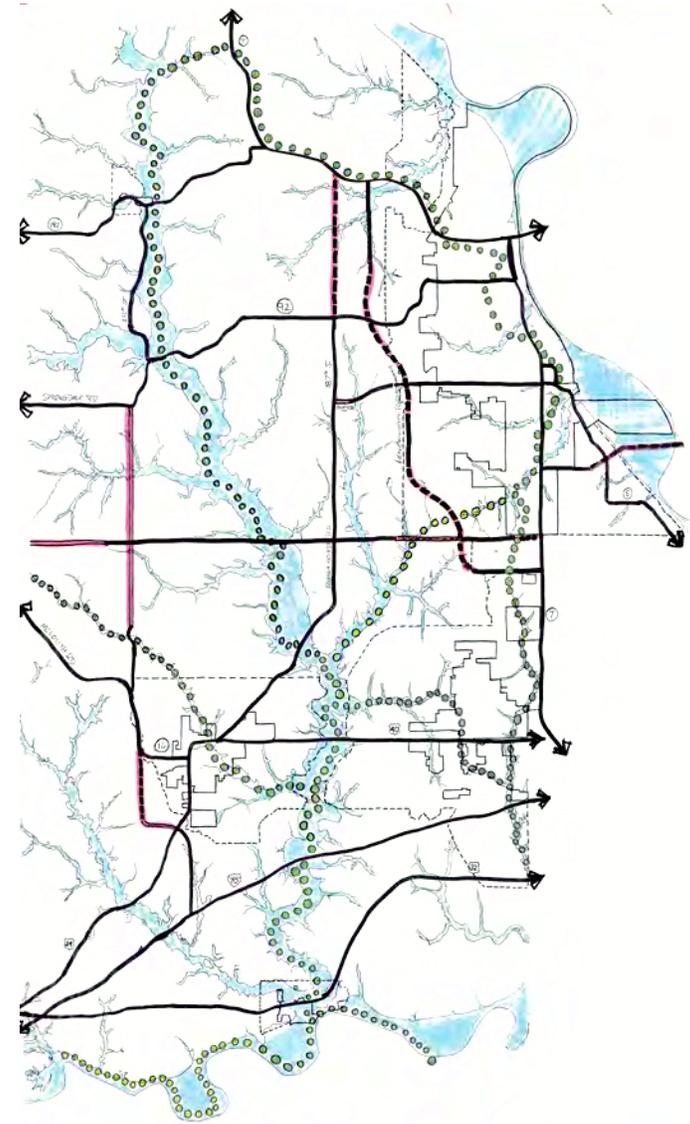


Figure 3.11

**Narrowed Future Land Use Concept (Not Final)**

**Narrowed Transportation and Connectivity Concept (Not Final)**

## Public Open House #2

### Purpose and Overview

The second public open house was on February 19, 2020 from 5:00 p.m. to 7:00 p.m. at the Lansing Community Center. The open house was advertised to the public through the Plan's Facebook account, the project website, email, a press release, and other various outlets.

The attendees were greeted by a member of the planning team and given an introduction to the comprehensive planning process and the purpose of and directions for the evening. There were a number of stations created for the attendees to view and give feedback on the topic or information provided. Any and all comments were captured via sticky notes and sticky dots. For a list of all questions and received comments, see *Appendix B*.

As the event was intentionally informal and did not include a formal presentation, members of the planning team were stationed around the room to clarify information, answer questions, and gather additional input through written comments and one-on-one or group conversations.

Much feedback was received. With regard to the future land use plan concept, concern about too much land subdivision (and not properly protecting large swaths of agricultural land) was shared. Specific transportation network comments were gathered, as well, such as the potential of connecting County Road 33 to County Road 29. As a response to what was missing from the Plan, several comments regarding high speed internet were collected.

### Public Open House #2 Stations

The second public open house was set up in a circular fashion, allowing attendees to start on one side of the room and work their way around to all the stations. Six stations were included in the open house and a representative from the planning team was stationed at each area to answer questions and engage with attendees. The stations included:

- 1 Sign-In
- 2 Learn about the Project
- 3 Where Have We Been?
- 4 What Did We Hear?
- 5 Where are We At Now?
- 6 What is Next? What Did We Miss?



# Online Draft Plan Commenting

## Purpose and Overview

To ensure even greater transparency, the planning team posted the draft Plan, as presented at the second public open house, online on the project website. The public was able to review and comment on the draft Plan from February 24, 2020 to March 9, 2020. The online comment period was advertised to the public through the Plan's Facebook account, the project website, email, a press release, and other various outlets.

Those interested in commenting on the draft Plan were able to do so anonymously or provide their name and email address in order to revisit their comments during the open commenting period.

Three-hundred fifty-one comments were received during the two-week period. Sentiment was shared primarily regarding land subdivision minimum acreages, protecting agricultural land, urban growth management areas, wind energy, open space care and management, high speed internet, and more. For a list a record of all received comments, see *Appendix B*.

The planning team read through each comment, organized all the comments into topics, and prepared an orderly spreadsheet of the comments to the Leavenworth County planning staff members and the Board of County Commissioners for their review.

The Board of County Commissioners provided final direction, directing the planning team to alter the draft Plan in various ways according to the comments received.



## DRAFT FOR REVIEW - Leavenworth County Comprehensive Plan

This document will help guide the future of the County for the next 10-20 years. Please provide your comments on the draft document, navigating through each section of the Plan. The commenting period is open until Monday, March 9, 2020 at 11:59 p.m. Leave comments anonymously or register as a user. As a user, you can revisit the document and your specific comments until the comment period is closed. Learn how to add comments by watching: <https://www.youtube.com/watch?v=L-MgasIsDTA&featu>.

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Leavenworth County

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## Section 4

# Land Use and Development Plan

This section identifies appropriate land uses, densities, and development areas within the county for the next 10 to 20 years. *Figure 4.1 Future Land Use Plan* recognizes the county's vast size and diversity and presents a flexible and balanced approach to assist county staff members, elected officials, the development community, and the general public in managing growth, while effectively protecting the county's rural heritage, agricultural land, and rich natural resources.

The recommendations within this section are based on the findings documented in Sections 1-3, but also on the guiding principles: elevate and compete; preserve and sustain; and communicate and coordinate. This section helps the county prioritize its land, resources, and infrastructure investment by directing most new residential and commercial growth into existing municipal boundaries and adjacent growth areas. Such a strategy allows for ample open space protection, agricultural use preservation, and the managed development of employment and industry areas that have appropriate access.

This section first presents the Future Land Use Plan (*Figure 4.1*) and provides descriptions of each land use category and other elements shown on the graphic. Targets and strategies (defined below) are then presented and described to achieve the Future Land Use Plan.

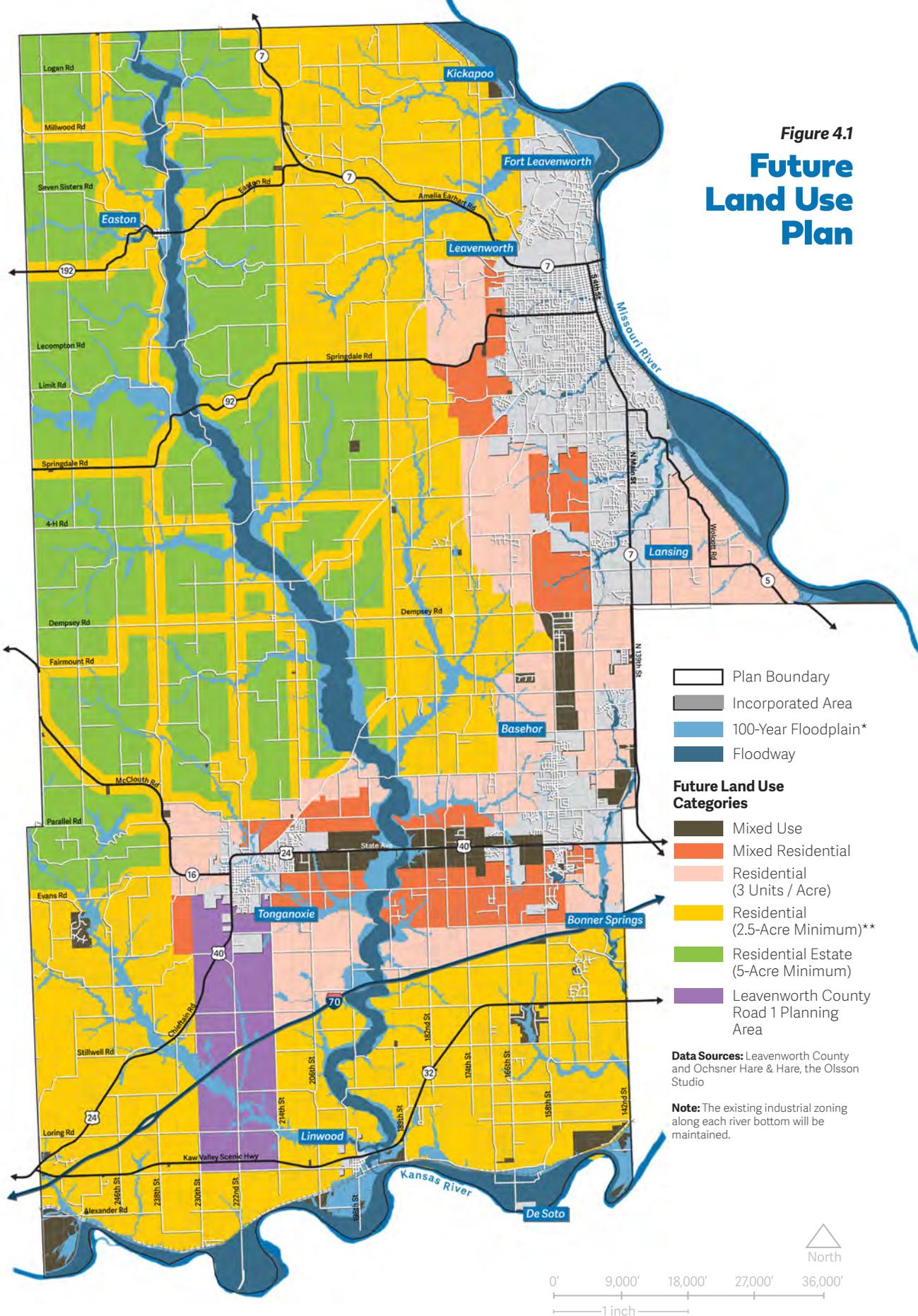


### Targets and Strategies

**Targets** are what the county would like to accomplish; they are the big ideas to move the county forward for the next 10 to 20 years. Targets are more qualitative than quantitative and answer the "what" rather than the "how."

**Strategies** present an approach or method for reaching or exceeding the targets. Strategies answer the "how" and can be broken down into tasks for individual organizations and/or responsible parties.

**Figure 4.1**  
**Future Land Use Plan**



\* Also known as Zone A or Zone AE, which are FEMA-defined Special Flood Hazard Areas

\*\* Residential (2.5-Acre Minimum) is the designated future land use within a quarter-mile of each side of the centerline of all improved roads within Leavenworth County, unless the quarter-mile area on either side of the centerline of an improved road is designated as a denser future land use, such as Residential (3 Units / Acre), Mixed Residential, or Mixed Use. "Improved" roads refer to all paved roads within Leavenworth County, not including those roads that have been hard-surfaced through the dust-abatement process. Due to sporadic data inaccuracy, Figure 4.1 Future Land Use Plan may show this quarter-mile Residential (2.5-Acre Minimum) buffer along roads that are not improved. In such cases, the Residential (2.5-Acre Minimum) quarter-mile buffer does not apply to either side of the unimproved road's centerline.

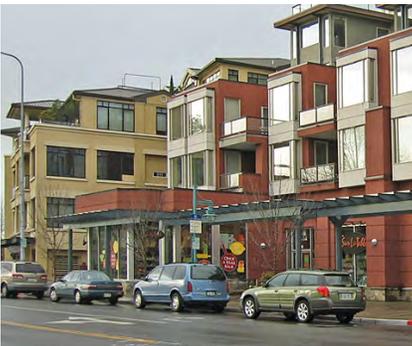
# Future Land Use Plan

Establishing a future land use plan is an essential first part of a comprehensive plan, as it provides the framework for future development and growth within the county. *Figure 4.1 Future Land Use Plan* ensures that future development within the county achieves the goals of the community and provides defined growth areas to, in turn, protect valuable natural features and agricultural land. Without a future land use plan, development decision making will be haphazard at best, or maintain the status quo.

Each of the future land use designations as shown on *Figure 4.1* are described and illustrated on the pages that follow. Land use designations describe the primary land use and development intensity of parcels within the county's jurisdiction. Although land use designations on their own are not legally binding, these designations provide the foundation for zoning. The zoning code is the regulatory tool used to implement the future land use plan and policies. The alignment of the future land use plan and zoning code is critical, as is outlined in the strategies of this section.

## Future Land Use Plan Categories

### Mixed Use



The Mixed Use land use category includes existing and proposed areas for development retail, service, office, and industrial uses. Mixed Use is primarily designated along existing major corridors, including US 24/40 between Tonganoxie and Basehor, and as a way to introduce higher density development in areas of natural expansion for Basehor and Lansing. Mixed Use offers flexibility in density and land use. This category should provide for the daily needs of residents and visitors. Nodal development is an important consideration within this category; key interchanges and intersections within this category should be more densely developed. Given this land use category's proximity to major roadways, special consideration should be given to building design, access, parking, and landscaping, while minimizing any negative impacts on adjacent residential uses.

### Mixed Residential



The Mixed Residential land use category includes existing and proposed areas for single- and multi-family residential development. This is the highest density residential development land use category within the county, and permits single-family residences, townhomes, duplexes, and, where appropriate, apartments. This land use category is predominantly located directly adjacent to existing city boundaries, or the Mixed Use land use category. Traditional, yet smaller lot, single-family developments are a natural fit within this category, but flexibility in residential format is encouraged. Planned Unit Developments (PUDs), as described in the Zoning and Subdivision Regulations for Leavenworth County should be considered within this land use category as a way to ensure high quality development, innovative and imaginative site planning, and the conservation of natural resources and land.

### Residential (3 Units Per Acre)



The Residential (3 Units per Acre) land use category includes existing and proposed areas for single-family residential uses with a gross maximum density of three units per acre. This category is generally designated in areas either directly outside of current city boundaries, or adjacent to Mixed Residential uses. This higher density residential land use category works to increase development density within the cities' growth areas – effectively minimizing dense development encroachment in areas to be preserved and/or maintained as agriculture and large lot residential. Where appropriate, conservation design is encouraged in order to cluster lots and maintain common open space areas within such developments.

### Residential (2.5-Acre Minimum)



The Residential (2.5-Acre Minimum) land use category includes existing and proposed areas for single-family residential uses with a two-and-a-half-acre minimum lot size. This category is generally designated in areas to the west of Leavenworth, Lansing, and Basehor to permit large lot residential development outside of, but near municipalities. Public sewer and water service will eventually need to reach such areas, but should first be prioritized in the Residential (3 Units per Acre) and Mixed Residential land use categories.

### Residential Estate (5-Acre Minimum)



The Residential Estate (5-Acre Minimum) land use category includes existing and proposed areas for single-family residential uses with a five-acre minimum lot size. This category is generally designated in areas that are not projected to have access to public sewer and water services. Residential Estate development is appropriate in unincorporated areas of the county. Increased densities are encouraged where appropriate.

### Leavenworth County Road 1 Planning Area



Following an in-depth analysis of County Road 1 (CR-1), south of Tonganoxie, the county is considering rezoning the area shown as "Leavenworth County Road 1 Planning Area" on *Figure 4.1* to align with the preferred land use plan in the analysis. The Leavenworth County Road 1 Land Use Analysis studied the existing land development conditions within the six-mile study area located between Tonganoxie's southern limits and K-32.

A wide range of land use development categories are envisioned in this area, from open space and agricultural preserve to high density residential and medium intensity industrial. Land uses are primarily mixed east, northeast, and southeast of the I-70/CR-1 interchange, with open space designated along the entirety of Nine Mile Creek. Medium intensity industrial uses are proposed west of this interchange. South of Cantrell Road, the area is almost exclusively reserved for open space, except for the intersection of CR-1 and Linwood Road, which is slated for commercial. North of the I-70 and CR-1 interchange exhibits much higher density of uses compared to south of the interchange, with a wide range of land uses including commercial, varying residential density developments, and mixed use/mixed use cluster. This Plan supports the land use recommendations and proposed rezoning for the CR-1 planning area.

# Targets

- 1 Establish strong relationships with each county municipality to ensure joint and mutually beneficial current and long-term planning efforts.
- 2 Support new commercial, industrial, residential, and mixed use growth that balances the desire for economic development and a heightened tax base with Leavenworth County's predominantly small town feel and rural heritage.
- 3 Concentrate new residential, commercial, and industrial development in areas where utility infrastructure networks are available or easily extended.
- 4 Ensure residential development within the county meets the needs (including safety) and desires of various county residents and allows residents to age in place.
- 5 Build upon the county's multimodal infrastructure and locational advantages to expand industry and employment opportunities in key areas of the county.
- 6 Preserve the most productive farmland as a source for viable agricultural activities that will enhance the county's economy and continue its rural character.

# Strategies

**Align county zoning and subdivision regulations with the targets and strategies stated in this Plan.** Zoning and subdivision regulations are a critical tool to guide development within counties and cities. Zoning districts and their related regulations must be regularly evaluated by a community to ensure that (1) their desired style of development is possible and that (2) the community's needs are met through the current regulations. It is recommended that county staff undertake a complete review of the Zoning and Subdivision Regulations for Leavenworth County, Kansas, following adoption—and as one of the steps to implement—the comprehensive plan.

While rezoning (change the zoning district) may not be necessary throughout the entire unincorporated county, some of the future land uses illustrated on *Figure 4.1* will be best served and implemented by certain zoning districts. It is recommended that as development and redevelopment take place within the county, county staff members work with applicants to determine the zoning district that best fits the applicant's needs that also aligns with the future land use plan. Additionally, properties can be rezoned outside of a development proposal. If a full-scale rezoning of the county is pursued, existing land uses can be "legal non-conforming" uses that are grandfathered in until such a time that a major improvement proposal comes forward for that property. This discourages reinvestment in uses that do not implement the future land use plan.

**Identify and prioritize commercial and mixed use development along key corridors and at strategic nodes with a high degree of access to major transportation routes.** Leavenworth County's large land area, natural resources, and transportation system afford the opportunity to create a blend of urban and rural environments that provide the template for the county and its principal population and economic centers to adapt to future trends in land use, economics, demographics, and transportation. The county benefits from an extensive highway system and proximity to Kansas City International Airport.

Most new commercial and mixed use development should occur in incorporated areas, as they have a higher density of consumers and possess existing infrastructure that can be built upon. However, commercial and mixed use growth should also develop at several strategic nodes and along major transportation corridors in unincorporated areas, with possible expansion outward over time into corridor-style development.

Recommended commercial and mixed use growth locations include:

- U.S. 24/40 corridor between Basehor and Tonganoxie;
- Intersection of U.S. 24/40 and CR-1; and
- 155th Street between Basehor and Lansing (as a long-term play).

While these commercial areas will likely be relatively low-density, they will be able to provide goods and services to both county residents, regional travelers, and commuters. To complement these more prominent nodes, neighborhood commercial development opportunities will also occur in response to continued new home construction and population growth nearer to the municipalities.

**Focus county investment into unincorporated areas positioned for industrial growth, especially on high access transportation corridors.** The county is well-situated for economic and employment growth and expansion due to its existing multimodal infrastructure and locational advantage. While the county should direct most residential and commercial growth into municipalities and Initial Growth Areas (660-foot buffer around each incorporated city), the county should actively promote industrial development and expansion within targeted unincorporated areas. This may include investing in high quality transportation infrastructure to assist in the movement of goods, as well as coordinating with utility companies and local industry to provide high-quality and reliable infrastructure, including water, energy, and telecommunications to these priority industrial growth areas.

In addition to the four active business parks currently operating in Leavenworth County, prospective future major employment nodes include:

- U.S. 24/40 corridor between Basehor and Tonganoxie;
- CR-1 corridor north and south of I-70; and
- K-7 corridor between Basehor and Lansing.

*Below: Center roadway is U.S. 24/40 corridor between Basehor and Tonganoxie, looking east*



**Establish different categories of special use permits with varying submittal requirements and factors to be considered.** Because the county is primarily zoned as a rural zoning designation, special use permits for industrial uses and many commercial uses in unincorporated areas are all too common. While the special use permit process is inherently worthwhile, as it subjects development proposals to more scrutiny (resulting in a better end product for the development and surrounding properties), the process should be streamlined.

It is recommended that the county create different categories of special uses, dependent on their scale, use, and potential impact on health, safety, and welfare of the surrounding properties. Various models of special use review should be explored. The following types of special uses should be considered:

- **Type 1:** Uses on large tracts of land that are recreational or public/quasi-public in nature, but occasionally can include accessory uses or limited characteristics that can be detrimental to adjoining property if not controlled or constrained.
- **Type 2:** Uses related to communications or utilities, which tend to be out of character to the land uses in the immediate vicinity.
- **Type 3:** Uses with unique characteristics and/or potential to produce nuisance impacts such as light glare, noise, traffic, litter, and more.
- **Type 4:** Uses that are largely industrial operations that frequently generate hazardous or intense nuisance factors. The county has the responsibility to control, mitigate, or eliminate those attributes of such uses as are deemed hazardous or detrimental to the community's health, safety, and welfare.

To ensure sufficient review of special use permit applications and proper regulation, applications must be complete and include much detail. Generally, the more intense the special use, the more application requirements, factors to be considered, and resulting conditions.

**Promote efficient residential densities, types, and values.** From 2019 to 2040, the county's population is forecast to increase by over 19,000 residents. Continued population growth will generate increased demand for retail goods and services, commercial space, and new residential housing units. To meet diverse needs, future housing stock should provide for a variety of for-sale and rental housing options and price ranges. Most of the residential growth should be directed inward, either within city boundaries or within Initial Growth Areas.

As shown in *Figure 4.1*, four residential land use types are identified. To maintain the rural character that draws and keeps many residents within the county, large portions of the county are designated as "Residential Estate (5-Acre Minimum)" and "Residential (2.5-Acre Minimum)." Such land use types secure area for large lot residential uses. As one moves closer to identified development corridors, such as U.S. 24/40, and incorporated areas, residential densities should increase to three units per acre and higher. In this way, rural lifestyles are still encouraged, and higher residential densities are directed to, or closer to, areas where utility infrastructure is available, provision of services are more readily available.

**Explore and adopt appropriate county building codes that primarily protect the health, safety, and welfare of residents.** Building codes address many important concerns, including public health, safety, welfare, and environmental protection. In large part, building codes establish a building's quality, safety and energy performance for years to come. Leavenworth County currently does not have building codes. Given that the county is no longer federally classified as a rural county, the county should ensure a basic level of consistent and safe building practices countywide. Building codes provide many benefits, including assurance of cost efficiency and property value, and reduction of damage from natural disasters.

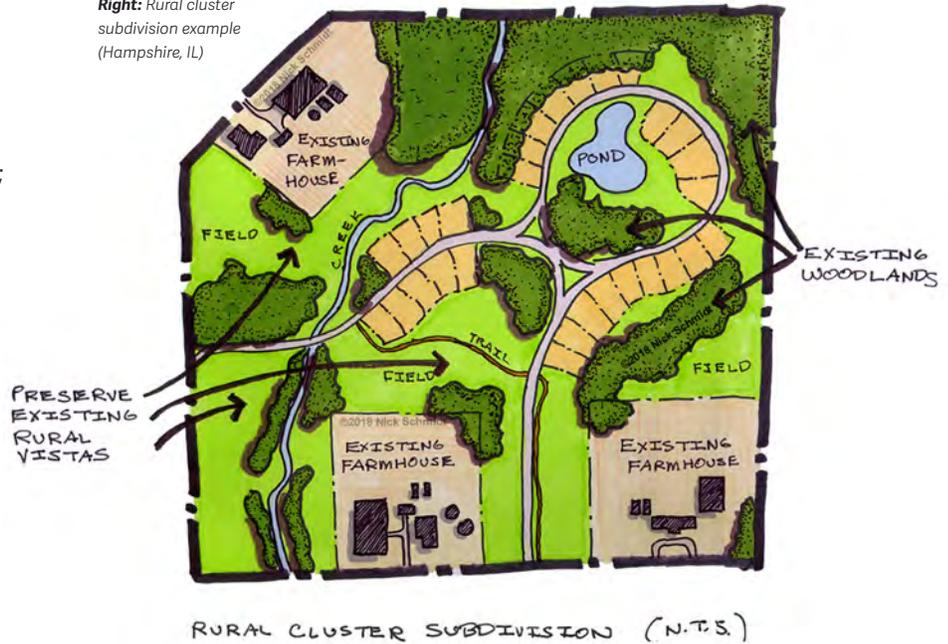
The development and subsequent adoption of a building code should be done in a measured and transparent manner. The county should review existing model codes available from state and federal sources to determine the regulations that best fits the needs of the county. The building code should not regulate aesthetics, but should include code basics, such as fire safety codes and structural standards. The code's development process should include public engagement, gathering feedback from all parts of the unincorporated county. Ultimately, the building code should be adopted by the Board of County Commissioners. Like this Plan, building codes must be revisited often to ensure they are reflective of current best practices.

**Utilize a “land first” or conservation-based approach to planning in unincorporated areas of the county to minimize premature development of agricultural land.** “Land first” refers to a set of principles and strategies designed to create more livable and sustainable communities in which development should first take into consideration the value of natural ecology, features, and functions of land before determining the most appropriate design. Conservation design, which requires the conservation, preservation, and enhancement of natural and environmental resources, is one way to implement a “land first” approach to development. Ultimately, the “land first” approach values healthy ecological functions, while still permitting development.

Leavenworth County has a vital agricultural community and natural beauty that should be protected from irreversible changes that often accompany development. To accomplish this “land first” practice, conservation design should be widely implemented. In areas where extensive environmental resources exist, conservation design is likely the best guiding framework for new development. Conservation design seeks to preserve the integrity of a landscape’s natural functions, protect water resources, enhance community character and connectivity, and provide for greater design flexibility and housing affordability. This framework includes a variety of tools, such as:

- Standards for open space, greenways, and trails;
- Density bonuses;
- Protection of natural areas, including wetlands, treed areas, and steep slopes;
- Clustering of lots and flexible lot standards;
- Efficient road networks;
- Best management practices for infiltrating and filtering stormwater runoff;
- Natural landscaping;
- Tree protection;
- Long-term stewardship of natural areas and open space; and
- Lighting standards that reduce light pollution.

**Right:** Rural cluster subdivision example (Hampshire, IL)



Practically, the county should advance a “land first” initiative. It is recommended that the county adopt a conservation design addendum to their subdivision regulations such that future developments implement these principles, so long as the developments are on individual septic systems and not community systems.

**Utilize the Land Evaluation component of the Land Evaluation and Site Assessment (LESA) system to identify and encourage the protection of the most productive farmland.** The LESA was developed by the U.S. Department of Agriculture (USA) to identify areas with highly productive soils when properly drained and cultivated. Areas are given a land evaluation score between zero and 100, with a greater value representing higher potential productivity. Soils with a score less than 80 require more intensive use of resources, while soils with a score higher than 80 have been identified as primary targets for protection. To enhance and further the county’s agricultural nature, the county should put policies in place to protect highly productive areas from development and guard existing agricultural uses that utilize highly productive soils.

Given Leavenworth County’s agricultural capabilities, the county should endorse and utilize the Land Evaluation (LE) component of the LESA system. The LESA scoring system can be used to determine a site’s appropriateness for development and should be integrated into the county’s zoning and subdivision regulations. This system will be especially important for areas designated as “Rural Agriculture” if a rezoning case/development proposal arises in such an area.

## Section 5

# Transportation and Mobility Plan

Access within the county is limited due to the topography, natural borders (rivers and creeks), and I-70, which hampers residential growth and employment opportunities. Many of the connections that do exist are dirt or gravel roads that cannot support significant traffic volumes. This places a burden on the county from a maintenance perspective, while simultaneously making roadways within potential annexation areas unattractive candidates for city annexation. As the transportation system controls the movement of goods and people throughout the county and beyond, a properly planned and executed transportation plan is essential for providing efficient, convenient, and safe traffic flow. As such, this section outlines targets and strategies that address these challenges head on.

The creation of a long-range transportation plan is a fundamental prerequisite to ensuring future success. Although *Figure 4.1* outlines future commercial, residential, and mixed use developments, if the transportation network leading to these future sites is inadequate, they will be underutilized. Further, if the only means of reaching future activity centers is by car, it drastically reduces the populations that can access the goods and services being provided.

This section presents the Transportation Plan (*Figure 5.1*) and describes the features illustrated. The targets and strategies that follow are high level and specific recommendations Leavenworth County can implement to realize the Transportation Plan.



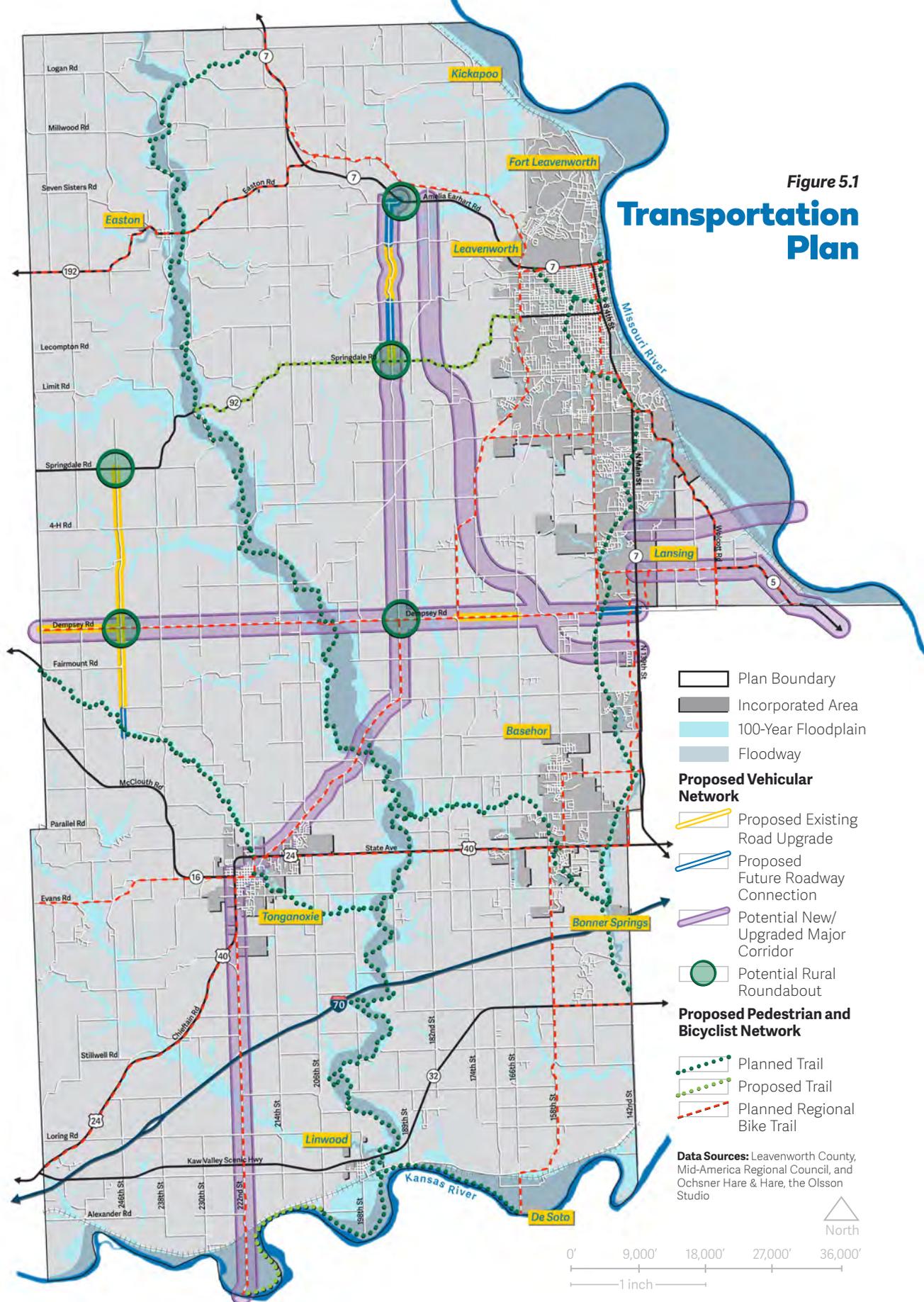
### Targets and Strategies

**Targets** are what the county would like to accomplish; they are the big ideas to move the county forward for the next 10 to 20 years. Targets are more qualitative than quantitative and answer the “what” rather than the “how.”

**Strategies** present an approach or method for reaching or exceeding the targets. Strategies answer the “how” and can be broken down into tasks for individual organizations and/or responsible parties.

Figure 5.1

# Transportation Plan



# Transportation Plan

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This section addresses transportation and mobility challenges within Leavenworth County. *Figure 5.1* emphasizes connectivity in all directions by upgrading existing unpaved roads, strategic intersection improvements, and implementation of regional efforts related to non-vehicular transportation. *Figure 5.1* should be implemented in concert with proposed land use and development patterns (see *Figure 4.1*) to facilitate countywide connections that align with future growth.

The following sections outline the components of *Figure 5.1* that identify important corridors and connections – both vehicular and non-vehicular – within the county. Each feature of the Transportation Plan is described to provide an understanding of what is recommended, the function it serves, and how it would improve mobility in Leavenworth County. As the population grows, it will be with increasing importance that the roadway system is equipped to handle the increased traffic volumes. As most county residents must commute for work, goods, services, and entertainment, the transportation system must be one that is responsive and prepared to ensure an acceptable level of service.

**NOTE:** This is a planning-level document. All proposed roadway connections, roadway upgrades, trails, and bikeways are for illustrative purposes only. Final decisions on future transportation and trail connectivity would be made as additional planning and design progresses.

## Transportation Plan Elements

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### Proposed Existing Road Upgrade

A recurring theme throughout the public engagement process was the need for enhanced mobility throughout the county. Although east to west connectivity was frequently discussed, the need for better north to south transportation routes was expressed at length. In a perfect world, multiple north to south and east to west connections would exist countywide. Realistically, though, strategic areas must be targeted to ensure available funds create the most meaningful impact.

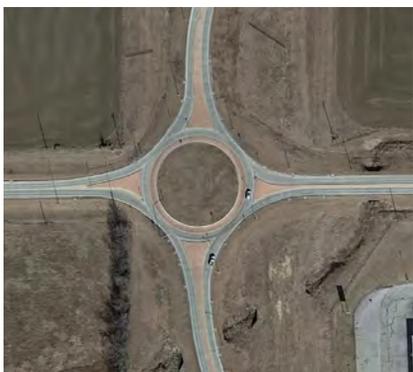
As such, the strategy illustrated in *Figure 5.1* is one that capitalizes on existing, unpaved roads that can be upgraded to provide greater paved connectivity that improves safety, reduces maintenance, and provides a more reliable transportation network. By concentrating efforts on existing infrastructure, construction costs can be reduced while still meeting the identified goal of enhancing connectivity throughout Leavenworth County and the broader Kansas City metropolitan area.

### Proposed Future Roadway Connection

In contrast to the road upgrades illustrated on *Figure 5.1*, certain connections simply do not exist. These sections have been identified and are proposed for brand new roadways that would tie into either an existing roadway, or a roadway proposed for upgrade. Similar to the rationale for the road upgrades, these proposed roadway connections intend to provide consistent transportation corridors in the county.

Each proposed roadway ties into a known major thoroughfare that enhances access. For instance, Tonganoxie Road is a primary north-south connector in Leavenworth County. However, north of Springdale Road, Tonganoxie Road alternates between gravel and dirt, as well as sections where no roadway exists. This represents an ideal opportunity to consistently connect a stretch of road that capitalizes on an existing major thoroughfare that, with improvements to key areas, creates a consistent north to south connection from Highway 24/40 all the way to K-7.

## Potential Rural Roundabouts Location



**Above:** Rural roundabout (Fredonia, KS)

Given the high cost of transportation infrastructure improvements, upgrades, and new construction, a more financially feasible and time-effective option can include intersection improvements and/or rural roundabouts. Both of these options require less time, materials, and funds to construct while still elevating the level of service, improving traffic flow, and enhancing safety.

At this scale, intersection improvements are not identified on *Figure 5.1*. However, they should be considered as a strategy for the future. Intersection improvements can include a variety of strategies, including:

- Improving signal timing, which will be a partnership between the cities, county, and state officials;
- Removing elements that hinder sight distance;
- Making drivers aware that they are approaching an intersection through signage; and
- Improving bicycle and pedestrian facilities at the intersection.

Intersection improvements are a recommended option where upgrading several miles of gravel or dirt roads is simply too costly. Until funds become available or traffic volumes mandate additional road upgrades or connections, identified intersection improvements will strategically upgrade high-traffic areas to enhance countywide access.

Rural roundabouts are another identified solution to enhance access and reduce crashes at intersections while being mindful of cost. Typically, roundabouts are designed to allow drivers to maintain speeds in the range of 15 to 25 miles per hour (mph), which reduces time spent at stop signs and increases visibility of oncoming traffic to avoid incursions. Rural roundabouts are designed to accommodate larger farm equipment to ensure areas identified near agricultural properties are able to navigate the county roadways. Five rural roundabouts are shown in potential locations on *Figure 5.1*; however, more review and study would be required to determine ultimate locations.

## Potential New/Upgraded Major Corridor

Although specific areas for road upgrades and future road construction are illustrated, at the comprehensive plan scale, it is challenging to show exactly where and what type of new roadways should be upgraded or constructed. As such, *Figure 5.1* supplements the identified road upgrades and future road construction areas with potential new/upgraded major corridors. These corridors do not necessarily show exactly how the roadway will be made into a major corridor, but rather show where a major corridor is necessary to enhance the county's mobility.

The potential new/upgraded major corridor along 222nd Street/Tonganoxie Road is a critical north-south connection that, when prioritized as a major corridor, can facilitate connection from the southernmost edge of the county to K-7. To better connect the county east to west and beyond, potential new/upgraded major corridors are shown along Dempsey Road, K-5, as well as just north of K-5 as a potential new connection across the Missouri River. With the proposed road upgrades and proposed future roadway connections along Dempsey Road, this becomes a major east to west corridor that consistently connects vehicles from either edge of the county.

The east to west facilitation provided by the potential new/upgraded major corridors along K-5 and just north of K-5 represent more complex transportation challenges than 222nd Street/Tonganoxie Road and Dempsey Road. Rather, these major corridor options along and across the Missouri River intend to provide options of where new connections could be made upon further study in a dedicated Transportation Master Plan to provide enhanced regional access less dependent on I-70 and K-7.

Although labeled as a potential new/upgraded corridor, the corridor illustrated just east of 222nd Street/Tonganoxie Road corridor represents a slightly different style of connection within Leavenworth County. While the other major corridors identified provide a relatively straight and long-distance connection, this corridor connects a shorter distance and serves a different function as a collector roadway. The route is not as linear and curves along the outer belt of Lansing and Fort Leavenworth, supporting those cities' expansion rather than strictly serving as a county arterial.

## Planned and Proposed Trails

This feature of *Figure 5.1* represents Mid-America Regional Council's (MARC) planned MetroGreen regional greenway system (illustrated as Planned Trail on *Figure 5.1*), a metropolitan trail system that connects urban and rural green corridors throughout seven counties in the Kansas City region. Alongside its goal of trail connectivity and enhancing quality of life, the plan also intends to protect water quality in the region for the next 100 years to conserve and enhance existing natural elements. The MetroGreen system follows streamways and rail corridors to capitalize on existing features, including floodplain lands.

In lieu of proposing a new trail system, the Transportation Plan uses the MetroGreen alignments, with strategic additional trail connections outside of the MetroGreen recommendations that enhance connectivity from a local perspective (illustrated as Proposed Trail on *Figure 5.1*). The proposed trail alignments connect to MetroGreen's planned trails and bike trails to provide more options for Leavenworth County residents to recreate and enjoy nature in their backyard.

## Planned Regional Bike Trail

The planned regional bike trail component is part of the Greater Kansas City Regional Bikeway Plan that plans for a cohesive network of bikeways, connected across city, county, and state boundaries to promote active transportation. The bike trails are found along roadway corridors.

The portion of the bike trails in Leavenworth County are part of a 2,000-mile network of on-road and off-road facilities that spans eight counties in the bi-state Kansas City region. Similar to the rationale of the planned MARC MetroGreen trails, *Figure 5.1* proposes that Leavenworth County fund and implement the bike trails outlined in the Kansas City Regional Bikeway Plan. These bike trails were studied during a dedicated, one-year planning process that focused solely on biking in the Kansas City region. Implementing the planned bike trails will connect Leavenworth County within its own borders and beyond, resulting in transportation alternatives for commuters and recreators alike.

# Targets

- 1 Ensure roadways under current or future county ownership have been designed for long-lasting success.
- 2 Enhance access within Leavenworth County, as well as to the broader region and Kansas City metropolitan area.
- 3 Proactively plan for emerging transportation technologies and modes to ensure Leavenworth County maintains its relevancy as an attractive place for commerce.
- 4 Integrate planning efforts countywide to ensure transportation infrastructure decisions are made holistically.
- 5 Develop and prioritize a countywide bike and trail system to improve connectivity, promote open space preservation, and enhance the county's recreational appeal – both for visitors and residents alike.
- 6 Continue support and funding for existing transit services while monitoring and anticipating future transit needs as population dictates a need for enhanced offerings.

# Strategies

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**Fund, develop, and adopt a Transportation Master Plan to determine appropriate and prioritized connectivity improvements throughout the county.** While *Figure 5.1* represents a transportation plan for Leavenworth County, it is important to understand that a dedicated, in-depth study of transportation is highly recommended. This Plan can only address vehicular and multimodal transportation at a high level. Transportation is a complex and multi-faceted issue, particularly in Leavenworth County where the public has indicated a need for enhanced mobility. Therefore, this topic merits an individualized study that can get into the level of detail that simply is not possible at the comprehensive planning level.

A transportation master plan would evaluate existing conditions, identify infrastructure needs, develop evaluation criteria to prioritize the greatest needs, and create an action plan to implement the recommended infrastructure investments or improvements. Community outreach efforts would be focused entirely on transportation challenges and opportunities to put forth goals and strategies that solely consider transportation. To ensure a transportation master plan is a viable option, funding for the study should be included in the county's upcoming Capital Improvements Program (CIP).

**Develop and adopt updated county road standards according to current best practices, such as those published by the FHWA.** Updating the county's road standards is long overdue. The current standards were last updated in 2003 and do not meet current best practices. As such, it is strongly recommended that Leavenworth County update their current road standards, considering national practices and reviews of peer counties in the vicinity.



**Implement proposed existing road upgrades, proposed future roadway connections, and potential rural roundabouts.** Arguably the greatest challenge facing Leavenworth County from a transportation perspective is the lack of sufficient and consistent connectivity across the county. Throughout the public engagement process, residents indicated the need for enhanced mobility options to ease commute times. Most county residents must use a car to travel to work, school, services, and entertainment, thus making key connections critical to ease transportation woes.

Implementation of the proposed existing road upgrades, proposed future roadways connections, and potential rural roundabouts, as illustrated on *Figure 5.1*, will facilitate improved transportation connectivity along key north- south and east- west corridors. The proposed improvements take advantage of existing infrastructure to maximize resources while enhancing vehicular service within the county. By providing more and better options for vehicular travel, congestion and delays could be reduced as the roads being traveled would be equipped for the necessary level of service. Alongside route enhancements, potential rural roundabout locations are shown to better facilitate mobility at certain intersections. Additionally, rural roundabouts are generally a more cost-effective solution to upgrade and improve an intersection.

The proposed upgrades and connections shown are based on public input and analysis of how mobility could be enhanced to serve users better. These areas for improvement include the following:

- Several sections of Dempsey Road are currently gravel, which are recommended to be upgraded to a paved surface; specifically, from 243rd Street to 259th Street and 175th Street to just west of 159th Street. These paved upgrades alongside a new road connection from 147th Street to K-7 on the east side of the county would result in an additional and consistent east-west connection.
- From Springdale Road to Hollingsworth Road, it is recommended to upgrade from gravel to pavement, and from Hollingsworth Road to the planned trail a new road must be built to offer a north-south route that connects to K-92 on the north and McClouth Road/K-16 on the south.
- 222nd Street/Tonganoxie Road is used as a major thoroughfare; however, it is not designed to function as such. To transform the entirety of this route and make it a viable alternative to traverse from north to south, upgrading from gravel to pavement in certain sections and constructing new roads is recommended from Springdale Road on the south to Amelia Earhart Road/K-7 on the north. Specifically, from Amelia Earhart Road/K-7 to Mount Olivet Road and Shawnee Road to Lecompton Road, new construction would be required as there is no existing roadway. Between Mount Olivet Road and Shawnee Road, as well as Lecompton Road south to Springdale Road, there are existing gravel roads that should be upgraded.

**Further evaluate the potential new/upgraded major corridors.** In addition to the more specifically recommended new and upgraded roadways discussed above, the major corridors indicate areas within the county that should be looked at a more macro-scale to better facilitate a countywide transportation network. The identified corridors are opportunities to create consistent, large-scale east-west and north-south thoroughfares where traffic can travel more quickly and consistently, all the while capitalizing on the routes that currently exist. The corridors, in general, aim to use what already exists within the county to elevate mobility without constructing an entirely new roadway system.

At this scale, recommendations about where major corridors should be are general in nature and represent areas that should be considered for upgrade upon further study. Specifically, these recommendations focus on creating major corridors at the following locations:

- Potential new bridge connection across the Missouri River somewhere north of K-5 to facilitate an additional access point from Main Street to I-435;
- Realign K-5 to follow Dempsey Road before heading north on K-7 to provide better access to I-435 on the south side by removing the “jog” it currently follows through Leavenworth County;
- As previously discussed, utilize key upgrades to transform 222nd Street/Tonganoxie Road from the Kansas River to Amelia Earhart Road/K-7 into a major north-south corridor; and
- Similar to 222nd Street/Tonganoxie Road, take advantage of the proposed improvements along Dempsey Road to create an east-west connection that alleviates pressure from existing routes while adding to the network.

**Capitalize on the access to rail and water transport along the southern and eastern edges of the county to facilitate economic development.** Leavenworth County is uniquely situated, bordered by the Missouri and Kansas Rivers, as well as the Union Pacific Railroad, and BNSF Railroad. Although the Transportation Plan concentrates on the roadway network, other modes of transportation must not be forgotten. While the transportation system facilitates economic development by trucking freight, the railroads and waterways contribute to the economy, as well. Leavenworth County offers plenty of business opportunities in a wide variety of industries, which makes it that much more important to capitalize on the entire transportation system.

According to the Association of American Railroads, in 2017 alone, America's major freight railroads supported 1.1 million jobs, nearly \$220 billion in output, and \$71 billion in wages across the U.S. economy. Although a nationwide statistic, this level of productivity trickles into local economies, especially those with as great of access as Leavenworth County enjoys.

Regarding water movements, the Leavenworth County Port Authority (LCPA) is a quasi-governmental agency that was originally established in 1969 to provide guidance and direction for the development of the port area along the Missouri and Kansas Rivers. As economic development opportunities in the county have trended away from barge and rail importance, the LCPA has adapted to serve additional economic development needs. Now, the LCPA's mission is to assist in the development of economic opportunities through the planning, construction, and marketing of industrial properties and facilities in Leavenworth County.

**Accommodate future transportation technologies, including the impacts of autonomous vehicles (AVs).** As technology progresses, integration of new modes, such as connected vehicles (meaning vehicles that communicate with nearby vehicles and infrastructure) and automated vehicles (meaning vehicles that operate with varying degrees of autonomy with varying degrees of driver dependence) should be considered as connections are facilitated. Although AVs, including trucks, may seem far off, this emerging technology is already on America's roadways and the plans to expand this type of transportation are aggressive.

Integration of AV technology into the transportation system could increase productivity, facilitate freight movements more efficiently, and create new employment opportunities. Additionally, this technology could increase access to transportation for traditionally underserved communities, particularly the elderly and people with disabilities. A critical component of the future of AV technology is maintaining good infrastructure, including pavement conditions, signing, and pavement marking, such that the connected and AVs can more reliably function alongside existing traffic.



Autonomous semi-trailer (CNBC)



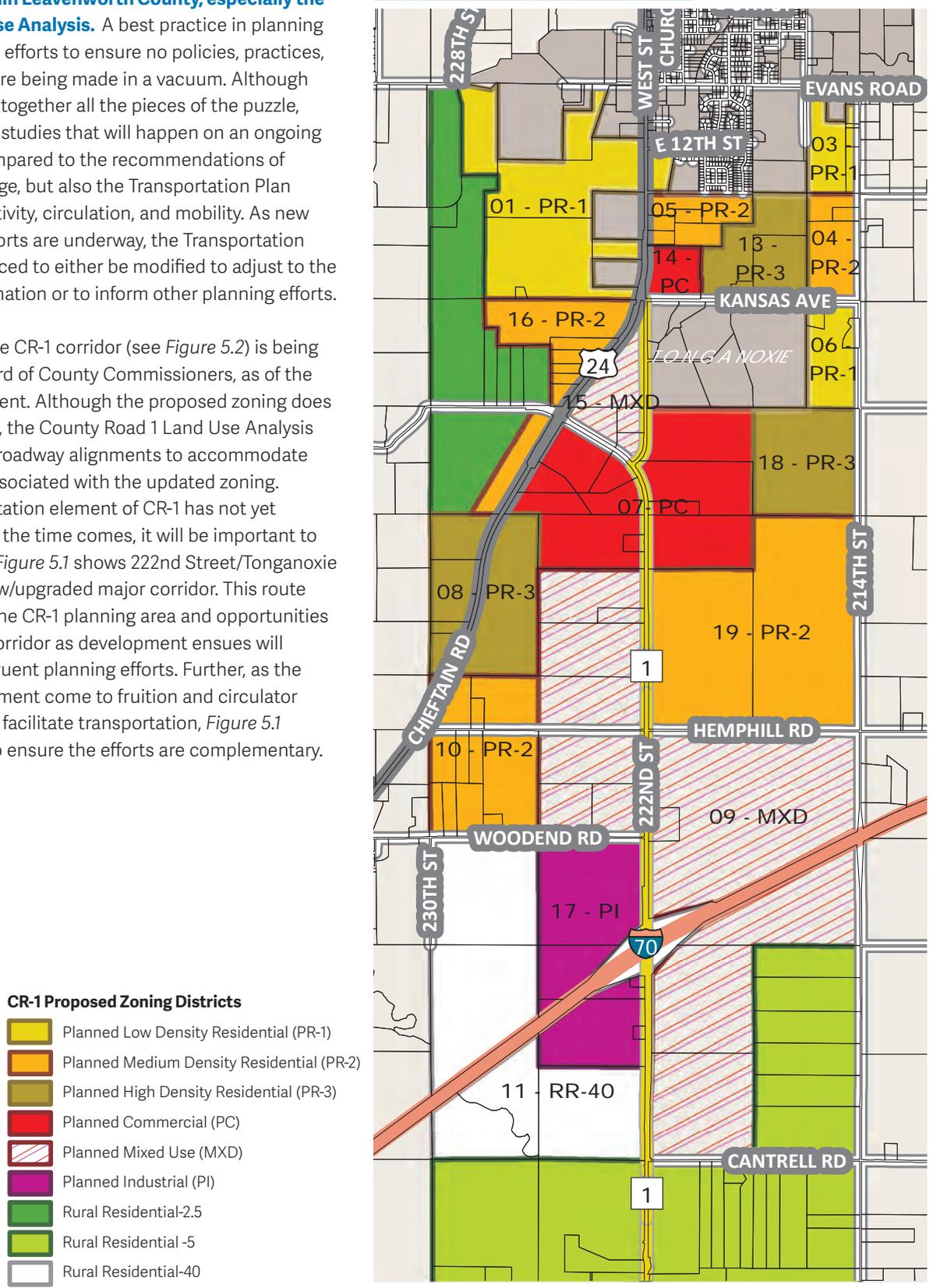
Autonomous car (Gear Patrol)



**Coordinate transportation planning efforts with other planning projects within Leavenworth County, especially the County Road 1 Land Use Analysis.** A best practice in planning is always to coordinate efforts to ensure no policies, practices, or recommendations are being made in a vacuum. Although this Plan aims to bring together all the pieces of the puzzle, there are other topical studies that will happen on an ongoing basis that must be compared to the recommendations of not only the Plan at large, but also the Transportation Plan as it relates to connectivity, circulation, and mobility. As new studies or planning efforts are underway, the Transportation Plan should be referenced to either be modified to adjust to the most up-to-date information or to inform other planning efforts.

Proposed zoning for the CR-1 corridor (see Figure 5.2) is being considered by the Board of County Commissioners, as of the creation of this document. Although the proposed zoning does not address new roads, the County Road 1 Land Use Analysis did indicate proposed roadway alignments to accommodate future development associated with the updated zoning. Although the transportation element of CR-1 has not yet been formalized, when the time comes, it will be important to consider both efforts. Figure 5.1 shows 222nd Street/Tonganoxie Road as a potential new/upgraded major corridor. This route runs directly through the CR-1 planning area and opportunities to improve upon the corridor as development ensues will capitalize on the congruent planning efforts. Further, as the land uses and development come to fruition and circulator roads are necessary to facilitate transportation, Figure 5.1 should be consulted to ensure the efforts are complementary.

**Figure 5.2 CR-1 Proposed Zoning**



- CR-1 Proposed Zoning Districts**
- Planned Low Density Residential (PR-1)
  - Planned Medium Density Residential (PR-2)
  - Planned High Density Residential (PR-3)
  - Planned Commercial (PC)
  - Planned Mixed Use (MXD)
  - Planned Industrial (PI)
  - Rural Residential-2.5
  - Rural Residential -5
  - Rural Residential-40

(Leavenworth County)



### **Implement the Kansas City Regional Bike Plan planned regional bike trails.**

As previously stated, the planned regional bike trail component shown on the Transportation Plan is part of a regional effort to create a cohesive network of bikeways connected across city, county, and state borders. Concentrated along roadway corridors, the planned regional bike trails are strategically dispersed throughout Leavenworth County in a pattern intended to make the most ideal connections to other municipalities. These regional trails thus offer the greatest opportunity for bicycle commuting to and from destinations as they truly facilitate long-distance, meaningful connections to activity centers. Mainly, the bike trails aim to do the following:

- Maximize connections between population and employment centers along multijurisdictional corridors;
- Connect the regional system to national and statewide trail systems; and,
- Provide connections across the region between urban and city centers, as well as smaller communities.

Although there is an existing bike community within Leavenworth County currently, implementation of this network would create a dedicated, official, and consistent system that not only serves as a recreational opportunity for residents and visitors alike, but as a viable transportation method that serves as an alternate to driving.

It is important to note that build out of this system could span many decades and is dependent upon the effort and willingness of local entities, like Leavenworth County and its cities, to implement and finance. MARC provides guidance and fiscal support when possible; however, as seen in *Figure 5.3*, most of the bikeways within Leavenworth County are listed as a low priority level. **It is critical that bike users of all levels and interest are considered in trails planning - from the "interested, but concerned" with a low stress tolerance with biking conditions to the "highly confident" with a high street tolerance for biking conditions.**

As is visible on *Figure 5.3*, the highest priority bikeways start in the center of downtown Kansas City where there is much existing infrastructure as well as high activity, and then work their way out into the other cities and counties. This indicates a greater need for Leavenworth County to locally support the regional bikeway system such that the county is well connected to the parts of the system that are being prioritized.

The plan includes planning level cost estimates per-mile cost of bikeway to help entities with planning. As is the case with all planning level estimates, the prices provided are approximations with many factors. As such, the facility estimated cost per mile varies widely, ranging from \$2,900 for the most basic improvement of adding signage to an existing route, to over \$470,000 for more robust improvements, including construction and/or road widening. However, there are ways to reduce these costs. One example would be to adopt a policy that every time a street is constructed or reconstructed, bicycle accommodations should be implemented.

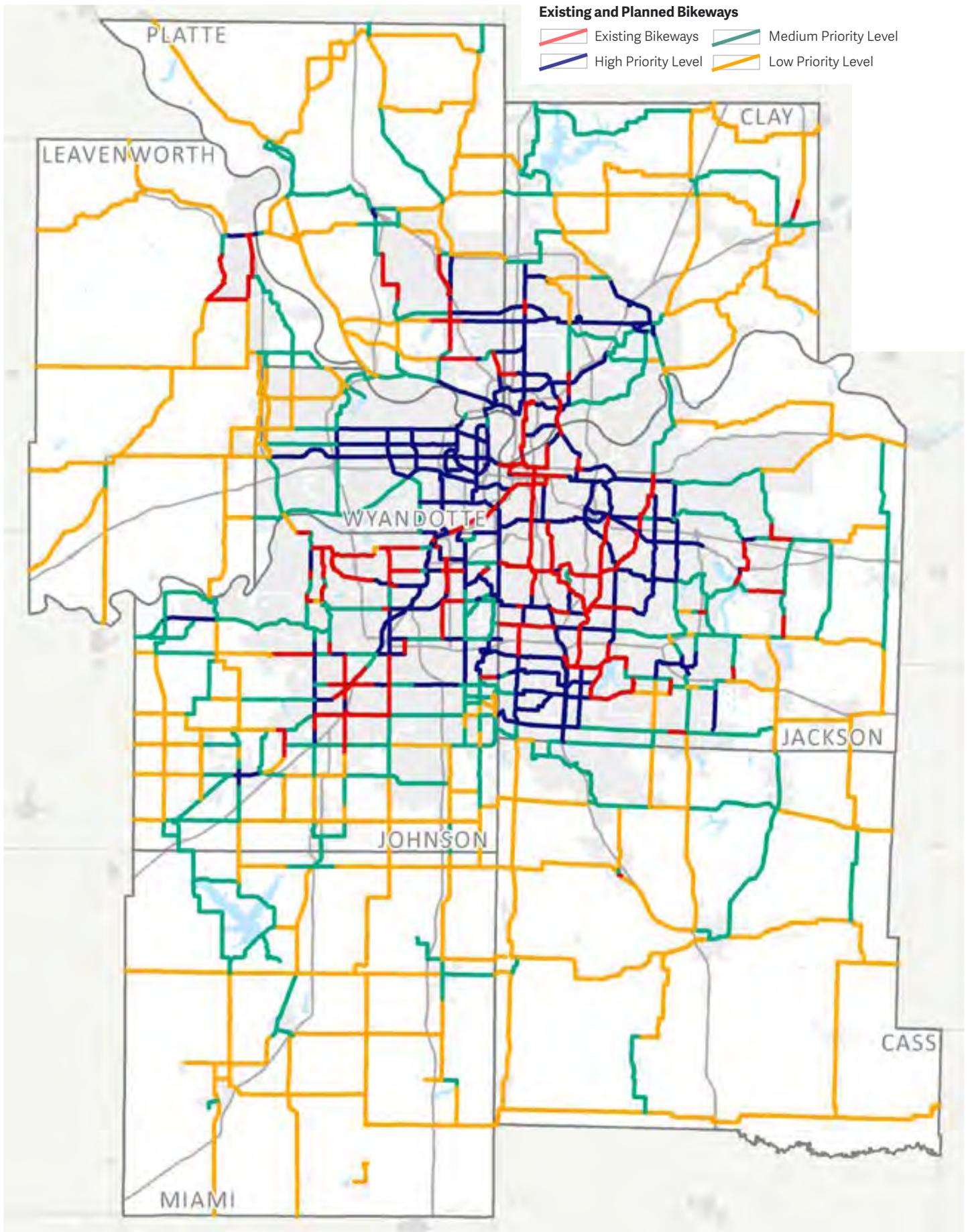
Further, if the street project includes the necessary width for the bikeway, such as a gravel shoulder for the paving of a bike lane, the true marginal cost for the bikeway is significantly less. The most important thing to remember, though, is that the funding and subsequent implementation of these bikeways within Leavenworth County capitalize on a much larger system that makes the impact of the local routes far more meaningful than if they had been built as a single system. This integration and cooperative effort across municipal boundaries will create an alternative transportation system that spans the Kansas City metropolitan area.



Trails have a positive impact on communities, including the following quantitative and qualitative benefits:

- Increase physical and social connectivity, encouraging healthy living and reducing medical costs;
- Provide a safe means of travel for residents;
- Add an amenity that influence the places people choose to live, as well as support the increase of property values;
- Increase tourism by drawing users from outside the community inside, which increase commerce and supports jobs at local businesses; and
- Influence business location and relocation decisions; companies often choose to locate where a high level of amenities is available to employees as a means of attracting and retaining top level workers.

**Figure 5.3 Regional Bikeway Priorities**



Above: Prioritized bikeways throughout the Kansas City metropolitan region (Kansas City Regional Bike Plan [2015])

**Implement the MetroGreen Regional Greenway System planned trails and proposed trails to enhance the countywide trail system.** A 2019 study, "Investing in Our Future," estimated the human health, environmental, and economic benefits of completing the East Coast Greenway, which passes through Philadelphia, Pennsylvania. The study found that the benefits of the trail amount to 10 times the costs of completing it, infusing approximately three billion dollars annually just for the sections local to Philadelphia. Although Philadelphia as a municipality is not a good comparison to Leavenworth County, the data still stands: the benefits of trails are considerable. These outdoor recreation systems bring together community members, connect people to the rural heritage and natural scenery of the county, provide appreciation for environmental resources, and promote health and wellbeing, all of which contribute to a higher quality of life.

The MetroGreen Regional Greenway System offers a gateway to creating a countywide network of trails along streamway corridors and abandoned rail lines to realize these benefits for Leavenworth County residents and visitors. Implementing the MetroGreen system alongside the additional proposed trail recommendations featured on the Transportation Plan will not only create a physical trail system, but also support the biological diversity of streams, rivers, and lakes through:

- Specifying waterways to be used for recreational purposes;
- Offering watershed strategies for flood control and protecting natural stream corridors;
- Recommending local adoption of streamside buffer zones; and,
- Restoring native habitat for indigenous plants and animals.

In this way, implementation of the trails plays a role in conservation and restoration, too, by physically protecting riparian corridors while providing a means for people to appreciate and understand the importance of preserving these precious resources. The trail system is intentionally designed to connect with the bikeways, creating a multimodal network not only within Leavenworth County, but within the greater Kansas City Metropolitan area. As opportunities present themselves for the county to set aside funding for this system, it is recommended the trails system be implemented to facilitate this region-wide network.

**Align future transit decisions with development patterns while maintaining existing service to senior populations.** A recurring theme throughout the public engagement process when discussing transit included much praise for the existing Leavenworth County Council on Aging service. This service provides transportation to those ages 60 and above, meal delivery, and a host of other personal services to ensure seniors receive the care and transportation they need and want. The public indicated that additional transit services are not needed or desired at this time as the Leavenworth County Council on Aging is meeting current demand for transit. However, as *Figure 4.1* is realized, there may be a need for enhanced offerings to ensure there are multiple options to reach destinations.

At the time of this Plan's writing, transit offerings are meeting transit demand. To ensure that Leavenworth County residents maintain this optimal mobility into the future, transit should be evaluated on an ongoing basis. As developments are constructed, particularly those with employment centers, retail services, and entertainment, it will be important to look at the transportation network holistically. A diverse transportation system allows residents to age in place, access jobs, goods, and services, all of which contribute to a healthy economy.



## Section 6

# Community Facilities and Infrastructure Plan

Leavenworth County has a well-established network of community facilities and infrastructure that support everyday life. These networks are focused on the areas surrounding the cities and exist only sporadically throughout the more rural extents of the county. Substantial growth in unincorporated areas of the county may place a burden on the county as the need for infrastructure and services expands.

Moving forward, Leavenworth County must plan for future development and growth by establishing a new direction for the expansion of infrastructure to meet the demands and pressures that come with an increased population. This section provides targets and strategies that help achieve measured and sustainable growth within the county that also honor the county's rural heritage.

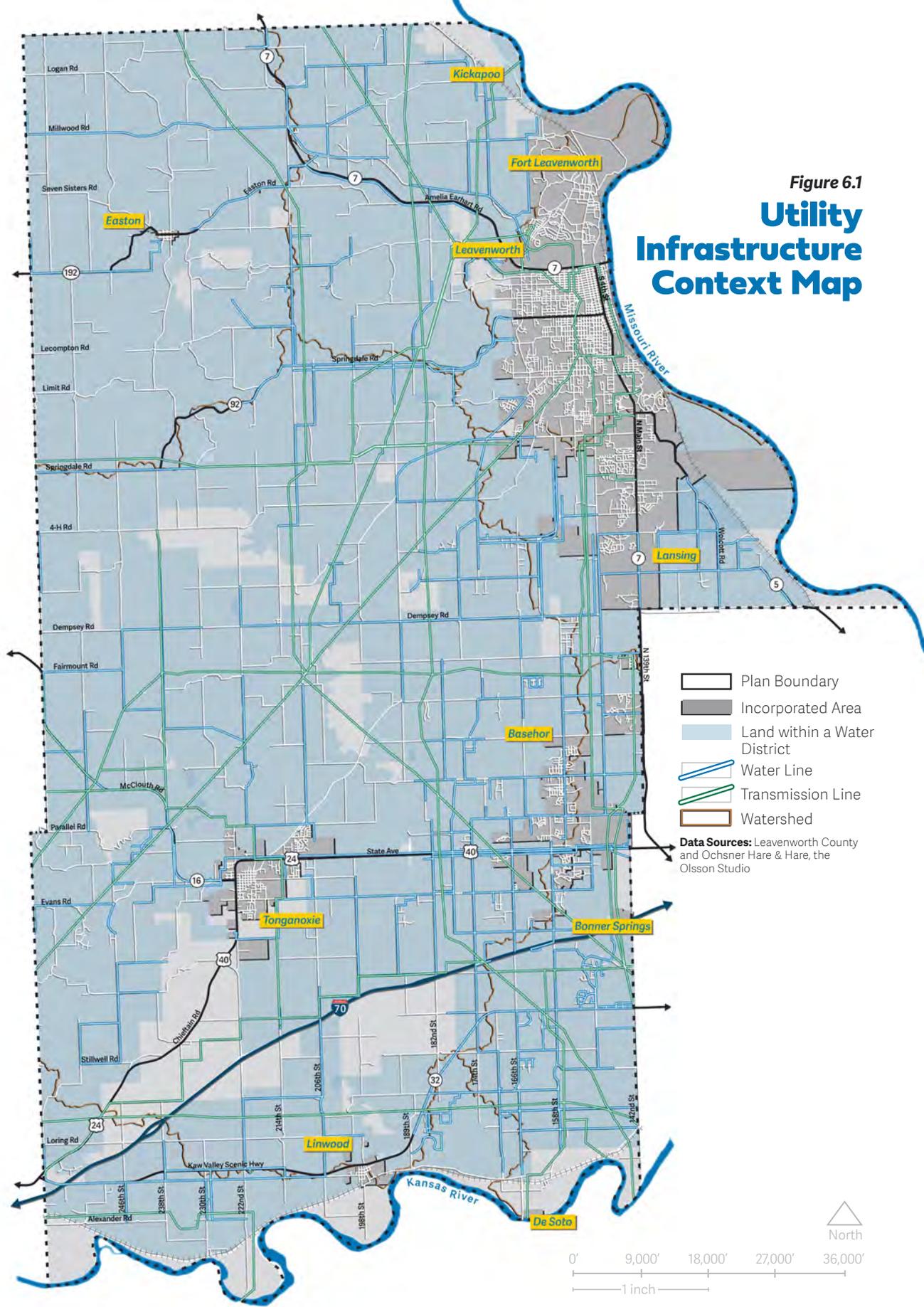


### Targets and Strategies

**Targets** are what the county would like to accomplish; they are the big ideas to move the county forward for the next 10 to 20 years. Targets are more qualitative than quantitative and answer the “what” rather than the “how.”

**Strategies** present an approach or method for reaching or exceeding the targets. Strategies answer the “how” and can be broken down into tasks for individual organizations and/or responsible parties.

**Figure 6.1**  
**Utility Infrastructure Context Map**



# Utility Infrastructure Context Map

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Figure 6.1 provides a picture of the existing utilities and their context within the county, including areas serviced by a water district, water lines, transmission lines, and watersheds. As will be discussed in the strategies, a dedicated utility master plan is necessary to adequately address the provision of utility services at this scale. Therefore, Figure 6.1 provides a countywide look at what presently exists to provide context in this section.

## Targets

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- 1** Provide utility infrastructure in an efficient and effective manner that meets current and future needs and can facilitate and adapt to county growth.
- 2** Continue to plan for and provide public safety facilities and services that protect the health, livelihood, and property of current and future county residents.
- 3** Increase general support for and all residents' access to healthcare systems to encourage greater health and well-being throughout all stages of life.
- 4** Increase the diversity of the county's energy portfolio to reduce reliance on fossil fuels.

# Strategies

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**Develop a utility master plan that fully assesses the county’s utility infrastructure including current conditions, expected lifespan, reliability, and expansion strategies that align with projected growth.** Leavenworth County must fully assess the current state and future growth of utility services available to county residents through a utility master planning process. Though this Plan provides a high-level review of Leavenworth County’s utility services, a utility master plan would dive deep into water, wastewater, power, natural gas, and telecommunications infrastructure to assess strengths, weaknesses, opportunities, and threats to the systems, establish the needs as future development occurs, and recommend a course of action to ensure that utility infrastructure can meet current and projected demand. The county’s Geographic Information System must include up-to-date utility data to understand where existing utilities are.

Of particular importance in a utility master plan is a deep dive into the future of wastewater treatment countywide. Formal wastewater treatment systems are currently found in or near municipalities. High-density rural residential developments are serviced by central treatment options that are operated and maintained by the individual subdivision. As the county grows and develops, wastewater must be studied further, with three leading options:

1. Coordinate and plan with all wastewater systems to develop a long-range plan to provide needed collection/pumping/treatment systems for development outside of current proposed municipal growth areas (e.g., specific, targeted improvements);
2. Develop a countywide wastewater system that absorbs all existing collection/treatment systems (e.g., countywide improvements); or,
3. Develop area-specific wastewater systems to address future sewer needs (e.g., drainage basins).

In addition to the facilitation of the actual utility master plan, a Cost of Services study should be conducted alongside the effort. A Cost of Services study would review the cost to the county of providing utility services to proposed land uses within the county (see *Figure 4.1*). Understanding the cost associated with the provision of utility infrastructure based on the type of development helps shape the conversation and decision-making about how to meet the demands of a development while ensuring the county is set up for long-term success.

Lastly, coordination between the county, municipalities, and utility companies should take place on an ongoing basis to ensure utility infrastructure is properly maintained and residents are receiving quality service.

**Study and enhance public safety services to ensure all life and property within Leavenworth County is adequately protected.**

Public safety is an essential portion of the services provided by the county and includes law enforcement, fire, and emergency medical services. As such, the county should complete a public safety master plan to ensure the residents of the county are adequately protected by these essential services.

A public safety master plan should analyze the following:

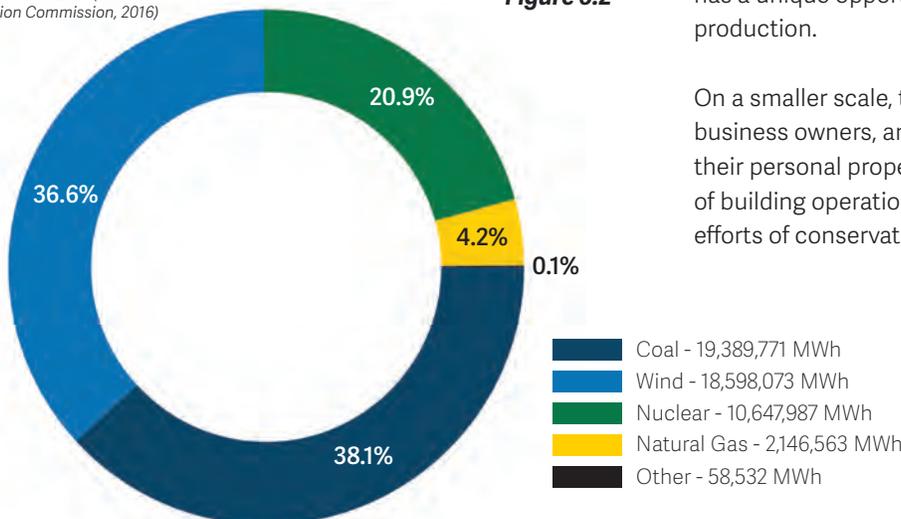
- Current demand for law enforcement, fire, and emergency medical services, including calls for service and other workload demands;
- Staff resources in all departments (how they are deployed and utilized to understand personnel gaps);
- Current operations and opportunities analysis to improve the delivery of services;
- Current management systems and approach to overseeing and controlling the operations of public safety departments; and,
- Feasibility of alternative approaches to providing police, fire, and emergency medical services.

A planning effort of this type allows the county to evaluate where its provision of services is adequately covering residents and identify gaps in service. With a study of this type, the county will be better equipped to prepare for and respond to natural disasters and emergency situations. To address these occurrences, it is recommended that – in addition to a public safety master plan – the county actively rely upon and utilize the Kansas Homeland Security Region L Hazard Mitigation Plan (2019-2024) as a best practice in emergency management. Region L includes Johnson, Leavenworth, and Wyandotte counties, but the plan addresses each jurisdiction individually, assessing risk and providing mitigation strategies and ways to implement and maintain the plan.

**Kansas Electric Generation Sources by Total Megawatt Hours**

State historical tables (Kansas Corporation Commission, 2016)

Figure 6.2



**Be open to opportunities for renewable energy to illustrate Leavenworth County’s commitment to the environment while reducing reliance on non-renewable resources.**

According to the Kansas Corporation Commission, fossil fuels currently generate most of the electricity produced in Kansas; however, the use of renewable energy - including wind and solar - continues to expand. In fact, the Renewable Energy Standards Act (RESA) establishes a statewide renewable energy standard for Kansas, which is a voluntary goal that 20 percent of a utility’s peak demand within the state be generated from renewable energy resources by the year 2020. Although not required, RESA indicates a statewide push toward the integration of renewable resources into energy portfolios.

There are many opportunities for incorporating renewable energy into the county as a viable alternative to traditional power source, including:

- Wind;
- Solar thermal sources;
- Photovoltaic cells and panels;
- Dedicated crops grown for energy production;
- Cellulosic agricultural residues;
- Plant residues;
- Methane from landfills or wastewater treatment;
- Clean and untreated wood products, such as pallets;
- Existing and new hydropower;
- Fuel cells using hydrogen produced by one of the above-named renewable energy resources; and,
- Energy storage that is connected to any renewable generation by means of energy storage equipment including, but not limited to, batteries, fly wheels, compressed air storage and pumped hydro.

With the abundant agricultural land and open space in Leavenworth County, renewable energy is more feasible than in other, more developed counties. For example, wind turbines have a relatively low impact on farmland productivity, soil health, or grazing animals while still offering ample space to accommodate the equipment. Further, Leavenworth County has a unique opportunity to grow crops strictly for energy production.

On a smaller scale, the county could encourage homeowners, business owners, and developers to use renewable energy on their personal properties and/or projects. Encouraging this type of building operation and design supports the recommended efforts of conservation site design previously discussed.

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# Section 7

# Implementation

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This section of the Plan sets forth specific actions that various departments, bodies, and organizations should take to move the Plan's recommendations forward. Such actions are organized by topic and strategy, and then evaluated by multiple considerations. Short-, mid-, and long-term processes, policies, plans, and programs that advance one or more targets of the Plan are assessed. This section should be used as a decision-making tool as county staff, vested organizations, and elected officials consider land use-, development-, and infrastructure-related issues.

# Overview

Although planning is a fluid and continuous process, adoption of this Plan begins a long and collaborative journey of implementing the recommendations. This comprehensive plan provides a road map for growth, development, and connectivity that has been vetted by the community and validated by county staff members and county officials. Of all the work that occurred to make this Plan a reality, this section is perhaps the most important as it demonstrates the “how.” With the research and analysis that occurred, the community engagement that took place, and interactive work sessions with county staff members and elected officials, now it is time to put the Plan to work. Adoption of this Plan is the first step into the future of putting the recommendations into action to realize the vision.

Integral to each implementation step are the following overarching strategies:



## Day-to-Day Use

The Plan should be used daily, as the official policy guide for land use, development, transportation.



## Cooperation and Coordination

Open lines of communication with each municipality and the public must be maintained. Coordinating strategies, projects, and policies are critical to proactively execute the Plan.



## Start with Policy

Establishing policy creates the essential framework for future implementation of the Plan. Oftentimes, policy changes can be made quickly and for a minimal cost.



## Be Bold, Visible, and Conversational

Early “wins” and visible projects help garner the endorsement of the public. Spread the word to market and celebrate early successes through multiple outlets to gain support and momentum for long-term ventures.



## Identify Plan Champions

Those persons involved in the planning process must continue to champion the Plan over time to maximize success. Continue communications with the SCAC.

# Action Plan

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This subsection utilizes several implementation matrices to clearly lay out the next steps that will move the Plan forward. One implementation matrix outlines holistic measures that should be considered across all recommendations. For instance, communicating the Plan’s recommendations to the public and municipalities is an overarching implementation measure that stretches across all targets and strategies.

In addition, an implementation matrix is provided for different topics. Each of these respective matrices will have specific tasks that relate to that topic. Although there is inherent overlap, these measures will be most specifically related to the topic at hand.

The implementation matrices are broken down by strategies and tasks. Every strategy is analyzed by identifying its “owner;” other participants; time frame for completion; overall impact to safety, infrastructure, quality of life, and economic development; and barriers to implementation. Each strategy is broken down into actionable tasks. Tasks are analyzed by identifying its category (process, policy, program, or plan); “owner;” other participants; and cost impact.

The purpose of providing this level of detail is to ensure each strategy is viewed through the lens of political, economic, and community reality, but also properly weighed against the widespread benefits. The definitions of each analysis topic are provided as follows.

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## Category

Each task can be categorized as a process, policy, plan, or program.

- **Process:** Tasks that set forth actions for (primarily) county planning department staff members to continue throughout the life of the Plan
- **Policy:** Tasks that can be achieved by making and implementing county policy changes
- **Plan:** Tasks that are centered on the need for additional study, and therefore recommend the development of a separate plan
- **Program:** Tasks that describe a set of related measures or activities with a long-term aim and a set schedule and plan

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## Strategy/Task Owner and Participants

Although the entire public should feel an investment in the Plan’s advancement, elected officials, county staff members, and certain organizations have a vested responsibility when it comes to Plan implementation. Both strategy/task owners and strategy/task participants are responsible to ensure the Plan does not sit idle.

- **Strategy/Task Owner:** Those that are charged with leading implementation of the specific strategy and/or task; shown in **BOLD** text
- **Strategy/Task Participants:** Those that are also involved in the implementation of the action item and provide support to the strategy/task owner

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## Time Frame

While some strategies/tasks should be started immediately and/or continued over time to continue building the Plan’s momentum, other strategies/tasks should be planned for and implemented within the next one to five years.

- **Immediately:** (0-1 year) Ease of implementation, directly advances other strategies/tasks, and/or addresses critical issues
- **Continuous:** (Ongoing over Plan lifetime) Necessary strategies/tasks to sustain the Plan
- **Short-Term:** (1-5 years) With appropriate planning, can be implemented within this time frame

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## Overall Impact To

Four categories of impact were considered for the recommended strategies. Each impact category is rated either low, medium, or high. The categories are as follows:

- **Enhanced Safety:** Enhances the safety of the county's transportation system, structures, and operations
- **Resilient and Supportive Infrastructure:** Provides for a resilient and efficient transportation and utility physical infrastructure system that will serve county residents and county growth now and into the future
- **Improved Quality of Life:** Improves county residents' health and diversity of choices (in entertainment, living, shopping, dining, recreation, etc.)
- **Sustained Economic Growth:** Increases potential and sustainable economic growth through development, business recruitment and/or retention, and resident and visitor appeal

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## Barriers to Implementation

Three categories of barriers to implementation were considered for the recommended strategies. Each barrier category is rated either low, medium, or high. The categories are as follows:

- **Necessary Amount of Political Will:** If a task requires a low amount of political will, the task's barriers to implementation decrease, as little convincing, marketing, etc. is necessary to gain the public's and elected official's support. If a task requires a high amount of political will, the task's barriers to implementation increase, as effort must be spent meeting with elected officials, gathering community input, etc.
- **Number of Involved Parties:** If a task requires a low number of parties (people, bodies, departments, and organizations) to be involved, the task's barriers to implementation decrease, as little coordination between groups is necessary. If a task requires a high number of parties to be involved, the task's barriers to implementation increase, as much coordination between groups is necessary.
- **Cost Impact:** If a task has a low cost impact, the task requires limited outside funding requirements and/or a limited public dollars, which decreases the task's barriers to implementation. If a task has a high cost impact, the task requires heightened levels of outside funding and/or public dollars, which increases the task's barriers to implementation. Note that cost impact does not account for private investment costs.

# Holistic Implementation Measures

This implementation matrix, *Table 7.1*, includes items that comprehensively address all recommendations of the Plan. These items set the stage for the advancement of topical implementation measures. Additionally, items listed in *Table 7.1* ensure the Plan’s sustainability as time goes on as they provide the framework necessary for the topical implementation measures to be successful.

**Table 7.1**

Holistic Implementation Measures Matrix									
Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 1: ADOPT THE UPDATED COMPREHENSIVE PLAN</b>	<b>Planning &amp; Zoning Dep’t Commissioners</b>	<b>Immediately</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Low</b>
<i>Strategy 1 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Post final draft Plan to the county website prior to Planning Commission and County Commission adoption hearings			Process	Planning & Zoning Dep’t, Commissioners			Immediately	Low	
Determine when and how the Leavenworth County Planning and Zoning Department will utilize the Plan during the development review process and communicate to Planning Commission and County Commission			Process	Planning & Zoning Dep’t, Commissioners			Immediately	Low	
Present the Plan to the Planning Commission for recommendation of adoption and to the County Commission for adoption			Policy	Planning & Zoning Dep’t, Commissioners			Immediately	Low	
<b>STRATEGY 2: AMEND RELEVANT REGULATIONS AND PLANS</b>	<b>Planning &amp; Zoning Dep’t County Attorney, Public Works Dep’t, Commissioners</b>	<b>Immediately</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>
<i>Strategy 2 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Conduct a thorough review of the existing zoning and subdivision regulations and compile a comprehensive list of changes (with exact policy text) necessary to align county zoning and subdivision regulations with the intent of the Plan			Process	Planning & Zoning Dep’t, Commissioners			Immediately	Low	
Conduct a thorough review of the existing plans, such as the U.S. 24/40 Corridor Study, and compile a comprehensive list of changes (with exact policy text) necessary to align the plans with the intent of the Plan			Process	Planning & Zoning Dep’t, Public Works Dep’t, Commissioners			Immediately	Low	
Communicate changes with county residents through the Planning and Zoning Department’s webpage on the county website			Process	Planning & Zoning Dep’t, Commissioners			Immediately	Low	
Present proposed plan amendments to the Planning Commission for recommendation of approval and to the County Commission for approval			Policy	Planning & Zoning Dep’t, Commissioners			Immediately	Low	

Table 7.1

**Holistic Implementation Measures Matrix (Continued)**

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 3: USE THE PLAN ON A DAY-TO-DAY BASIS</b>	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Commissioners	<b>Continuous</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>
<i>Strategy 3 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>		<i>Time Frame</i>	<i>Cost Impact</i>		
Evaluate all improvement and development proposals within the county by the Plan's targets and strategies to assess whether the proposal aligns completely, partially aligns, or does not align with the Plan			Process	<b>Planning &amp; Zoning Dep't,</b> Commissioners		Continuous	Low		
Assist the Planning Commission and County Commission in the day-to-day administration, interpretation, and application of the Plan			Process	<b>Planning &amp; Zoning Dep't,</b> Commissioners		Continuous	Low		
<b>STRATEGY 4: REVIEW THE PLAN PERIODICALLY AND STRATEGICALLY; PREPARE AN ANNUAL PROGRESS REPORT</b>	<b>Planning &amp; Zoning Dep't,</b> Leavenworth County Development Corporation, Public Works Dep't, Commissioners	<b>Continuous</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>
<i>Strategy 4 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>		<i>Time Frame</i>	<i>Cost Impact</i>		
Maintain a list of current possible amendments, issues, or needs that may be a subject of change, addition, or deletion from the Plan			Process	<b>Planning &amp; Zoning Dep't</b>		Continuous	Low		
Monitor demographic and market data as it becomes available to alter land use-specific demand projections			Process	<b>Planning &amp; Zoning Dep't,</b> Leavenworth County Development Corporation		Continuous	Low		
Prepare an annual progress report and presentation to present to the Planning Commission and County Commission that describes the list of successes and possible amendments, issues, or needs that may be subjects of change, addition, or deletion from the Plan			Process	<b>Planning &amp; Zoning Dep't,</b> Commissioners		Continuous	Low		
Conduct an internal update of the Plan every three to five years; dovetail this review with the preparation of the county budget and capital improvements program			Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Commissioners		Continuous	Low		

**Holistic Implementation Measures Matrix (Continued)**

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 5: EDUCATE ELECTED OFFICIALS, COUNTY DEPARTMENTS, LOCAL MUNICIPALITIES, AND THE PUBLIC</b>	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, County Administrator, Municipalities, Commissioners	<b>Continuous</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>

<i>Strategy 5 Tasks</i>	<i>Category</i>	<i>Task Owner and Participants</i>	<i>Time Frame</i>	<i>Cost Impact</i>
Conduct a work session with Planning Commission and County Commission to educate them on the findings and recommendations of the Plan as leadership changes; prepare a key takeaways document for easy reference after the presentation	Process	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Commissioners	Continuous	Low
Meet with relevant department heads and local municipal leaders to explain the findings and recommendations of the Plan; prepare a succinct presentation and provide a copy of it to the department heads and local municipal leaders	Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, County Administrator, Municipalities, Commissioners	Immediately ( <i>and as leadership changes</i> )	Low
Make copies of the Plan available online for free and provide hard copies at the County Courthouse for purchase	Process	<b>Planning &amp; Zoning Dep't</b>	Immediately	Low
Aid the public in explaining the Plan and its relationship to private and public development projects and other proposals, as appropriate	Process	<b>Planning &amp; Zoning Dep't,</b> Commissioners	Continuous	Low
Draft a summary document that includes key recommendations from the Plan that can be distributed to residents, developers, businesses, and other interested parties	Process	<b>Planning &amp; Zoning Dep't</b>	Immediately	Low

<b>STRATEGY 6: WIDELY COMMUNICATE AND MARKET THE PLAN TO CELEBRATE THE PLAN'S SUCCESSES</b>	<b>Planning &amp; Zoning Dep't</b>	<b>Continuous</b>	<b>Low</b>						
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<i>Strategy 6 Tasks</i>	<i>Category</i>	<i>Task Owner and Participants</i>	<i>Time Frame</i>	<i>Cost Impact</i>
Post the final Plan on the city's and county's website	Process	<b>Planning &amp; Zoning Dep't</b>	Immediately	Low
Provide a copy of the Plan to each county department	Process	<b>Planning &amp; Zoning Dep't</b>	Immediately	Low
Regularly maintain and update the Plan website (www.lvcountryplan.com) with progress and changes; utilize the email marketing tool integration to send update emails out to the contact list	Program	<b>Planning &amp; Zoning Dep't</b>	Continuous	Low
Post updates related to the Plan on the county's social media accounts	Program	<b>Planning &amp; Zoning Dep't</b>	Continuous	Low
Utilize the developed project branding style guide to ensure a consistent look and feel in Plan-related messaging	Process	<b>Planning &amp; Zoning Dep't</b>	Continuous	Low

Table 7.1

**Holistic Implementation Measures Matrix (Continued)**

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 7: DEVELOP STRONG RELATIONSHIPS WITH IMPLEMENTATION PARTNER ORGANIZATIONS</b>	<b>Planning &amp; Zoning Dep't</b> , County Administrator, Leavenworth County Development Corporation, Leavenworth County Port Authority, Leavenworth County Council on Aging, Commissioners	<b>Continuous</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>

<i>Strategy 7 Tasks</i>	<i>Category</i>	<i>Task Owner and Participants</i>	<i>Time Frame</i>	<i>Cost Impact</i>
Ensure open communication lines between the county and vital implementation partner organizations, such as the Leavenworth County Development Corporation, Leavenworth County Port Authority, and Leavenworth County Council on Aging	Process	<b>Planning &amp; Zoning Dep't</b> , County Administrator, Leavenworth County Development Corporation, Leavenworth County Port Authority, Leavenworth County Council on Aging, Commissioners	Continuous	Low
Gather demographic and market insight and research from implementation partner organizations to avoid duplicative efforts as the Plan is updated to reflect changing conditions	Program	<b>Planning &amp; Zoning Dep't</b> , County Administrator, Leavenworth County Development Corporation, Leavenworth County Port Authority, Leavenworth County Council on Aging, Commissioners	Continuous	Low

# Topical Implementation Measures

The implementation matrices that follow, *Tables 7.2-7.4*, describe specific measures that must be taken to advance the topic at hand. Land use, economic development, transportation, and infrastructure are inherently linked and the efforts taken to address items in these categories should complement one another; however, it is important – from an implementation standpoint – to understand what must occur in each of these areas for progress to be made. Opportunities to overlap projects exist, such as a redevelopment project that lends itself to a roadway improvement.

**Table 7.2**

Land Use and Economic Development Implementation Measures Matrix									
Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 1: CREATE COMMERCIAL AND MIXED USE DEVELOPMENT AND REDEVELOPMENT PLANS WITH INCENTIVES ALONG IDENTIFIED KEY CORRIDORS AND AT SPECIFIC INTERSECTIONS</b>	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, Public Works Dep't	<b>Short-Term</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>

**Strategy 1 Tasks**

Prepare incentive plans and assistance packages to spur the development of the U.S. 24/40 corridor between Basehor and Tonganoxie; the intersection of U.S. 24/40 and CR-1; and 155th Street between Basehor and Lansing; the package should detail the proposed uses on the site, as well as the site's advantages

**Category**

Process

**Task Owner and Participants**

**Leavenworth County Development Corporation**  
Planning & Zoning Dep't,  
Public Works Dep't

**Time Frame**

Short-Term

**Cost Impact**

Medium

Consider preparing a Request for Proposal for the above mentioned corridors and intersections to send to interested developers; the RFP should detail the available incentive and assistance package; high standards for site and building design should be required

Process

**Leavenworth County Development Corporation**  
Planning & Zoning Dep't,  
Public Works Dep't

Short-Term

Low

Use the county's existing online mapping software to show the spatial location of available properties and incentives

Process

**Leavenworth County Development Corporation**  
Planning & Zoning Dep't,  
Public Works Dep't

Short-Term

Medium

Table 7.2

Land Use and Economic Development Implementation Measures Matrix (Continued)

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 2: UPDATE THE SPECIAL USE PERMIT CATEGORIES AND REVIEW AND MONITORING PROCESS</b>	<b>Planning &amp; Zoning Dep't,</b> County Administrator, County Attorney, Commissioners	<b>Immediately</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>

*Strategy 2 Tasks*

Create a tiered review and approval system for special uses within the county with different categories of special uses, dependent on their scale, use, and potential impact on the health, safety, welfare, and property values of surrounding properties, using page 81 of this Plan as a guide

*Category*

Policy

*Task Owner and Participants*

**Planning & Zoning Dep't,**  
County Administrator, County  
Attorney, Commissioners

*Time Frame*

Immediately

*Cost Impact*

Low

Consider longer approval terms for lower class special uses within the county

Policy

**Planning & Zoning Dep't,**  
Commissioners

Immediately

Low

Integrate the Land Evaluation component of the Land Evaluation and Site Assessment (LESA) system into the special use permit review process, as spelled out in the county's zoning and subdivision regulations, to identify areas of and protect the most productive farmland

Policy

**Planning & Zoning Dep't**

Immediately

Low

<b>STRATEGY 3: INTEGRATE A "LAND FIRST" APPROACH INTO THE DEVELOPMENT REVIEW PROCESS, AND A CLEAR ANALYSIS OF SUCH AN APPROACH INTO COUNTY PLANNING STAFF REPORTS</b>	<b>Planning &amp; Zoning Dep't</b> Commissioners	<b>Short-Term</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>	<b>Low</b>
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*Strategy 3 Tasks*

Update the county's zoning and subdivision regulations to include graphic examples and descriptive text that illustrates conservation design principles, as described on page 82

*Category*

Process

*Task Owner and Participants*

**Planning & Zoning Dep't**  
Commissioners

*Time Frame*

Short-Term

*Cost Impact*

Low

Work with and educate development review applicants on ways to incorporate conservation design principles into their development proposals

Process

**Planning & Zoning Dep't**  
Commissioners

Continuous

Low

Consider the use of incentives to encourage applicants to incorporate conservation design principles into their development proposals

Policy

**Planning & Zoning Dep't**  
Commissioners

Continuous

Low

Table 7.2

**Land Use and Economic Development Implementation Measures Matrix (Continued)**

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 4: DEVELOP AND ADOPT AN ECONOMIC DEVELOPMENT STRATEGIC PLAN</b>	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, County Administrator	<b>Short-Term</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Medium</b>

<i>Strategy 4 Tasks</i>	<i>Category</i>	<i>Task Owner and Participants</i>	<i>Time Frame</i>	<i>Cost Impact</i>
Identify funding for an economic development strategic plan	Process	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, County Administrator	Short-Term	Medium
Prepare a scope of services for an economic development strategic plan that includes a regional market assessment, opportunity and barrier assessment, target industry sector analysis, regional and target industry positioning, economic development goals and policies, and stakeholder input	Process	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, County Administrator	Short-Term	Low
Develop a county economic development strategic plan with robust stakeholder input	Plan	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, County Administrator	Short-Term	Medium
Consider regional and municipal economic development activities in the economic development strategic plan	Process	<b>Leavenworth County Development Corporation</b> Planning & Zoning Dep't, County Administrator	Short-Term	Low

Table 7.2

Land Use and Economic Development Implementation Measures Matrix (Continued)

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 5: CREATE AN ECONOMIC DEVELOPMENT ROUNDTABLE</b>	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Leavenworth County Development Corporation, Commissioners	<b>Short-Term</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Medium</b>	<b>High</b>	<b>Low</b>

Strategy 5 Tasks	Category	Task Owner and Participants	Time Frame	Cost Impact
Identify critical participants, including public, private, and nonprofit partners, in the economic development roundtable to be part of the first line of communication between businesses and local government and subsequent recommendations to the Planning Commission and County Commission	Process	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Leavenworth County Development Corporation, Commissioners	Short-Term	Low
Standardize the economic development roundtable's meeting schedule, member responsibilities, and goals, as they relate to business recruitment and retention; workforce development and training; marketing; regional collaboration; and strategic economic development planning.	Program	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Leavenworth County Development Corporation,	Short-Term	Low
Invest in online mapping software that can be integrated into the county's website in order to show the spatial location of available properties and incentives	Process	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Leavenworth County Development Corporation	Short-Term	Medium

Economic Development Resources

**Leavenworth County Development Corporation (LCDC)**

The LCDC is a coalition for economic growth in the Leavenworth, Lansing, Tonganoxie, and Basehor communities, mobilizing business, government, and civic leaders. The public-private partnership gives companies access to partner investment for starting up, relocating, or expanding.

**Leavenworth County Port Authority (LCPA)**

Originally focused on development in the port area along the Missouri and Kansas Rivers, the LCPA is a quasi-governmental agency whose focus is economic development opportunities with industrial properties and facilities. The LCPA is staffed by the Leavenworth County Development Corporation (LCDC).

**AltCap Low Interest Loan Fund for Businesses Affected by COVID-19**

On March 31st, 2020, AltCap launched a community-backed five million dollar small business relief loan fund, supported by the Greater Kansas City Chamber of Commerce, the Kansas City Area Development Council (KCADC), the Civic Council of Great Kansas City, and the Ewing Marion Kauffman Foundation. In order to qualify for a relief loan, small businesses must be located in the Kansas City metropolitan area (including Leavenworth County); have 20 or fewer full-time equivalent employees, and have \$2.5 million or less in annual revenue.

**Broadband Initiative / Kansas Universal Service Fund**

Created by the 1996 Telecommunications Act, the purpose of the Kansas Universal Service Fund is to assure that quality communication services are available for all Kansans, including local businesses and rural area networks. All telecommunications companies contribute a percentage of all intrastate retail revenues to the fund, which is then distributed back to designated eligible local carriers.

**Small Cities Community Development Block Grant**

The CBDG economic development program is a source of financing for companies that are expanding or relocating to a non-metropolitan area of Kansas. Up to \$750,000 is available per project. In order to obtain funds, the county governing body applies on behalf of the private business.

**U.S. Economic Development Administration (EDA)**

The U.S. Economic Development Administration (EDA) partners with entities to develop and disseminate tools on new and emerging economic development concepts that practitioners and policymakers can utilize to make more informed development decisions. They focus on areas such as identifying areas of distress and competitive advantage; pinpointing regional clusters; measuring the triple bottom line and innovation capacity; analyzing investments; and more.

Table 7.3

Transportation and Mobility Implementation Matrix									
Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 1: DEVELOP AND ADOPT A TRANSPORTATION MASTER PLAN</b>	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Public Works Dep't, Commissioners	<b>Immediately</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>
<i>Strategy 1 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Allocate funding for a transportation master plan in the county's upcoming budget cycle			Plan	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Commissioners			Immediately	Medium	
Prepare a scope of services for a transportation master plan that covers all modes of transportation, including maintenance of roads (including paving guidelines), road construction or upgrades, trails, pedestrian and bicycle facilities, transit, freight, railroads, and aviation; attention should be placed on funding			Process	<b>Planning &amp; Zoning Dep't,</b> County Administrator, Public Works Dep't, Commissioners			Immediately	Low	
The transportation master plan should take into consideration regional and municipal planning activities, including but not limited to the Kansas City Regional Bike Plan, MetroGreen Regional Greenway System, KDOT planned improvements, MARC's Regional Transportation Plan 2050, KCATA transit plans, and Leavenworth County's Council on Aging			Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, KDOT, KCATA, MARC, Leavenworth County Council on Aging, Commissioners			Short-Term	Low	
Use the recommendations illustrated on <i>Figure 5.1</i> Transportation Plan as a starting point for the transportation master plan			Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Commissioners			Short-Term	Low	
Following existing conditions analysis, public engagement, and formulation of transportation recommendations, present the master plan to the Planning Commission for recommendation of adoption and to the County Commission for adoption			Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Commissioners			Short-Term	Low	
<b>STRATEGY 2: IMPROVE CONNECTIVITY IN THE COUNTY'S TRANSPORTATION NETWORK</b>	<b>Public Works Dep't,</b> Planning & Zoning Dep't, Commissioners	<b>Continuous</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Medium</b>	<b>High</b>	<b>High</b>
<i>Strategy 2 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Align transportation improvements with development and redevelopment projects to link activity centers with appropriate roadway infrastructure			Policy	<b>Public Works Dep't,</b> Planning & Zoning Dep't, Commissioners			Continuous	Medium	
Regularly coordinate with the Leavenworth County Port Authority to address barge and rail operations and determine their role in the regional transportation network			Process	<b>Planning &amp; Zoning Dep't,</b> Public Works Dep't, Leavenworth County Port Authority			Continuous	Low	

Table 7.3

Transportation and Mobility Implementation Matrix (Continued)									
Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 3: UPDATE THE COUNTY'S ROAD STANDARDS</b>	<b>Public Works Dep't, Commissioners</b>	<b>Immediately</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>
<i>Strategy 3 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Review and potentially update the county road standards, based on best management practices, peer county practices, and FHWA guidance			Process	<b>Public Works Dep't, Commissioners</b>			Immediately	Low	
Regularly (every one to three years) review the updated county road standards and revise them to follow national best practices			Process	<b>Public Works Dep't, Commissioners</b>			Continuous	Low	
<b>STRATEGY 4: ACTIVELY COORDINATE WITH OTHER MUNICIPALITIES ON THE COUNTY ROADWAY SYSTEM</b>	<b>Public Works Dep't, KDOT, Municipalities</b>	<b>Continuous</b>	<b>Medium</b>	<b>Medium</b>	<b>Low</b>	<b>Medium</b>	<b>Medium</b>	<b>High</b>	<b>Low</b>
<i>Strategy 4 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Host quarterly transportation meetings with representatives from each municipality's public works department, as well as KDOT, to ensure a coordinated strategy for the incorporated and unincorporated roadways			Process	<b>Public Works Dep't, KDOT, Municipalities</b>			Continuous	Low	
Proactively communicate with municipalities about the updated county road standards			Process	<b>Public Works Dep't, Municipalities</b>			Continuous	Low	
<b>STRATEGY 5: MONITOR TRANSIT NEEDS COUNTYWIDE</b>	<b>Leavenworth County Council on Aging, Planning &amp; Zoning Dep't, KCATA</b>	<b>Continuous</b>	<b>Low</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>Low</b>	<b>Medium</b>	<b>Low</b>
<i>Strategy 5 Tasks</i>			<i>Category</i>	<i>Task Owner and Participants</i>			<i>Time Frame</i>	<i>Cost Impact</i>	
Meet annually with KCATA to evaluate how well the current transit system is meeting demand			Process	<b>Leavenworth County Council on Aging, Planning &amp; Zoning Dep't, KCATA</b>			Continuous	Low	
Continue allocating appropriate funds to operate the Leavenworth County's Council on Aging on-demand meals and transportation service to seniors			Program?	<b>Commissioners, Leavenworth County Council on Aging, Planning &amp; Zoning Dep't</b>			Continuous	Low	

**Table 7.4**

**Community Services and Infrastructure Implementation Matrix**

Strategy	Strategy Owner and Participants	Time Frame	Overall Impact To				Barriers to Implementation		
			Safety	Infrastructure	Quality of Life	Economics	Political Will	No. of Parties	Cost Impact
<b>STRATEGY 1: DEVELOP AND ADOPT A UTILITY MASTER PLAN</b>	<b>Public Works Dep't,</b> County Administrator, Municipalities, Utility Providers, Planning & Zoning Dep't, Commissioners	<b>Short-Term</b>	<b>Low</b>	<b>High</b>	<b>Medium</b>	<b>Medium</b>	<b>High</b>	<b>High</b>	<b>Medium</b>

<i>Strategy 1 Tasks</i>		<i>Category</i>	<i>Task Owner and Participants</i>	<i>Time Frame</i>	<i>Cost Impact</i>
Allocate funding for a utility master plan in the county's upcoming budget cycle		Process	<b>Public Works Dep't,</b> Planning & Zoning Dep't, County Administrator, Commissioners	Short-Term	Medium
Prepare a scope of services for a utility master plan that covers all utilities, including water, wastewater, stormwater, and energy		Process	<b>Public Works Dep't,</b> Planning & Zoning Dep't, County Administrator, Commissioners	Short-Term	Low
Consider hiring a consultant to draft the utility master plan or dedicate staff time to perform the study in-house		Process	<b>Public Works Dep't,</b> Planning & Zoning Dep't, County Administrator, Commissioners	Short-Term	Low / Medium
Following existing conditions analysis, public engagement, and formulation of utility master plan recommendations, present the Plan to the Planning Commission for recommendation of adoption and to the County Commission for adoption		Process	<b>Public Works Dep't,</b> Planning & Zoning Dep't, Commissioners	Short-Term	Low
Perform a Cost of Services study to understand the cost associated with the provision of utility infrastructure based on development type		Plan	<b>Public Works Dep't,</b> Planning & Zoning Dep't, Commissioners	Short-Term	Medium
Host regular coordination meetings between the county, municipalities, and utility providers to ensure utility infrastructure is properly maintained and residents receive quality service		Process	<b>Public Works Dep't,</b> Planning & Zoning Dep't, County Administrator, Utility Providers, Municipalities, Commissioners	Continuous	Low

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# Potential Funding Mechanisms

The potential funding mechanisms, listed in *Table 7.5* below, for the Plan come in several different forms: regulation, taxes, districts, bonds, and grants. It is important to note the objective of securing funding is to pay for improvements that otherwise would not have a source of funding, and to provide seed monies for the encouragement of private investment to occur. There will never be enough public funding to realize the recommendations in the Plan. For this reason, the investment and leverage of private dollars is crucial to the success of the Plan. Unless another entity or organization is clearly charged with recognition, application, and acquisition of funding resources for the implementation of the Plan recommendations, the county should analyze the appropriateness, cost benefits, and best application of these tools as necessary to implement the Plan's recommendations.

**Table 7.5**

Potential Funding Mechanisms	
Mechanism	Description
<b>REGULATION</b>	
Impact Fees	The development applicant pays a fee as a condition of the county's approval of the development
<b>TAXES</b>	
Excise Tax	A tax levied on a particular activity, measured by the amount of business done or income received
Economic Development Tax	A tax levied on all sales for the purpose of specifically funding infrastructure and operating expenses within a certain parameter, but also most economic development activities; the revenues cannot be used on retail projects
Capital Improvements Tax	A tax levied on all retail sales for the purpose of funding capital improvements
Transportation Sales Tax	A sales tax of one-half percent on all retail sales to generate revenues for transportation purposes
<b>DISTRICTS</b>	
Community Improvement District (CID)	CIDs derive revenues through special assessments, a district-only sales tax, or other funds as appropriated by the county to finance a variety of locally approved development-related activity, including property acquisition, infrastructure development, and parking and building construction; funds can also extend to improvements outside the district, so long as these are deemed necessary to implement the larger development plan
Business Improvement District (BID)	Individual cities (not counties) can implement BIDs within their jurisdictions to fund a variety of activities to improve, maintain, and promote a designated district
<b>BONDS</b>	
General Obligation Bonds	General obligation bonds are issued with the county's full faith and credit that are paid by a dedicated amount of property tax
Revenue Bonds	Revenue bonds are issued to finance facilities with a definable user or revenue base; revenue bonds differ from general obligation bonds as they are backed by a specific revenue stream
<b>GRANTS</b>	
Small Cities Community Development Block Grant (CDBG)	The CDBG program is a source of financing for companies that are expanding or relocating to a non-metropolitan area of Kansas; up to \$750,000 is available per project; in order to obtain funds, the county governing body applies on behalf of the private business
Transportation Improvement Program (TIP)	The TIP is developed by MARC in cooperation other agencies; the program document is updated every two years to include all major surface transportation projects planned to receive federal, state, and local funding within a five-year period; inclusion in the TIP enables a project to receive and expend federal funds
Congestion Mitigation Air Quality (CMAQ)	The CMAQ is a federally funded program administered by MARC for surface transportation projects designed to reduce traffic congestion and improve air quality
Surface Transportation Block Grant Program (STBG)	The STP is a flexible funding program administered by MARC intended to fund a wide variety of projects that address multiple modes of transportation
STBG Set-Aside (formerly Transportation Alternatives Program – TAP)	The TAP, administered by MARC, is intended to create safe, accessible, and environmentally-sensitive communities by providing funding for a variety of active transportation projects that were previously funded through the Transportation Enhancements, Safe Routes to School, and Recreational Trails Program





# Leavenworth County

## Comprehensive Plan

*Sustainably managing growth and maintaining rural lifestyles*