

# — CONNECT STERLING —

## Comprehensive Development Plan for the Sterling Area, Kansas: 2015—2035



— Connect Sterling —  
Comprehensive Development Plan  
for the  
Sterling Area, Kansas:  
2015—2035

— June 3, 2015 —

adopted by the  
Sterling City Planning Commission  
on June 25, 2015

approved by the  
Sterling City Commission  
on August 3, 2015

technical assistance by



and  
Sterling City Staff

# OFFICIAL COMPREHENSIVE DEVELOPMENT PLAN APPROVAL

This document, entitled  
*Connect Sterling – Comprehensive Development Plan for the Sterling Area, Kansas: 2015-2035*  
is an official Plan of the City of Sterling, Kansas, for the Planning Period 2015-2035.  
The Planning Area of 47.9 square miles comprises the City of Sterling and  
portions of Sterling and Atlanta Townships in Rice County, Kansas.

In accordance with K.S.A. 12-747, an officially advertised public hearing was held  
on June 25, 2015,  
and this document was adopted by a Resolution of the Sterling City Planning Commission  
on July 9, 2015.

A certified copy of the *Comprehensive Development Plan*,  
together with a summary of the hearing, was submitted to the Sterling City Commission.

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Jeff Laudermilk, Chairperson, Sterling City Planning Commission

ATTEST:

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Taggart Wall, Recording Secretary, Sterling City Planning Commission

**APPROVED** by the Sterling City Commission  
on September 8, 2015 by Ordinance No. 2465  
and published on September 10, 2015 in *The Bulletin*.

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Jonathan Zimmerman, Mayor

ATTEST:

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Sandra Fankhauser, City Clerk

## Sterling City Commission

Jonathan Zimmerman, Mayor  
Paul Bingle  
Bob Booth  
Ray Brown  
Steve Rivas

## Sterling City Planning Commission

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Bill Calderwood / City Member  
Priscilla Carder / City Member  
Jerry Jacob / City Member  
Joe Jacob / City Member  
Clayton Mantz / Rural Member  
James Silman / City Member  
Scott Walton / Rural Member  
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# Acknowledgments

The production of this Comprehensive Plan would not have been possible without the support of Sterling's City Commission, who led the effort to commence the comprehensive planning process, and will be ultimately responsible for achieving its goals.

During the course of this project, the **City Planning Commission** provided direction to the consultants, reviewed the preliminary text and accompanying maps, and participated in numerous meetings. **Jeff Laudermilk** served as Chairperson during this important period.

**Taggart Wall**, City Manager, wrote the chapters on local history, utilities, and community facilities. He was the primary communications link between the consultants and the members of the Planning Commission and Steering Committee, coordinated the distribution of drafts for review, and organized all the meetings during the planning process. He was instrumental in producing and distributing the Community Questionnaire, and completed most of the Data Collection Forms. He hunted down the answers to every question the Consultants asked, and in general was invaluable in the production of this Plan.

**Andy Prebble**, Planning and Code Enforcement Director, helped to carry out the Land Use and Housing Condition Field Survey, provided information on the City Maintenance Building, and on the water supply, sewage disposal, and stormwater management systems.

**Sandra Fankhauser**, Sterling City Clerk, collated the Community Questionnaire results.

**Jason Briar**, Sterling Recreation Commission / USD 310, provided information on Recreation Commission board members and programs.

**Michael Rajewski**, Executive Director of Sterling Presbyterian Manor, **Shirley Kenyon**, Director of the Sterling Free Public Library, and **Steve Caywood**, Director of Physical Plant at Sterling College, filled out Data Collection Forms and provided information on their respective institutions.

Local stakeholders participated in phone interviews to provide information on Sterling's planning needs and future goals. Thanks to the following individuals for their time and insights:

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- **Stacy Clark**, CEO, Main Street Sterling
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- **Todd Rowland**, President, Alden State Bank

And finally, special thanks to the dedicated members of the **Steering Committee**, who reviewed many drafts, attended many meetings, and provided the knowledge of Sterling and the love for their community that informs this Comprehensive Plan:

- **Bob Booth**, Sterling City Commission
- **James Decker**, Sterling Medical Center
- **Brayden Hosman**, Youth Representative
- **Jeff Laudermilk**, Sterling Planning Commission
- **Carol Prather**, Sterling USD 376
- **Andy Prebble**, Sterling Public Works Director
- **Scott Rich**, Sterling College
- **Taggart Wall**, Sterling City Manager
- **David Wilson**, Sterling Planning Commission
- **Kaci Wilson**, Youth Representative

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## Executive Summary



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Where the Quality of Life Shines!

## EXECUTIVE SUMMARY

Once adopted by the Planning Commission and approved by the City Commission, this document will be the official comprehensive plan for the City of Sterling for the twenty-year **Planning Period** from 2015 through 2035.

The **Sterling Planning Area** includes the City of Sterling, as well as portions of Sterling and Atlanta townships in Rice County, Kansas – an area of 47.9 square miles. The delineation of a Planning Area does not create a regulatory boundary as such, but identifies an area which has an influence on the planning and development of the City. Any **extraterritorial jurisdiction** for Subdivision Regulations or Zoning Regulations around a City cannot exceed the Planning Area as delineated, nor be more than three miles from the city limits, nor be more than one-half the distance to another city, nor extend into another county.

A Comprehensive Plan provides overall direction for both short and long range planning, but decisions on particular planning situations should always be based on specific conditions at the time. Implementation of planning decisions must take place within the democratic process of government.

The Sterling Planning Commission is required to review the *Comprehensive Development Plan* annually, and can propose to amend, extend or add to it as necessary. An attested copy of the *Plan* and any amendments must be sent to all other taxing subdivisions in the Planning Area which request a copy.

Vision  
Statement  
for Sterling

*Those of us whose hearts call Sterling home  
will work together to create a vibrant future rooted in our past,  
preserving the best qualities of small town living  
for generations to come.*

**QUALITY OF LIFE** Quality of life refers to the overall happiness and well-being of a person or community. It is an essential factor in making a community a successful economic competitor, so **investments in quality of life should be regarded as investments in Sterling's future.**

Good health is a major element of quality of life. Planning decisions affect the design of the neighborhoods in which people live, work, learn, and play – which in turn affects physical activity levels, which affect rates of obesity and related chronic diseases. Planning policies should always be made with an eye toward crafting places that encourage physical activity, nurture social connections, and promote good health.

**GOALS** Clearly defined planning goals provide a framework for efficient decision-making, make it possible to effectively determine priorities, and facilitate productive use of resources. Concise tables of categorized and prioritized goals and tasks are available in Chapter 2.

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**POPULATION** The Planning Commission will plan for an increase in the City's population from 2,328 in 2010 to **2700 people by the year 2035**, for an increase of about 16% over the next twenty-five years. This translates to an increase of approximately 160 additional households in the city by the end of the Planning Period.

- Sterling's population was fairly stable between the end of the oil boom in the 1930s, and the recession of the 1980s, when it fell by 5%. It then grew by about 6% in the twenty years between 1990 and 2010, in a county where the population has been falling for at least 50 years.
- The population in the **Planning Area** *outside* of the City is approximately 232 people, or about 10% of the City's population. The current population of the entire Planning Area, including the City of Sterling, is estimated at 2560 persons.
- Out of 203 family households with children under 18 years old in Sterling, 25% of family households were **single-parent families**.

**HOUSING** Housing that is well cared-for, whatever its age or size, is a major factor in a city's quality of life and its ability to compete economically. The average American household size has been declining for years, so there is more demand nationwide for smaller houses, duplexes, apartments, and condominiums. Sterling should plan for **housing diversity**.

- The average household size in Sterling in 2010 was 2.31 people, and the average family size was 2.89 people.
- Of the 933 total housing units in Sterling, 786 (84.2%) were occupied, and 147 (15.8%) were vacant.
- Of the 786 occupied housing units in Sterling, 572 (72.8%) were owner-occupied, and 214 (27.2%) were renter-occupied.
- The median value of owner-occupied housing units in Sterling was \$81,200.
- Of the 570 owner-occupied units in Sterling, 47.9% had a mortgage, and 52.1% did not.
- As of 2015, 18% of Sterling's housing units have residents who moved in since 2010, and 63% have residents who moved in since 2000. About 21% of Sterling's occupied housing units have residents who have lived there for more than twenty-five years.
- Over one third of Sterling's houses are over 75 years old, and two thirds (66.6%) are more than 50 years old. These homes help give the community continuity and character.

**Housing Condition Survey** A windshield survey of housing conditions in Sterling was conducted in 2014. Every house within the city limits was surveyed, and assigned a rating.

- Of Sterling's 800 detached houses, 87% were in either Standard or Minor Substandard condition, implying a superior level of care from Sterling's homeowners.
- Of the 99 (12.4%) detached houses in Sterling that were rated Major Substandard, most were in good condition overall, but typically had one of three serious problems: the roof needed to be replaced, there were structural cracks in the foundation walls, or chimneys needed to be repointed or rebuilt entirely.
- Only five houses in Sterling were rated as Dilapidated, in large part a result of the City's ongoing and aggressive code enforcement efforts.

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**ECONOMY** It is *quality of life* that makes a community a *successful* economic competitor. Sterling should regard investments in its quality of life as investments in economic development.

- **Median earnings and median family income** for Sterling residents are somewhat higher than for Rice County residents in general; **median household income** is somewhat lower, probably brought down by the number of low-income student households in the City.
- Between 1999 and 2013, **per capita income** in Sterling increased by 97%, and **median family income** increased by 53%.
- About 706 people commute into Sterling for work; 310 both live and work in Sterling; 629 people live in Sterling and work outside the city limits.
- Of the nine cities in Rice County, Sterling had the second highest Total Assessed Valuation, and the fourth lowest **mill levy**.

**TRANSPORTATION** The City road system will undergo a major change when the K-96 / K-14 Highway is relocated to bypass Sterling, and a new K-96 interchange is constructed just northeast of the City. Construction on this project is currently estimated to begin in 2017.

- The 2014 *Core Connections* study for the Main Street Corridor Project documents the City's existing road system, provides baseline data to identify and prioritize bicycle and pedestrian projects, and offers information on a 'complete streets' approach for City roadway standards.
- Sterling's roads are part of a nationwide system of federal street classifications. Changes in classification are periodically reviewed and revised, and must be approved by County Commissioners. Street classifications affect federal funding for road improvements.
- Continue to support sidewalks, and plan to develop a bike route system.

**UTILITIES** Sterling's municipal utilities infrastructure includes systems for water distribution, sewage collection and treatment, and power generation / electrical distribution. Of these utilities, the gravity flow limits of the sewage collection system and the build out of electric services impose the most direct limits on future development in Sterling.

- Policies on intrusion of structures, fences and vegetation into alley rights-of-way should be adopted and rigorously enforced. In some cases, the City may need to establish easements where utilities were built on private property with implied easements.
- Investigate additional water sources for Sterling's future. Investigate the costs of bringing hardness levels down.
- The average age of a Sterling water line is 61 years old, and breaks are becoming more common. A replacement program for water mains is needed, and would require a rate adjustment.
- Support a gravity flow sewage study, especially to address the need for sewer lift stations required to accommodate expected development to the north and northeast.
- Establish a program to begin the task of rehabilitating older sanitary sewer lines, utilizing modern trenchless sewer rehabilitation techniques.



**STORMWATER MANAGEMENT SYSTEMS** Nearly two-thirds of Sterling is located in floodplain. The flat terrain does not provide enough fall to allow for good drainage, and the water table is high. Five areas in the community are of common concern regarding drainage.

- Use the proposed K-96 interchange project as a catalyst for solving drainage problems in northern Sterling, while also preparing for future expansion to the north.
- A comprehensive stormwater management study should be conducted in the near future.
- Begin exploring options to incorporate elements of green infrastructure into the stormwater management system, as opportunity permits.

**COMMUNITY FACILITIES** Most of Sterling's existing public facilities are in good condition, and will continue to serve through the Planning Period to 2035. A few are in need of updating and improvement – particularly the Library and City Services Building.

It is vitally important to provide adequate staff and budgetary support for maintenance of public facilities. A good maintenance and capital improvement program is the most cost-effective investment the City can make in preserving the quality of its community facilities.

**LAND USE PLAN** Land Use analysis addresses the distribution and interrelationships of existing land uses, and evaluates the potential for future development. The Land Use Plan also provides a **legal foundation for the judicial review of zoning cases**. In turn, Zoning and Subdivision Regulations serve to implement the Land Use Plan and other proposals of the Comprehensive Plan.

- As of November 2014, Sterling's city limits encompass 1,047.1 acres of land.
- **Residential** – 367.0 acres (339.0 acres single-family, 18.0 acres multiple-family, 2.0 acres mobile home park); 45.4% of the developed area.
- **Transportation** – 251.6 acres; 31.1% of developed area.
- **Agricultural and Vacant** – 238.5 acres; 22.8% of the total land area.
- **Public and semi-public** – 116.8 acres; 14.4% of the developed area.
- **Industrial** – 46.6 acres; 5.8% of the developed area.
- **Commercial** – 26.6 acres; 3.3% of the developed area.

A **future land use plan** is intended to ensure that land will be developed in patterns that support efficient, balanced, and compatible land uses. When an area is designated for a particular future land use, that designation should be considered as an **indication of preferred land use character and predominant type**, rather than an absolute requirement. The **Future Land Use Map** in Chapter 11 exhibits a desired land use pattern, but it is expected that the Planning Commission may need to make minor adjustments from time to time.

- In general, new development will be to the north and northeast of the City.
- New **commercial** development will occur in the existing downtown, as well as in the vicinity of the new interchange. Each district can and should have its own character and its own commercial focus, collaborating to provide a range of services and experiences for the community, rather than competing against each other.
- Maintaining and enhancing Sterling's outstanding quality of life should be the primary intent of future land use decisions.

**RESOURCES & CONTEXT** Chapter 12 provides background on existing programs, information resources, and potential funding options, organized under headings of Housing, Economic Development, Transportation, and Quality of Life. Notes on some worldwide trends germane to Sterling's planning activities, and results from the 2015 Community Questionnaire which reflect residents' attitudes towards these issues are also included.

- For a detailed analysis of Sterling's housing needs, see the 2011 *Housing Market Study and Needs Assessment, Sterling, Kansas*, by Virden Associates.
- With its proximity to Quivira National Wildlife Refuge and the TransAmerica Bicycle Trail, with Sterling College, Sterling Lake Park, and its quintessential small town ambience – Sterling has the potential to attract tourists, and tourism dollars.
- Consider joining the *K-96 Corridor Development Association, Inc.*, a nonprofit organization which promotes economic development along Highway K-96, and includes both government partners and the private sector.

**REGULATORY TOOLS** Chapter 13 discusses regulatory tools that can be utilized to implement a community's planning goals, including Zoning Regulations, Site Plan Review, Subdivision Regulations, Construction & Environmental Codes, and Annexation.

- Because it must act in a quasi-judicial manner, the Planning Commission is required to make its recommendations based on findings of evidence and an issue oriented analysis, in order to prevent arbitrary and capricious zoning decisions. The Governing Body is held to the same standards.
- Court tests of zoning cases are based upon the "reasonableness" of the decision, and state statutes hold that any zoning amendment is **presumed to be reasonable** if it is in accordance with the land use element of a comprehensive plan.
- As a prerequisite to extraterritorial zoning outside the city limits, state statutes require that the land being considered for it must be included within a comprehensive plan. The possibility of extending extraterritorial zoning to the area around the proposed K-96 interchange is one reason why this Comprehensive Plan is so important.

**PLAN IMPLEMENTATION** People choose to live in Sterling to be near family and friends, to be close to work, and to enjoy the City's small town character. Understanding why people choose Sterling is the first essential step in leading the community to a comfortable and sustainable rate of growth. **Organization and leadership** are the keys to successful implementation of this Comprehensive Development Plan.

## **Section 1 – Planning & Goals**

CHAPTER 1. Comprehensive Planning

CHAPTER 2. Quality of Life & Planning Goals

## CHAPTER 1. Comprehensive Planning

When formally adopted by the Sterling City Planning Commission and then approved by the City Commission by ordinance, this document will constitute the ***Comprehensive Development Plan for the Sterling Area, Kansas: 2015 - 2035***. This document will then become the official comprehensive plan for the City of Sterling, Kansas, replacing in its entirety the City's previous 1980 *Sterling, Kansas Comprehensive Plan*.

This Comprehensive Plan was prepared under the supervision and with the aid of the Sterling City Planning Commission and City staff, with help from a Steering Committee of citizen volunteers, and with technical assistance by *Rice Foster Associates*, Landscape Architecture and Planning, *Foster & Associates*, Planning Consultants, and *Jim Heinicke, LLC*, Strategic Planning Specialist.

### Using a Comprehensive Plan

A comprehensive analysis involves the examination of a broad range of individual factors such as transportation, land use, and community facilities, as well as an assessment of how those factors interrelate. For example, determining the best location for a school (a community facility) depends on nearby residential neighborhoods (land use), and good road access (transportation system).

A comprehensive plan addresses both short and long range planning situations, so it must be specific in some matters and more general in others—but it should always provide overall direction. Each individual planning situation that occurs during the Planning Period will need to be considered and studied in detail, and a decision made based on specific conditions at that time.

A comprehensive plan has many uses, including the following:

- To compile information and provide plan proposals upon which City officials can base short-range decisions within the context of long-range planning.
- To serve as a guide for the overall development of the Planning Area, including providing assistance to potential developers.
- To serve as a planning basis for the administration of City Zoning Regulations and as a guide for making reasonable decisions on rezoning and special use applications.
- To provide a planning and legal basis for the administration of City Subdivision Regulations, and for the review and approval of plats based on growth policies and the availability of community facilities.
- To plan for orderly annexations.
- To balance urban development with the economical provision of community facilities and services.

- To encourage long-range fiscal planning policies such as a capital improvement program.
- To assist in selecting and applying for state and federal grant programs which would benefit the City and the Planning Area.
- To coordinate efforts, avoid duplication, and establish a working relationship for implementing plan proposals between the City of Sterling and other entities – including Lyons and other nearby cities; Sterling, Atlanta, and other nearby townships; Rice County and Reno County; Sterling Unified School District 376; and the Rice County Board of Commissioners, the State of Kansas, and the federal government.

## Plan Parameters

This Comprehensive Plan addresses planning issues within a specific geographic area (the *Planning Area*), and within a specific span of time (the *Planning Period*).

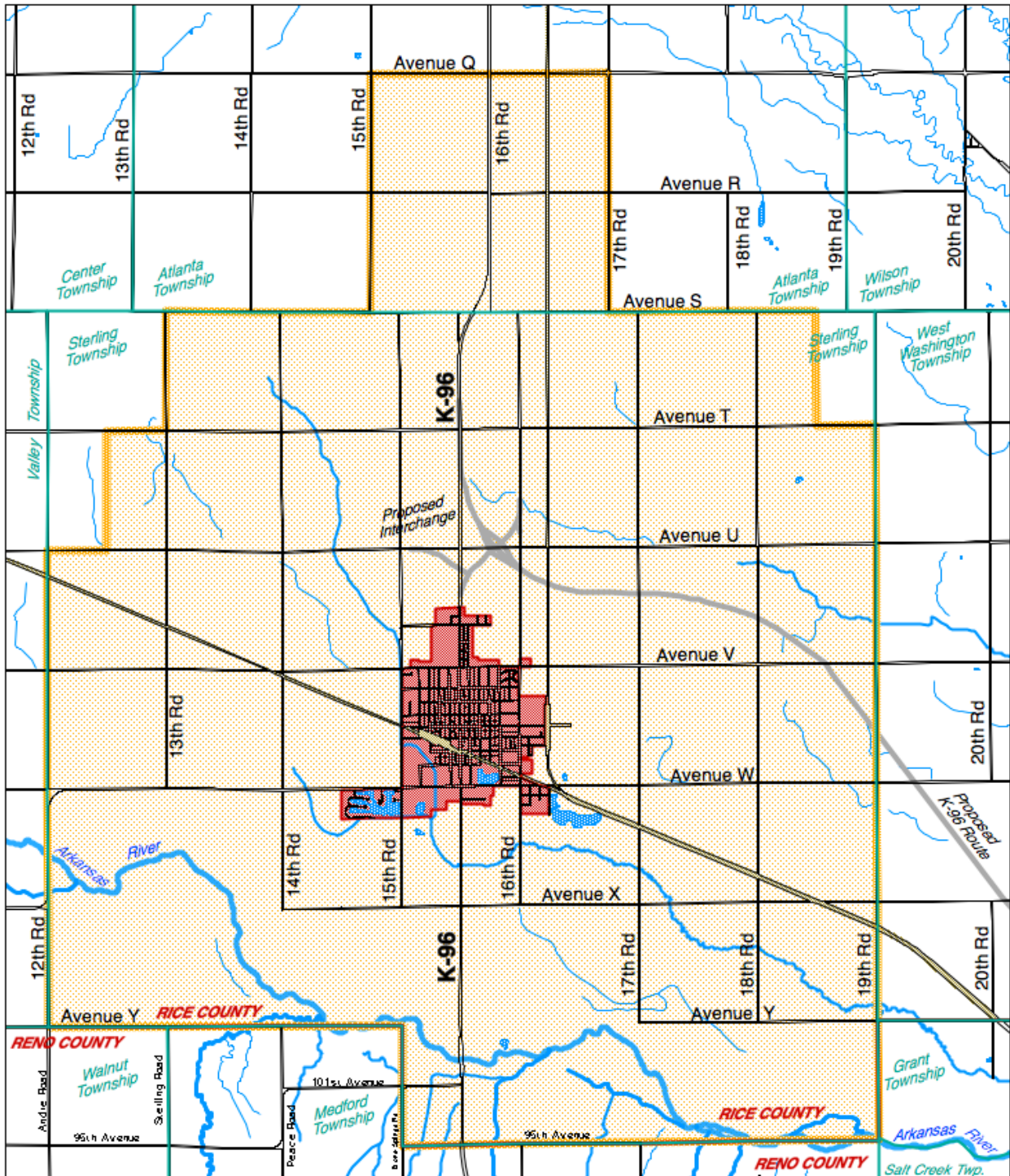
**Planning Area** The designation of a Planning Area recognizes that the City's activities both affect and are affected by the surrounding region. Delineating a Planning Area does not create a regulatory boundary as such, but identifies an area which has an influence on the planning and development of the City, and therefore should be studied as part of what the state statutes refer to as the "total community of which the City is a part". Any extraterritorial jurisdiction for Subdivision Regulations or Zoning Regulations around a city cannot exceed the Planning Area as delineated (nor extend more than three miles from the city limits, nor extend more than one half the distance to another city, nor extend into another county).

As defined for this Plan, the Sterling Planning Area includes the City of Sterling, as well as portions of Sterling and Atlanta townships in Rice County, Kansas. The extent of the Sterling Planning Area is 9.0 miles north-to-south and 7.0 miles east-to-west. This encompasses a total area of 47.9 square miles or 30,670.9 acres.

The previous *Sterling, Kansas Comprehensive Plan*, completed in 1980, did not define a Planning Area.

**Planning Period** The Planning Period for this comprehensive plan is the twenty-year time span from 2015 through 2035. For this type of plan, twenty years is typically the practical limit for useful forecasting of both local needs and local resources. For instance, existing community facilities are assessed within this plan, to determine whether they need to be modified or replaced in some way due to changing conditions or population growth, or are likely to last throughout the course of the Planning Period.

**Figure 1-A: Sterling Planning Area**



*The Sterling Planning Area, as shown shaded in orange,  
extends from 12th Road on the west to 19th Road on the east,  
and from Avenue Q on the north to Avenue Y and 95th Avenue on the south.*

## Legal Basis

The State enabling statutes provide for a broad interpretation of what constitutes a plan. According to the statutes for Planning and Zoning and Subdivision Regulations for Cities and Counties in K.S.A. 12-747, *et seq.*, a planning commission ...

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

In effect, the Planning Area cannot extend into Reno County.

In the preparation of such a plan, according to K.S.A. 12-747, the planning commission ...

*"... shall make or cause to be made comprehensive surveys and studies of past and present conditions and trends relating to land use, population and building intensity, public facilities, transportation and transportation facilities, economic conditions, natural resources and may include any other element deemed necessary to the comprehensive plan ..." and "... shall show the commission's recommendations for the development or redevelopment ..." of the planning area.*

**Planning Commission** For the plan to become effective when completed, it must be formally adopted as a whole or in parts by a resolution of the planning commission, after a public hearing which has been properly advertised beforehand. Adoption must be based on a majority vote of the total membership of the planning commission. A certified copy of the plan or part thereof, together with a written summary of the hearing, must then be submitted to the governing body.

**Governing Body** Following adoption by the planning commission, the governing body completes the process by approval and publication of an ordinance. After receiving the certified copy of the plan or part thereof, together with a written summary of the hearing, the governing body may either:

*"(1) Approve such recommendations by ordinance ... ;  
(2) override the planning commission's recommendations by a 2/3 majority vote; or  
(3) may return the same to the planning commission for further consideration, together with a statement specifying the basis for the governing body's failure to approve or disapprove. If the governing body returns the planning commission's recommendations, the planning commission, after considering the same, may resubmit its original recommendations giving the reasons therefor or submit new and amended recommendations. Upon the receipt of such recommendations, the governing body, by a simple majority thereof, may adopt or may revise or amend and adopt such recommendations by the respective ordinance ... , or it need take no further action thereon. If the planning commission fails to deliver its recommendations to the governing body following the planning commission's next regular meeting after receipt of the governing body's report, the governing body shall consider such course of inaction on the part of the planning commission as a resubmission of the original recommendations and proceed accordingly."*



**Copies of the Plan** An attested copy of the comprehensive plan and any amendments thereto shall be sent to all other taxing subdivisions in the Planning Area which request a copy of the plan.

**Annual Review** To maintain the viability of the Plan, according to state statutes, at least once each year the planning commission shall review or reconsider the plan or any part thereof and may propose amendments, extensions or additions to it. Amendments to the plan in the future are made by the same procedures as for the original adoption process.

**Implementation** The plan or part thereof "*... shall constitute the basis or guide for public action to insure a coordinated and harmonious development or redevelopment which will best promote the health, safety, morals, order, convenience, prosperity and general welfare as well as a wise and efficient expenditure of public funds.*"

Although the Kansas Supreme Court views the adoption and annual review of a comprehensive plan as a "legislative function", note that a plan is still a "guide" and actual implementation must take place within the democratic process of local government and other agencies.

On a nationwide scale, the comprehensive plan and the role it plays in the planning and implementation process are assuming an increasingly important role in land use litigation. The consistency of the plan with the regulatory tools for implementation, especially zoning and subdivision regulations, is often at the center of such litigation.

## The Planning Process

City planning can be defined as a decision-making process which is expressed in the form of a plan. The plan typically defines community goals (physical, social and economic), and includes project proposals and policy statements, all aimed at the broad objective of improving a community's quality of life. Planners seek ways to correct the mistakes of the past, preserve the best of the present, and deal with the challenges of the future.

Effective planning should be farsighted, realistic in terms of existing resources and potential capabilities, and adaptable to changing community needs and opportunities. A successful comprehensive plan must reflect knowledge and understanding of the "public interest" in the community. The public interests expressed in a plan must still earn public approval through the democratic process.

A basic purpose of planning is to help guide the use of land in an orderly manner, minimizing conflicts between various users of land. Planning also allows community services to be provided efficiently and economically. Compromise in the location of a community service facility affects its efficiency, and therefore its long-term costs to local taxpayers. To prevent such compromises, the process of planning is a means of making better short-range decisions by relating them to long-range plans.



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The planning process consists of inventorying and then analyzing existing conditions in the planning area, establishing goals and setting standards, projecting future needs, deciding upon alternative solutions to problems, and selecting methods of implementing the plan. Throughout the development of the plan document, officials and citizens should be involved to the maximum extent feasible, have access to the plan materials, and have opportunities to communicate their ideas and reactions.

This planning process has been followed in the preparation of this *Comprehensive Development Plan for the Sterling Area*. Public meetings were held, which provided a forum for members of the community to express their ideas and comment on the proposed plan. In addition, the City Commission and the Planning Commission held discussions of planning goals.

**Community Questionnaire** As part of the process of developing this Comprehensive Plan, the opinions of Sterling area residents were solicited through a set of surveys. In 2015, City staff distributed a Community Questionnaire to both residents within the City and to rural residents in the Planning Area. Specialized versions of these questionnaires were distributed to local High School students, and to Sterling College students.

Of the 897 questionnaires distributed to households in the City and Planning Area, a total of 129 were returned – a good return rate of 14%. Of the 129 completed household surveys, 119 (92%) were returned from households within Sterling, and 10 (8%) were returned from households within the Planning Area but outside the city limits. All of the 50 survey forms distributed to Sterling College students were completed and returned.

References will be made periodically in this document to the results of this Community Questionnaire. The tabulated results of the Community Questionnaires are available to the public from the office of the City Clerk at Sterling City Hall.

## CHAPTER 2. Quality of Life & Planning Goals

Sterling's residents recognize that their community has an excellent quality of life. That high quality is a significant factor in attracting new residents and new businesses. Even the city logo includes the tag line "Where the Quality of Life Shines".

But what does "quality of life" actually mean? And how do planning decisions affect this nebulous but essential characteristic of a community?

### Quality of Life

Definitions of the term "quality of life" vary by perspective, incorporate a wide variety of factors, and tend to run to many pages in length when people get serious about trying to nail down the concept. Yet even without an academically precise definition, most people readily recognize the importance of the idea, and have a strong opinion about whether their personal quality of life is good or not.

Factors that play a role in quality of life may include housing, neighborhood, schools, physical and mental health, family life, safety and security, the built environment, education, leisure time, recreation options, culture, values, social belonging, spirituality, employment, job satisfaction, and financial security – among others. In short, "quality of life" is a highly subjective way of describing the overall happiness and well-being of a person or community.

Although "quality of life" includes economic factors, it should not be confused with "standard of living", a term which refers strictly to income levels, and how well that income serves to acquire the goods and services viewed as necessary by the individual or community whose income is being evaluated.

The fact that quality of life is subjective and difficult to measure makes it no less important. Planning decisions affect housing, the local economy, transportation, safety, parks, health, and many other factors which in turn profoundly affect the community's long-term quality of life.

Every city and county competing for economic advantage understands that good public infrastructure, a trained labor force, reasonable taxes, and available land are all necessary to attract economic activity – so most viable competitors already have those assets in place. According to the American Economic Development Commission, it is quality of life that makes a community a *successful* competitor.

**Maintaining and enhancing Sterling's quality of life should be a primary focus of future planning goals. Investments in quality of life should be regarded as investments in Sterling's future.**

## Community Health

Health is one of the most important factors in quality of life. Both personal and community health are impacted by public planning decisions and policies.

Planning has always affected public health, and vice versa. For instance, historically, the design of cities was powerfully influenced by the need to develop systems of fresh water supply and sewage disposal, in order to fight disease epidemics. And one of the original functions of urban parks, such as New York City's Central Park, was to give poor and middle-class city dwellers a place to escape the heat – which, before the advent of air conditioning, killed thousands of people every summer.

In the last few generations, unintended consequences of planning decisions have had a dire effect on American health. The availability of automobiles and the development of the interstate highway system seemed to offer people the benefits of cheap land out in the country, privacy from close neighbors, wide open spaces, and personally controlled transportation. Among the unintended results were suburban sprawl, social isolation, long commutes and their associated air pollution, and car-dependence – which are considered major contributing factors to the obesity epidemic in America.

In 1950, approximately one in ten American adults was obese, with a body mass index (BMI) equal to or greater than 30. By 2010, that number had increased to one in three. In 2011, nearly two thirds (64.4%) of Kansas adults were either overweight or obese, with a BMI of 25 or above.

Many chronic diseases are related to obesity, including diabetes, arthritis, hypertension, heart disease, and a variety of cancers. Building physical activity back into people's daily routines is one of the best ways to combat obesity, and all its associated health risks. In turn, levels of activity are strongly influenced by the design of the neighborhoods in which people live, work, learn, and play.



## **Planning for Community Health**

Planning policies and decisions shape our neighborhoods and our community, and should always be made with an eye toward crafting places that encourage physical activity, nurture social connections, and promote good health. Many potential planning goals affect aspects of the built environment that can increase opportunities for residents to engage in healthy lifestyle options. Possibilities include:

- **Active Transportation** – Encourage active transportation options such as walking and biking, by supporting a community-wide network of sidewalks, and developing a system of bicycle paths, lanes, and routes.
- **Complete Streets** – Incorporate street design elements that support safe and comfortable travel by all users, of all ages and abilities, including pedestrian amenities such as shade, benches, curb extensions, and crosswalk medians.
- **Mixed Land Use** – Support residential neighborhoods that are close to and connected with workplaces, schools, retail, parks, and other destinations. Mixed land use is significantly associated with increased physical activity.
- **Vibrant Downtown** – Cultivate a vibrant downtown, with shared on-street public parking, good lighting, bike racks, public art, street trees, and creative signage. Strive for a balance of workplaces, restaurants, services and retail that creates synergy, to both support the local economy and enrich local social connections.
- **Public Spaces** – Develop public gathering spaces flexible enough to support community events such as a Farmers Market or Art Fair. Such places, and the events and celebrations they support, strengthen community ties.
- **Connectivity** – Promote new developments which are designed to maximize connectivity and walkability – generally encouraging traditional gridiron street networks, and discouraging disconnected and car-dependent cul-de-sac development.
- **Parks & Recreation** – Develop a diverse system of parks and greenspaces, that increase access to nature, and offer on-demand opportunities for exercise. Consider including linear parks that incorporate paths, and special-use parks that encourage frequent use and enhance social connections, such as a dog park or a park with outdoor exercise equipment. At playgrounds, include shade, drinking fountains, and even waterspray elements to encourage activity even on hot days.

## **Resources**

- *Building Healthy Places Toolkit*, from the Urban Land Institute – [www.uli.org](http://www.uli.org)
- *Active Living by Design* – [www.activelivingbydesign.org](http://www.activelivingbydesign.org)
- *Healthy Communities by Design* – [www.healthycommunitiesbydesign.org](http://www.healthycommunitiesbydesign.org)
- *Designing Healthy Communities* – <http://designinghealthycommunities.org>
- *CDC / Designing and Building Healthy Places* – [www.cdc.gov/healthyplaces/](http://www.cdc.gov/healthyplaces/)

## Planning Goals for Sterling

Communities which recognize and specify their own common goals establish a basis for becoming the kind of place in which people wish to live, to work, and to find cultural and social satisfaction. **Goals** provide a framework for efficient decision-making. Clearly defined goals make it possible to determine mutually recognized **priorities**, and allow resources of time and money to be invested in community needs in an organized and productive manner.

Planning goals take into account not only the physical needs of a community, but also its social, economic and governmental needs. A set of goals which are reasonable and well grounded, yet also purposeful and ambitious, can help frame policies and focus decision-making. Meaningful goals will help Sterling establish a unique identity which will distinguish it from other area communities, and enhance its ability to compete for residents, resources, and economic development.

Goals for the Sterling Planning Area were generated primarily from community input during the public meeting held on February 5th, 2015; from comments made by Steering Committee members, City staff, and Planning Commission members; from phone interview discussions with community stakeholders; and from responses to the Community Questionnaire. The resulting list of goals was then refined and prioritized by the Planning Commission and Steering Committee, and organized into categories by planning topic:

- Population & Land Use
- Downtown
- Quality of Life
- Urban Forestry
- Economic Development
- Housing
- Transportation
- Utilities & Stormwater Management
- City Facilities
- Tourism
- Parks & Recreation
- Policies & Programs

At the Comprehensive Plan public meeting on May 7, 2015, participants were asked to vote on which goals and which tasks were most important for Sterling. The column on the left side of each table shows the tally of votes received by each goal and task. A long dash in that column indicates that the goal or task was not yet available for review at the public meeting.

Resources of time, energy, and funding are never ample enough to allow every goal to be achieved immediately, and some objectives must necessarily be achieved in a logical sequence. Therefore, **tasks** associated with the listed goals are **prioritized** as intended to be achieved within a short-term, mid-term, or long-term time frame relative to the 20-year Planning Period of this Comprehensive Plan. Short-term is generally intended to mean within 5 years, mid-term means within 5 to 10 years, and long-term indicates 10 years or longer.

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PLANNING GOALS & TASKS – Population & Land Use						
Goals						
4	Seek modest, but continuing population growth. (Use an estimate of 2700 people for Sterling's total population by 2035.)					
3	Recognize and adapt to significant demographic trends.					
9	Encourage development of land at the new K-96 interchange and in the corridor between it and the City, that ensures its highest and best use.					
2	Protect farmland from the intrusion of unnecessary non-agricultural uses which detract from the productivity and character of the rural landscape.					
				Priority		
Tasks				short	mid	long
0	Pursue development of an <b>interchange District Plan</b> .			<input type="checkbox"/>		
6	Develop an annexation strategy for the area between the K-96 interchange and Sterling.			<input type="checkbox"/>		
2	Develop a gateway design and a plan for beautification, for the corridor from the K-96 interchange to Sterling.				<input type="checkbox"/>	
6	Develop a strategy for residential and commercial development of the area between the K-96 interchange and Sterling.				<input type="checkbox"/>	<input type="checkbox"/>
2	Consider encouraging development of a truck stop at the K-96 interchange.					<input type="checkbox"/>

It is essential that community leaders balance the development of a new interchange area with support of the City's existing downtown. Even while the City's focus is temporarily but necessarily diverted to development of the area between the new interchange and existing neighborhoods, Sterling's extraordinary downtown should be preserved and enhanced.

**One of the City's major policy goals must be to strive to coordinate and balance the development of the interchange area so that it complements downtown Sterling, rather than competing with established businesses.**

An **Interchange District Plan** would establish policies and procedures to encourage residential and commercial development of the area between the K-96 interchange and the existing neighborhoods of Sterling, and to pursue annexation as appropriate. The document should include guidelines for beautification of the corridor, and creation of a gateway feature for the City.

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<b>PLANNING GOALS &amp; TASKS – Downtown</b>							
<b>Goals</b>							
9	Cultivate a vibrant downtown with a balance of workplaces, restaurants, services, and retail.						
4	Continue to support existing downtown streetscape, city facilities, and community activities.						
7	Develop a retail draw by encouraging the expansion and attraction of more local retail and service businesses downtown.						
2	Strive for shared on-street public parking, good lighting, bike racks, public art, street trees, and creative signage downtown.						
				<b>Priority</b>			
<b>Tasks</b>				<b>short</b>	<b>mid</b>	<b>long</b>	
0	Update the Sterling downtown business Directory.				<input type="checkbox"/>		
2	Institute direct marketing efforts for Sterling's downtown businesses, including Studio 96.				<input type="checkbox"/>		
3	Continue to support the Chamber of Commerce / Main Street Sterling programs.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Explore advantages and disadvantages of consolidating the Chamber of Commerce and Main Street Sterling.				<input type="checkbox"/>		
1	Encourage extension of business hours downtown (later than 5 pm on weekdays and 11 am on Saturdays).					<input type="checkbox"/>	
2	Encourage removal of the remaining metal facades on downtown buildings.					<input type="checkbox"/>	
1	Consider establishing more events which use downtown as a venue.					<input type="checkbox"/>	
2	Study opportunities for historic recognition elements along Broadway, such as a plaque at the first Dillon's grocery store.					<input type="checkbox"/>	
0	Investigate dollar invested versus dollar of appraised value, especially in the downtown commercial district. The current imbalance makes it hard to borrow, and hard to justify investing in downtown building renovations.				<input type="checkbox"/>		

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PLANNING GOALS & TASKS – Quality of Life						
Goals						
8	Grow, but strive to retain Sterling's cherished small-town ambience and quality of life.					
				Priority		
Tasks				short	mid	long
0	Develop and invest in policies, programs and projects that improve Sterling's quality of life.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Promote new residential and commercial development which is designed to maximize connectivity and walkability.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Develop additional public gathering spaces, flexible enough to support community events such as a Farmers Market or Art Fair.			<input type="checkbox"/>		
0	Promote public awareness of healthy lifestyle options. Promote activities and events that strengthen social connections in the community, and celebrate community health.				<input type="checkbox"/>	<input type="checkbox"/>
8	Continue to support community celebrations (4th of July, WarriorFest, Pots & Petals, Prairie Art Show, College "Love Sterling" Barbecue, etc.).			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PLANNING GOALS & TASKS – Urban Forestry						
Goals						
2	Protect & preserve woodlands, especially in tree rows and along creeks and drainage ways.					
3	Encourage planting of appropriate tree varieties, on both public and private land.					
				Priority		
Tasks				short	mid	long
1	Develop and fund an ongoing maintenance program to care for trees on public property.			<input type="checkbox"/>		
2	Replace downtown street trees as needed with appropriate species, in appropriate locations.			<input type="checkbox"/>		
–	Invest in the re-forestation of the park system.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Reestablish participation in the Tree City USA program.			<input type="checkbox"/>		
1	Develop public education efforts to encourage private landowners to properly maintain existing trees, and to recognize and remove hazardous trees.				<input type="checkbox"/>	
0	Work with the County Extension office to encourage renovation of existing tree rows and establishment of new tree rows by rural residents in the Planning Area.				<input type="checkbox"/>	<input type="checkbox"/>
1	Consider a <b>street tree rebate program</b> by the City, to encourage landowners to purchase and install trees on City rights-of-way. Establish a list of acceptable tree species and varieties, or utilize the list of "Preferred Trees for South Central Kansas", established by the Kansas Forest Service and available at <a href="http://www.kansasforests.org/documents/community/Pref%20Trees%20SC.pdf">www.kansasforests.org/documents/community/Pref%20Trees%20SC.pdf</a> .			<input type="checkbox"/>		



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PLANNING GOALS & TASKS – Economic Development						
Goals						
5	Actively create and maintain a positive business climate in Sterling.					
9	Be prepared to take advantage of new business prospects as opportunities arise, and to make economic development decisions at the speed of business.					
3	Strengthen connections to the regional economy.					
				Priority		
Tasks				short	mid	long
0	Establish a formal City policy to promote and coordinate economic development activities.			<input type="checkbox"/>	<input type="checkbox"/>	
0	Designate an individual as the City's primary contact and key coordinator of economic development activities.			<input type="checkbox"/>		
1	Budget for economic development and marketing activities.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Continue to expand marketing materials for economic development, including a web presence to allow site selectors or outside businesses to explore options in Sterling.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Encourage development of a licensed commercial Daycare facility in Sterling, with facilities for infants, and services available in the evenings as well as in daytime.			<input type="checkbox"/>		
0	Continue to work with Rice County Economic Development.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Approach the board of the <i>K-96 Corridor Development Association, Inc.</i> to see if they are open to expanding their organization into Rice County.			<input type="checkbox"/>		
0	Maintain a network of key contacts to call upon as needed to respond to a business prospect. (Kansas Department of Commerce, Rice County Economic Development, Kansas Economic Development Association, bankers, realtors, trusted commercial builders, potential investors, etc.)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Cultivate relationships with local business owners, identify potential issues as quickly as possible, and seek opportunities to assist.			<input type="checkbox"/>		
0	Develop an inventory and map of available sites and buildings near Sterling, with pertinent information such as square footage, sidewall heights, docks, fixed price, etc.			<input type="checkbox"/>		
0	Develop and regularly update retail and service demand data (possibly in conjunction with Sterling College) to demonstrate potentials to prospective companies.				<input type="checkbox"/>	<input type="checkbox"/>
0	Work to retain local ownership of the Co-op.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Establish connections to resources (Sterling College, Wichita State University, etc.) to help local businesses with succession planning as older business owners transition to retirement.			<input type="checkbox"/>		
1	Facilitate a college program geared to local business succession.			<input type="checkbox"/>		
2	Seek leads for potential new companies from existing businesses, if they have suppliers or customers that may wish to relocate.				<input type="checkbox"/>	
4	Review the impact of utility rates on the local business climate.				<input type="checkbox"/>	

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<b>PLANNING GOALS &amp; TASKS – Housing</b>							
<b>Goals</b>							
7	Protect the character and quality of existing residential neighborhoods.						
12	Increase the number and variety of quality housing opportunities in Sterling, by encouraging the development of additional rental housing, entry level housing, accessible housing, and quality midrange housing.						
5	Engage developers and builders to explore appropriate options for housing development.						
				<b>Priority</b>			
<b>Tasks</b>					<b>short</b>	<b>mid</b>	<b>long</b>
4	Establish an investor group interested in helping finance development of new housing in Sterling.				<input type="checkbox"/>		
0	Recruit a developer to initiate subdivision activity in Sterling.				<input type="checkbox"/>		
1	Recruit a builder to construct infill housing units.				<input type="checkbox"/>		
1	If necessary, assemble land for residential development.					<input type="checkbox"/>	
8	Encourage development of quality starter homes, as well as midrange townhomes and houses.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Promote the construction of more duplexes, multiple dwelling units, and rental units.					<input type="checkbox"/>	
5	Develop accessible housing, for handicapped residents, and to allow seniors the option to age in place.						<input type="checkbox"/>
2	Engage in a joint marketing program with developers/builders/realtors to identify opportunities for finding homes, and encourage people to move to Sterling.					<input type="checkbox"/>	<input type="checkbox"/>
1	Establish a central source for rental information.				<input type="checkbox"/>		
1	Initiate public education efforts on maintenance needs of older houses. (Chimneys, foundations, windows, insulation, etc.)				<input type="checkbox"/>		
6	Retain the <b>Neighborhood Revitalization Program</b> for older areas of the city, a proven program for assisting citizens to upgrade their homes.				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Seek grants to meet housing needs.					<input type="checkbox"/>	
1	Develop appropriate housing incentives, geared to the developer/builder more than the buyer, to make it easier for the builder to get a construction loan.				<input type="checkbox"/>		
1	Regularly review housing objectives, and monitor the status of Sterling's housing inventory.					<input type="checkbox"/>	<input type="checkbox"/>

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<b>PLANNING GOALS &amp; TASKS – Transportation</b>				
<b>Goals</b>				
7	Encourage active transportation options such as walking and biking.			
8	Incorporate Complete Streets design principles into Sterling's streets, for both new streets and for existing streets undergoing major renovations.			
10	Develop a long-term, financially sustainable street maintenance plan.			
6	Support a community-wide network of sidewalks.			
		<b>Priority</b>		
<b>Tasks</b>		<b>short</b>	<b>mid</b>	<b>long</b>
11	Invest in repairs to side streets and alleys.	<input type="checkbox"/>		
2	Develop a budget and a plan, and begin the process of paving the nearly 8 miles of dirt roads in the City.		<input type="checkbox"/>	<input type="checkbox"/>
–	Develop a study of roads in the City, to assess capacity issues related to agricultural use.		<input type="checkbox"/>	
–	Improve the pedestrian crossing at Forrest and Broadway.	<input type="checkbox"/>		
–	Improve local collector streets near Sterling College.	<input type="checkbox"/>		
0	Develop a <b>Street Sign Replacement Plan</b> to meet new regulatory requirements.	<input type="checkbox"/>		
4	Continue to invest in Sterling's Sidewalk Replacement Program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Maintain contact with KDOT regarding maintenance of Broadway / K-96 in Sterling, throughout the construction process of the new Bypass and interchange, until maintenance responsibilities are transferred to the City.	<input type="checkbox"/>		
5	Update walking/biking routes near the new Grade School, especially to connect the Grade School with Broadway along Jackson Street.	<input type="checkbox"/>		
–	Install or improve sidewalks as necessary to provide pedestrian access to all schools in Sterling.	<input type="checkbox"/>	<input type="checkbox"/>	
2	Develop a system of bicycle paths, lanes, and routes within Sterling, linking neighborhoods with local destinations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Develop a bicycle connection from Sterling to the TransAmerica Bike Trail.	<input type="checkbox"/>		
5	Develop a bicycle connection from Sterling to Lyons.		<input type="checkbox"/>	
3	Develop a bicycle connection from Sterling to Quivira NWR.			<input type="checkbox"/>

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<b>PLANNING GOALS &amp; TASKS – Utilities &amp; Stormwater Management</b>				
<b>Goals</b>				
2	Keep technology services that are provided to residents up-to-date.			
7	In order to provide utilities cost-effectively, encourage new residential development that is adjacent to existing neighborhoods.			
7	Ensure Sterling's future water supply.			
5	Identify and develop solutions for stormwater drainage problems in Sterling, particularly on the north end of town.			
		<b>Priority</b>		
<b>Tasks</b>		<b>short</b>	<b>mid</b>	<b>long</b>
–	Adopt & rigorously enforce policies to deal with structures, fences and vegetation in utility and drainage easements.	<input type="checkbox"/>		
–	Whenever feasible, install utilities underground.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Develop & implement a plan to reduce Sterling water hardness levels.	<input type="checkbox"/>		
–	Establish a CIP budget for replacement of outworn water lines.		<input type="checkbox"/>	
2	Review and update as necessary the <b>City Water Conservation Plan</b> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Review and update as necessary the <b>City Wellhead Protection Plan</b> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Review & update the <b>City Emergency Water Supply Plan</b> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Develop a <b>Sewer System Study</b> , including planning for sewage lift stations needed to support further development north of the City, and southwest to Cottonwood Lakes subdivision.		<input type="checkbox"/>	
–	Establish a program to rehabilitate older sanitary sewer lines, utilizing trenchless techniques.		<input type="checkbox"/>	<input type="checkbox"/>
1	Maintain and upgrade the City electrical distribution system, as described in the 2015-2019 Construction Work Plan.	<input type="checkbox"/>		
5	Encourage Midwest Energy to upgrade transmission line to Sterling.	<input type="checkbox"/>	<input type="checkbox"/>	
1	Explore future baseload power supply contracts that are diverse and long-term.		<input type="checkbox"/>	<input type="checkbox"/>
0	Relocate City utilities that run through blocks with no platted alleys or easements, or establish easements and clear them for proper maintenance access to existing utilities.		<input type="checkbox"/>	<input type="checkbox"/>
0	Review the 2005 Bucher Willis Ratliff drainage study, and consider implementing uncompleted projects.	<input type="checkbox"/>		
5	Undertake a <b>Stormwater Management Study</b> for Sterling. Address drainage problems in the north end of town, and in the area of Presbyterian Manor. Establish a community Task Force to assist in developing the Study.	<input type="checkbox"/>		
–	Consider green infrastructure techniques for stormwater management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Approach the K-96 Interchange contractor, to pursue efforts to coordinate interchange construction with development of a new detention or retention pond north of town.	<input type="checkbox"/>		

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<b>PLANNING GOALS &amp; TASKS – City Facilities (1 of 2)</b>				
<b>Goals</b>				
–	Maintain the quality of existing City facilities and equipment.			
–	Plan for and fund necessary future improvements to City facilities and equipment.			
		<b>Priority</b>		
<b>Tasks</b>		<b>short</b>	<b>mid</b>	<b>long</b>
–	Implement necessary maintenance & improvements to the <b>City Hall / Police Department building</b> : replace roof, repoint bricks, repair windows, replace insulation as needed, paint as needed, expand storage, replace carpet.	<input type="checkbox"/>		
–	Construct a <b>new City Maintenance Building</b> , and relocate Public Works or electrical distribution functions there. Renovate existing City Services Building to efficiently support the remaining function.		<input type="checkbox"/>	
–	Implement necessary maintenance & improvements to <b>City Services Building</b> : repoint bricks, repair windows, improve & expand storage for supplies and equipment.	<input type="checkbox"/>		
–	Establish on-line payment system for City utility bills and other invoices.	<input type="checkbox"/>		
–	City Police Department will continue to cooperate with Rice County Dispatch to migrate to <b>Next Generation 911</b> system in 2016.	<input type="checkbox"/>		
–	Work with Rice County to establish and migrate to an enhanced radio communications system for law enforcement and emergency response.	<input type="checkbox"/>	<input type="checkbox"/>	
–	Consider establishing an improved system to respond to Utilities trouble calls and track work orders.	<input type="checkbox"/>		
–	Consider installing security fencing around the City Equipment & Bulk Storage Yard.		<input type="checkbox"/>	
–	Consider designing and installing areas of full or partial covered storage for materials and equipment at the City Equipment & Bulk Storage Yard.			<input type="checkbox"/>
–	Consider windrowing and turning the compost piles at the City Compost / Burn Site, allowing easier access for residents.	<input type="checkbox"/>		
–	Consider establishing a regular, perhaps annual, City auction to dispose of surplus equipment or supplies.	<input type="checkbox"/>		
–	Implement necessary improvements to the <b>Sterling EMS facility</b> : replace windows, replace gutters, repair interior water damage, replace roof.	<input type="checkbox"/>		
–	Complete a City/County needs analysis for EMS service in Sterling.	<input type="checkbox"/>		

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<b>PLANNING GOALS &amp; TASKS – City Facilities (2 of 2)</b>				
		<b>Priority</b>		
	<b>Tasks (continued)</b>	<b>short</b>	<b>mid</b>	<b>long</b>
–	Continue to work with local health care providers to make continuous improvements to the <b>Sterling Medical Center</b> facility as needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
–	Improve the Sterling Medical Center parking lot.	<input type="checkbox"/>		
–	Encourage USD 376 to consider parking improvements at the Grade School and the High School.		<input type="checkbox"/>	
–	Encourage USD 376 to consider improvements to its tennis facilities.	<input type="checkbox"/>		
–	Pursue solutions to the blight associated with the abandoned filling station at the northern entry to the Sterling College campus.	<input type="checkbox"/>		
–	Implement necessary maintenance & improvements to <b>Sterling Library</b> , including facade brick tucking, gutter replacement, window replacement, elevator repair, and renovation of the elevator entryway.	<input type="checkbox"/>		
–	Evaluate grades around the Library, ascertain improvements to prevent water infiltration problems, and identify potential sources of financing.	<input type="checkbox"/>		
–	Re-set or align stone memorial markers at Sterling Community Cemetery, as needed.	<input type="checkbox"/>		
–	Implement necessary maintenance & improvements to the chapel at <b>Sterling Community Cemetery</b> : replace windows, and repair masonry.	<input type="checkbox"/>		
–	Explore methods to reduce the infestation of sandburs at <b>Sterling Community Cemetery</b> .	<input type="checkbox"/>	<input type="checkbox"/>	
–	Paint the <b>Sterling Water Tower</b> with a more welcoming design.		<input type="checkbox"/>	
–	Consider investing in community <b>Tornado Shelters</b> .			<input type="checkbox"/>

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<b>PLANNING GOALS &amp; TASKS – Tourism</b>						
<b>Goals</b>						
0	Enhance tourism by taking advantage of existing attractions and events.					
8	Promote local tourism opportunities in regional markets. Focus on appealing to bicyclists, small-town aficionados, birders, fishers, and hunters.					
2	Encourage development of bed & breakfast inns, hunting / fishing cabins, and other rental housing alternatives for visitors.					
				<b>Priority</b>		
<b>Tasks</b>				<b>short</b>	<b>mid</b>	<b>long</b>
5	Create a local "tourist destinations" map, to be available for download from the City website.			<input type="checkbox"/>		
1	Coordinate with the Sterling motel to promote Sterling attractions on the motel's website (currently lists Hutchinson destinations).			<input type="checkbox"/>		
5	Revise City website to promote local tourist destinations (Quivira Wildlife Refuge, TransAmerica Bike Trail, Sterling Lake Park, Sterling College).				<input type="checkbox"/>	
3	Assign an individual to enhance Sterling's web profiles on other tourism websites. In particular, update the TransAmerica Bike Trail profile.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Capitalize on Studio 96 as an asset to provide meeting space for out-of-town users for business and organizational day meetings.			<input type="checkbox"/>	<input type="checkbox"/>	
1	Consider participating in the Kansas Sampler Foundation.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Work with Quivira to develop more annual events, to attract more people.				<input type="checkbox"/>	<input type="checkbox"/>
5	Design and install a system of wayfinding signs, to help visitors find their way around Sterling.				<input type="checkbox"/>	<input type="checkbox"/>
0	Recognize regional sporting events and tournaments as a tourism opportunity.					<input type="checkbox"/>
5	Encourage at least one really good chef to develop a restaurant in Sterling that is a foodie attraction.					<input type="checkbox"/>

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PLANNING GOALS & TASKS – Parks & Recreation				
Goals				
7	Maintain the high quality of existing park facilities, especially at Sterling Lake Park.			
5	Improve existing neighborhood parks, and consider developing additional neighborhood parks.			
1	Develop facilities that offer on-demand opportunities for exercise.			
3	Develop parks that increase access to nature.			
–	Promote ADA accessibility at all parks through installation of handicap parking stalls and sidewalks, and sufficient accessible furnishings and equipment.			
–	Make efforts to work in partnership with both USD 376 and Sterling College on recreation and park improvements, when synergy and opportunities exist to do so.			
		Priority		
Tasks		short	mid	long
7	Improve and expand the Campground at Sterling Lake Park.	<input type="checkbox"/>		
0	Explore adding an outdoor exercise equipment cluster at a neighborhood park.	<input type="checkbox"/>		
4	Provide shade, drinking fountains, and perhaps even waterspray elements at park playgrounds, to encourage activity even on hot days.		<input type="checkbox"/>	
5	Continue participation in the KDWP Community Fisheries Program at Sterling Lake.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
–	Evaluate expansion options for the Sterling Lake RV Park.	<input type="checkbox"/>		
–	Upgrade signage for tent camping availability at Sterling Lake Park.	<input type="checkbox"/>		
–	Evaluate facilities at parks other than Sterling Lake Park, to determine whether they need updating or reconstruction.	<input type="checkbox"/>		
–	Evaluate the Sterling Municipal Pool; analyze its capacity to meet future needs and the extent of necessary repairs. Consider the feasibility of installing shade structures, and of adding other outdoor water enhancements such as a waterspray element.	<input type="checkbox"/>	<input type="checkbox"/>	
1	Find a location, and pursue development of a Dog Park. (Strive for synergy by locating on a bicycle route, for bicyclists with dogs!)			<input type="checkbox"/>
2	Consider acquisition of floodplain land for a nature park.			<input type="checkbox"/>
1	Review programs provided by the Sterling Recreation Commission, considering community needs.			<input type="checkbox"/>



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<b>PLANNING GOALS &amp; TASKS – Policies &amp; Programs</b>				
<b>Goals</b>				
8	Continue to support and stay engaged with Sterling College and with USD 376.			
9	Promote upkeep of property through proper zoning and ordinance enforcement.			
4	Develop annexation policies to maintain reasonable city boundaries, and to ensure that those who benefit from City services are full partners.			
		<b>Priority</b>		
<b>Tasks</b>		<b>short</b>	<b>mid</b>	<b>long</b>
1	Consider annexing Sterling Cemetery and the Wastewater Treatment Plant.	<input type="checkbox"/>		
2	Study the potential for establishing extraterritorial jurisdiction.	<input type="checkbox"/>		
4	Pursue annexation as appropriate, particularly in the interchange corridor.	<input type="checkbox"/>	<input type="checkbox"/>	
0	Utilize the Site Plan Approval process to promote beautification.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Establish and maintain a Sterling five-year Capital Improvement Program.	<input type="checkbox"/>		
0	Develop a code to allow food trucks.	<input type="checkbox"/>		
1	Adopt development finance policies in advance of projects, on such issues as IRB's, special assessments, incentives, and utility rates.	<input type="checkbox"/>	<input type="checkbox"/>	
2	Consider establishing special assessments and other financing to support residential development.		<input type="checkbox"/>	
0	Develop a dedicated Sterling Community Foundation.		<input type="checkbox"/>	
1	Encourage Sterling College to continue to sponsor its annual "Fix-up Day".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Continue to be aggressive about condemning rundown houses before they drag their neighborhoods down with them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Investigate participation in the Kansas PRIDE Program.		<input type="checkbox"/>	
7	Invest in ongoing maintenance of municipal facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Regularly evaluate construction, health, and planning codes. Make additions or revisions as needed, to improve and maintain the quality of housing and related environmental conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	Cooperate with the County on implementation of zoning regulations and construction and sanitation codes outside the City.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **Section 2 – Community Background Data**

CHAPTER 3. Historical Development

CHAPTER 4. Natural Resources & Environmental Influences

CHAPTER 5. Population

CHAPTER 6. Housing

CHAPTER 7. Economy

## CHAPTER 3. Historical Development

Knowledge of the past historical development of an area is often important to an understanding of its future. Factors which influence growth or change may extend their effects for decades. For example, once established, roads remain a pattern that endures for generations — the location of one-third of the streets and highways in the nation were laid out before the automobile was even invented. The structure and purpose of a building may change over time, but its location remains a focal point to attract further development.

The following account of the formation and development of Sterling was prepared for this plan by deriving information from *Sterling, Rice Co. Kansas*, reprinted by Ross W. Zimmerman, *Sterling Centennial*, printed by the Sterling Bulletin in 1972, and *Main Street Sterling, The History of Sterling, Kansas* by Max Moxley.

### History of Sterling

It was on March 3, 1863, that President Abraham Lincoln signed the railroad land-grant bill that would eventually give three million acres of land to the then budding Atchison, Topeka and Santa Fe Railway. With a stroke of his pen the President opened up a whole new section of the west, making possible such pioneer settlements as Sterling and its forerunner, the tiny Quaker village of Peace.



*Broadway Avenue in Sterling*

– *Connect Sterling* –

*Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035*

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After 1822, when William Becknell pioneered the Santa Fe Trail, thousands of travelers crossed Rice County, but few chose to stay. The Railroad Act of 1862 gave the Atchison Topeka and Santa Fe Railway ten years to extend its track to the Colorado line, which seemed to be reasonable; but an affair called the Civil War occurred which interrupted this expansion. It was not until 1868 that the first spike was driven at Topeka.

By 1871 the railroad line had reached Newton. In the fall of that year a company was formed in Topeka known as the Agricultural Colony of Kansas. This group wanted to locate a community of farmers somewhere along this new railroad line – "237 miles southwest of Atchison". The initial exploration trip was made toward the end of December 1871, and the town of Peace was surveyed on January 15, 1872.

The surveyors showed very little imagination. The town site was exactly one mile square, Cleveland to Garfield and First Street to Eleventh Street, with Broadway, the principal street, located on the half-mile line.

The town was originally called "Peace", out of respect for Mr. Ninde, a Quaker, who was the town's first land agent. His headquarters was a strange building hauled here by wagon from Peabody and located south of town, across the road from what is now known as Sterling Lake Park. This structure housed a store, hotel, post office, surveyor's office, and the land office.



By 1876 the town of Peace was called Sterling, though the reason for the name change is something of a mystery. When the county was organized in 1871 there were only six townships, and one of them, Sterling Township, included all the southern part of the county. There was also a tiny settlement near Peace called Sterling, which had a post office. In May of 1876 the proud people of Peace decided that they needed a more progressive name for the fast-growing city, and the town was incorporated as a city of the third-class under the name of Sterling.

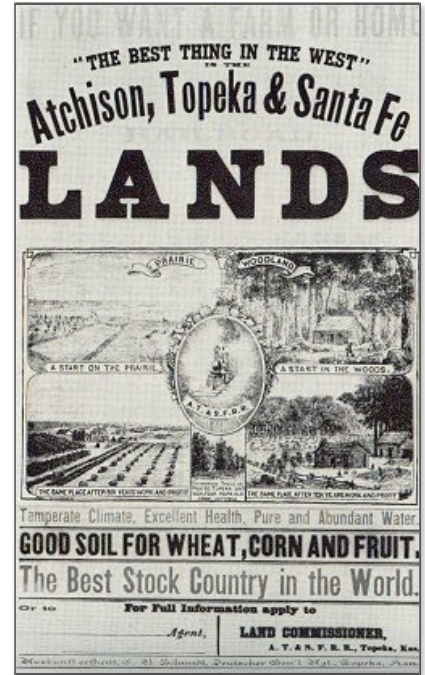
Looking back, it seems a wonder that the town got underway at all. It was founded in 1872. A nationwide financial panic hit in 1873, and the grasshopper plague followed in 1874. The town developed faster than the countryside. The sod had to be broken, and crops planted. For the first two years the farmers lived largely on profits from buffalo bones, which were gathered from the prairie and sold for \$8 a ton.

It was the policy of the railroad to locate a town about every ten miles, in order to sell lots and to populate the area with potential passengers and freight customers. Essentially, the entire geography was based on the five-mile-an-hour gait of the horse, a fact which eventually had much to do with the town's future, and ultimately its decline.

During the first five years there was much moving around and shuffling of the Rice County inhabitants. The town of Atlanta was doomed to fade once its location on the Santa Fe Trail was no longer of importance. Several buildings from Atlanta were moved to Sterling. A very large building was moved to Sterling from Union City, a settlement on Cow Creek south of Lyons. With major additions, it became the Green Mountain House, Sterling's principal hotel.

Sterling and Raymond, a town northwest of Sterling, were the oldest towns in the county. Raymond bloomed quickly under the illusion of a future in cattle, but faded fast as the Texas cattle trade eventually made its way to Dodge City. Several Raymond businesses then moved to Peace, bringing not just the proprietors, but also their buildings. Henry Sherman and T. C. Magoffin were among these mobile businessmen. Magoffin's Hall became one of the leading institutions in Sterling; both church meetings and dances were held in the same upstairs room.

The first school district in Rice County, District No. 1, was organized in the Green Mountain House hotel. The first school house, a frame structure 25 by 40 feet in size, was built on what was called College Square, where the present grade school still stands. The original school building was replaced in 1878, by a large brick school on the same block. Much later, additional grade schools were built on South Broadway, and the Adams Street school was erected at Ninth and Adams. In 1911, a new high school followed on North Broadway. Sterling's present high school was built in 1954.



Sterling Grade School



Located on the mainline of the Atchison, Topeka and Santa Fe Railway, Sterling grew rapidly and became the principal trading point for a wide area. The "Kinsley cutoff" or "bow-string" of the Santa Fe railroad was not built until 1887. Until then, Sterling served as a retail center, particularly for lumber, for the entire area to the southwest, including Sylvia and Stafford. Lyons did not get a railroad until 1880, with the construction of the McPherson-Ellinwood branch.

The year 1876 was a significant one. Peace changed its name, and Rice County held an election to determine the location of a new county seat. Two sites were proposed: Peace and a new town to be called "The Centre" and located in the exact center of the county. When Rice County was originally organized in 1871, it included five townships which are now in Reno County – Hays, Walnut, Medford, Salt Creek, and Grant. With the election pending, politicians at Atlanta persuaded the legislature to give these townships to Reno County, 115,200 acres of land, in order that Peace would be too close to the southern line to be a practical location for the county government. As a result, Peace lost to "The Centre", which later became Lyons, by a vote of 457 to 336.

As in most pioneer towns, the majority of the original buildings were one-story frame structures with false fronts. Sterling lost some twenty of these buildings in four major fires in the years 1880 to 1882. Three of the conflagrations were on Broadway, between Main Street and the railroad tracks.



*Tracks' end, near Hutchinson, 1872*

The first train in Peace arrived on the Santa Fe Railway at 4:00 p.m. on June 26, 1872. It was a construction train of about forty cars. On the morning of that day the smoke of the engine could be seen east of town, and by the evening of the 27th the crew was camped two miles west of the city. The grade had already been prepared, and track was laid at the rate of about three miles a day. Later, in western Kansas, as much as ten miles of iron was laid in a day.

Many of the original farmers, having come from Iowa, Illinois and Ohio, had expected to be able to grow corn here, but it was not to be. Rainfall was too sparse. As an experiment they turned to sorghums, which led to some unusual local industries. Encouraged by E. Branson Cowgill, editor of the *Rice County Gazette*, they established a molasses mill, a sugar cane mill, and most importantly, a broomcorn industry. Sterling gained national attention as a "Broomcorn Capital", shipping not just carloads but trainloads of brush to New York. A dwarf corn that grew well in the sandy land southwest of town was shipped to Schenectady, N.Y. where it was used in making whisk brooms. (Even the "dwarf" corn was twelve feet tall!)



Another early industry was the Sterling salt plant established in 1888 by banker T. H. Brown. It was a brine plant that operated until sold to Morton Salt in 1929.

From almost its first year, the town counted flour milling as a major industry. The city's first merchants, Landis and Hollinger, built the Keystone Mill and Elevator on South Broadway in 1873. This was followed by the International Roller Mill in the 1800s, located near Seventh Street along the railroad tracks. This large mill burned at the turn of the last century, and the all-concrete Arnold Mill was erected in 1922. The Arnold Mill was sold to the Farmers Co-op in 1955, and the mill shut down.

The Farmers Co-op Union has continued to expand through the years and is now a county-wide operation, one of the largest in the state, and with headquarters in Sterling. Equally important and still so today, was the establishment in 1887 of Cooper Memorial College by the Synod of



Kansas of the United Presbyterian Church of North America. The venture, promoted by the Sterling Land and Investment Company, was essentially a business move. A group of civic leaders, most of whom were members of the Congregational Church, offered a \$25,000 endowment. The men hoped to recoup their investment by selling lots in the north end of town. Most lots were never sold, but the school opened and survived, and changed its name to Sterling College in 1920.

The 1890s were perhaps the town's best years. Such structures as the Masonic Temple, the new Methodist Church, the D.J. Fair home at 6th and Monroe, and the Smyser (Zimmerman) home on West Main and 7th Street were erected.

In 1905 the J.S. Dillon Company was founded in Sterling. The first establishment was a wagon shop and furniture shop on West Main Street. The store eventually expanded its stock to include dry goods, furniture, hardware and second-hand items. From this beginning has bloomed an operation of over 300 stores across the country for the Hutchinson-based Dillon's Stores. Though not in its original form, Dillon's is still a staple of the Sterling community.

In 1916, bonds were issued by the City to purchase the George Morris Electric Light Plant from George Morris, and to improve both the plant and the distribution system. Sterling continues to be a public power community.

In 1920, Broadway was paved from Cleveland Avenue south. The City carried 33% of the financing for the project and property owners along the route paid the balance. In 1923, Broadway was paved from Cleveland Avenue north to the city limit.

Street lights were first installed in 1921.

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A sanitary sewer system was first installed in 1923.

The City Manager/Commission form of government was inaugurated in 1924, and Sterling became one of the first professionally managed communities in the country.

Sterling escaped some of the trauma of the 1930's Depression by the discovery here of oil in 1928. There has been exploration and production in the area continuously since that time.

Vital to the community was the introduction of irrigated farmland in the 1960s, from a supply of water in gravel beds 60 to 100 feet below the surface. Also, cash grain has been supplemented with cattle raising by most local farmers.



Several industries have been important additions to the economy, including a plant for the manufacture of front end loaders for tractors, a chemical plant, and a former drilling company which is now the location of a water filtration manufacturer called United Industries.

Other major local employers include Sterling Presbyterian Manor, as well as Sterling College.

For a time, Sterling gained statewide recognition as a medical center through the Trueheart Clinic and its pioneer work in the treatment of skin cancer. Dr. P.P. Trueheart and his son, Marion, were the first in the Midwest to use X-rays and radium for this purpose. The first hospital was opened in 1902, and new facilities were added in 1909 and again in 1953. The hospital eventually closed in 1976.

In the 1960s, school unification resulted in a strong local school system with a substantial tax base.

The early 1970s saw the establishment of a medical clinic housing three doctors, a nurse practitioner and one dentist. Improvements to the Rice County District Hospital located 9 miles north in Lyons have been undertaken through tax support from citizens. Hutchinson Regional Medical Center and Summit Surgical LLC both serve the City with major medical services and are both located in Hutchinson, approximately 20 miles away. One nursing home, Sterling Presbyterian Manor, is located within the community.

Municipal services and infrastructure have kept up with the times and seen major improvements such as a new water tower, fire station, swimming pool, upgraded water lines and electrical distribution system, a new sewer lagoon, and the addition of a Veterans' Memorial and other extensive park improvements. A major streetscape improvement was completed in 2000, and new grass greens at the Sterling Country Club golf course have boosted the membership.





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The Sterling Chamber of Commerce supports "The Old Fashioned Fourth of July Celebration", including an annual parade that has continued for over 115 years. The event draws large crowds, especially for the turtle races which have taken place for 74 years straight, and for the magnificent fireworks display presented each year at Sterling Lake Park.



Educational institutions have made marked facility improvements in recent years. The local school district, Sterling USD 376, embarked in 2008 on a \$20 million bond issue for improvements, including the addition of storm shelters and a brand new grade school. In addition, Sterling College has renovated a major administration hall, added two dorms, renovated the theater, and is looking at the addition of another dorm to bolster its record breaking enrollment in the mid 2010s.

In the late 1990s and early 2000s, the City undertook annexation efforts, including the addition of forty units of lake-side recreational development southwest of the city, known as Cottonwood Lake.

Efforts began in 2010 to work toward a long-term solution to affordable housing in Sterling, particularly for employees of the growing local economic sector. Between 2000 and 2010, the number of housing units in the community declined by thirty.



Sterling's population has remained fairly steady over the years. For 100 of 120 years it has always been near or just above the 2,000 mark in population. The census of 2000 reported Sterling's population as 2,642, which by the 2010 Census had decreased to 2,328.

As Sterling moves through the 21st century, questions arise about its future, and the future of all small Kansas cities. Planning for the future, Sterling hopes to continue to thrive.



## Historic Preservation

Sterling has a remarkable inventory of charming older homes, as well as a number of historical commercial buildings in the downtown area along Broadway. These structures and neighborhoods give Sterling character, and an extraordinary sense of place.

Three buildings in Sterling are listed in the National Register of Historic Places: Cooper Hall on the campus of Sterling College, the Shay Building, and the Sterling Free Public (Carnegie) Library.

Three other buildings in and near Sterling are listed as potentially eligible for listing on the National Register: Wilson Hall and Campbell Hall (both on the Sterling College campus), and a 19th-century farmstead on 18th Road between Avenues U and V.

Additional information on Sterling's historical buildings is available from the *Kansas Historic Resources Inventory* database, at <http://khri.kansasgis.org>.

### **Sterling Buildings Listed on the National Register of Historic Places**

**Cooper Hall** – on Sterling College campus;  
west of N. Broadway, north of Cooper Avenue

Cooper Hall was built in 1887 by George H. Evans of Topeka, based on plans by architect William Gall of Arkansas City. The rough-hewn limestone blocks used in its construction were quarried at Strong City in Chase County.

The three-story Gothic-influenced building is still used as the College administration building and for classrooms. A focal point on the campus and a landmark in Sterling, it was listed in the National Register in 1974.



*Cooper Hall  
Sterling College*

**Shay Building** – 202 South Broadway Avenue, on the southeast corner of Broadway and Monroe

Built in about 1881, just five years after the City was incorporated, the two-story brick Shay Building is an example of late 19th-century vernacular commercial styling. It was an early focus of business activity in Sterling, and is the only original building still remaining on what was historically Sterling's most important intersection.



*Shay Building  
Sterling, Kansas*

Erected and owned for many years by T.C. Magoffin, an early Sterling merchant, it was purchased by R.J. Shay in 1892. The Shay family continued to own the building until 1965.

In 1906, the building was redesigned. The brick on the main facades was parged with stucco, with lines scored in the stucco to make it resemble cut stone. An ornamental metal cornice was added along the roof line, including the word "Shay" on the pediment above the main corner entrance. This was apparently an attempt by the owner to keep pace with the newer, more impressive buildings that had been constructed on the other three corners of the intersection – the Mincer Building (lost to fire in 2002), Citizens State Bank (demolished in the mid-1960s), and First National Bank (demolished in 1968).

Approximately 10,000 square feet in size, the Shay Building has two first floor commercial storefronts, and nearly a dozen rooms upstairs used in the past as both professional offices and apartments. Over the years, the building has housed dry goods and grocery stores, social clubs, a photography studio, a dentist, a cobbler, and a hardware store. Starting in the 1930s the first floor became a pool hall, which was active for 70 years; when it closed in 2003, the building was unoccupied for the first time in its history.

The Shay Building has endured for a century without major structural changes, and has been recently rehabilitated in accordance with national restoration standards. It was listed in the National Register of Historic Places in 2010.

**Sterling Free Public (Carnegie) Library** –  
132 North Broadway, on the southeast  
corner of Broadway & Jefferson

Constructed in about 1917, the Library is a one-story brick building with limestone details, and a tiled roof. It incorporates Jacobethan design elements, including steep roof gables and light stone trim around the door. The architect was George P. Washburn of Ottawa, who designed nine Kansas Carnegie Libraries.



*Sterling Free Public Library (a Carnegie Library)  
Sterling, Kansas*

Scottish-American industrialist Andrew Carnegie significantly influenced the development of public libraries around the world. Between 1886 and 1921, in the United States alone, funds from his Carnegie Foundation helped build 1,681 city libraries, as well as 108 college libraries. Before Carnegie, many communities had no library, and those that existed were typically circulating libraries, available only to those who could afford a subscription. The system of publicly supported libraries we take for granted today, free to all users, is largely a result of Andrew Carnegie's vision and generosity.

At the time, public libraries were a relatively new building type, and many early Carnegie libraries were expensive Beaux Arts buildings with impressive exteriors and extremely inefficient floor plans. Then in 1910 the Carnegie Foundation began providing the first widely circulated guidelines for public library design – *Notes on Library Buildings*. These guidelines established many of the standard design elements still regularly used in libraries today.

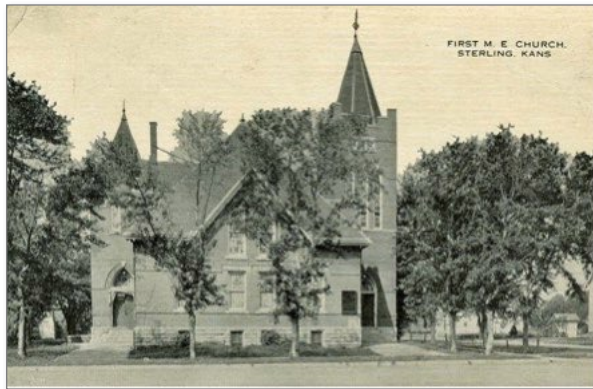
A Library Association was organized in Sterling in 1902, and by 1916 had won their \$10,000 Carnegie Library grant. Sterling's Library reflects the model specifications and floor plans included in the *Notes on Library Buildings*, and functioned well for the community. Eventually additional space was needed, and in 1982, a 1,700-square-foot addition was constructed at the back of the original 1,848-square-foot Library building.

The Sterling Free Public Library was listed in the National Register of Historic Places in 1987, as part of the "Carnegie Libraries of Kansas" thematic resources nomination. It is one of 63 Carnegie Libraries built in Kansas between 1900 and 1930, and one of only 28 that still retain enough of their original character to be on the National Register.



### **Other Historic Buildings in Sterling**

Other buildings in the community may have the potential for listing on the National Register, should their owners ever decide to pursue such recognition. The First United Methodist Church, on the southwest corner of Broadway and Jefferson, is one example of such a building. It was originally constructed in 1901; an addition was added in 1932. In 1991, that addition was removed and replaced with a new addition, and the basement was filled in. The main portion of the church still retains enough historical integrity that it may qualify for listing.



*First United Methodist Church – 1921*



*First United Methodist Church – 2015*

## CHAPTER 4. Natural Resources & Environmental Influences

The location of regional destinations, physical features, and natural resources all influence the development of various land uses within a community. Both natural and man-made features may positively support particular land uses, or they may restrict development possibilities and limit the directions available for urban growth.

Developmental policies should be established which maximize the advantages and minimize the disadvantages of a planning area's location and physical characteristics. Such policies are essential to guide urban development in a way that is both economically efficient and aesthetically pleasing.

In this chapter, a general picture is presented of the Sterling Planning Area's location and physical features, and their implications for the future development of various land uses. Geographic location, climate, soil types, water resources, topography and drainage, flood hazards areas, and woodlands will be discussed.

### Geographical Location

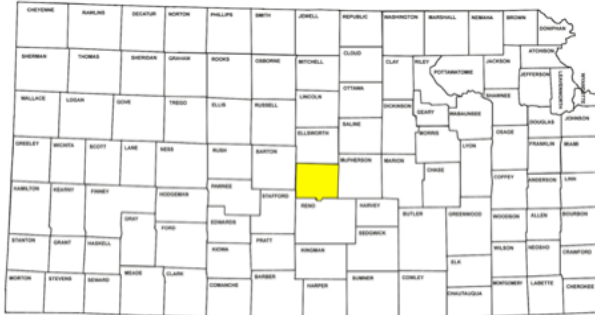
As shown on the geographic location maps which follow, Sterling is in south-central Rice County, which is in central Kansas. Sterling is not bordered by any other towns; the nearest cities are Lyons (about nine miles to the north), and Nickerson (to the southeast, about 11 miles away by road). There is land for potential contiguous expansion all around the City of Sterling, however the Arkansas River floodplains south and west of the City constrain future growth in those directions.

Currently K-96 goes through the center of Sterling, conveniently connecting the city's residents to the state highway system. That highway is soon due to be realigned, bypassing Sterling, but beginning in 2017 a new interchange will be constructed about half a mile northeast of the City, maintaining the community's excellent highway access.

Sterling is less than a one hour drive from I-135 to the east, and access to the interstate highway system. Driving from Sterling, it takes approximately 27 minutes to reach Hutchinson, 43 minutes to reach McPherson, 45 minutes to reach Great Bend, and 1 hour and 13 minutes to reach Wichita. Quivira National Wildlife Refuge is just a 33 minute drive west from Sterling.

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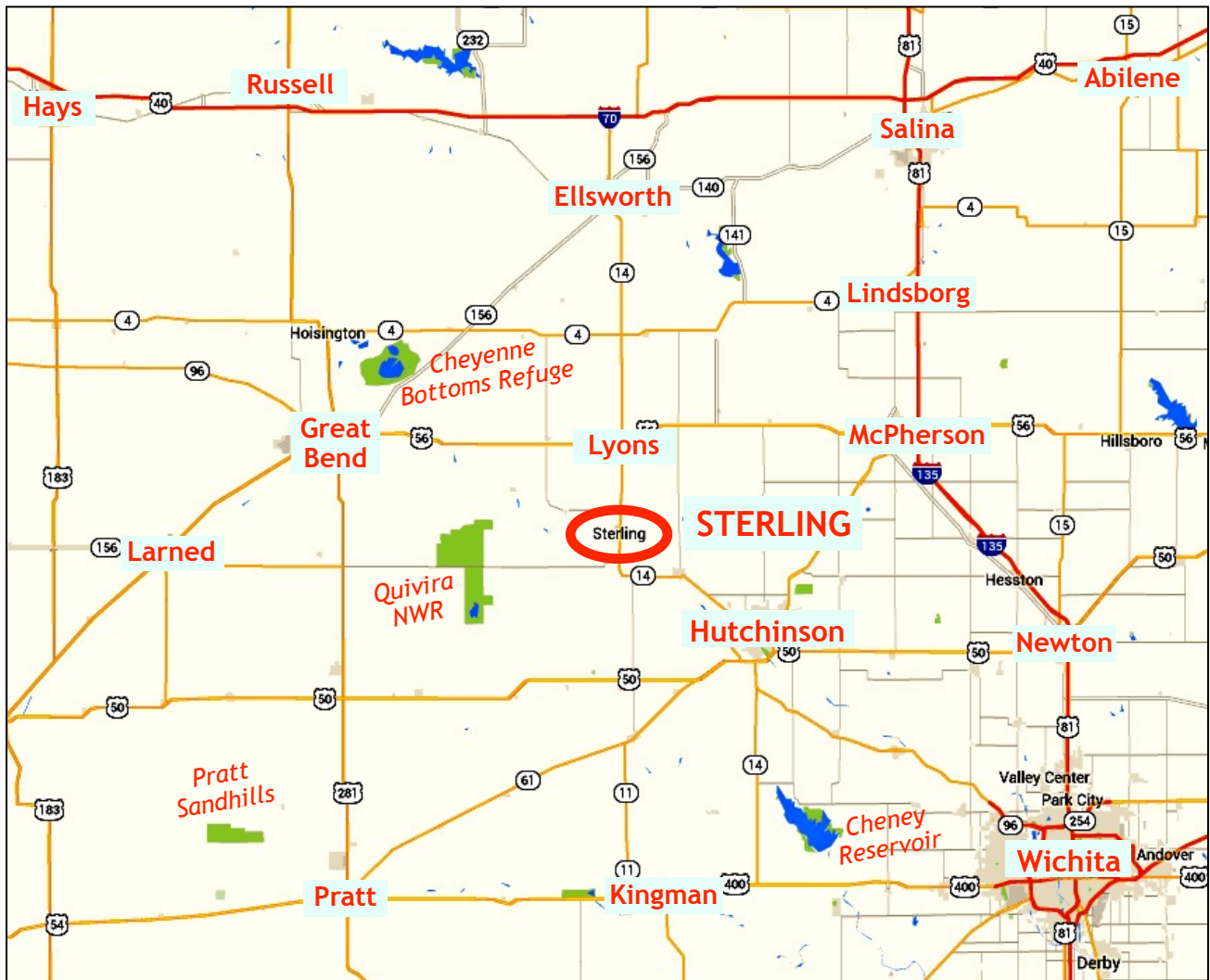
Location of Rice County in Kansas



Rice County Townships

Farmer	Eureka	Victoria	Galt	Odessa
Pioneer	Lincoln	Harrison	Mitchell	Union
Raymond	Center	Atlanta	Wilson	Rockville
Bell	Valley	<b>STERLING</b>	West Washington	East Washington

Geographic Location of Sterling



## Climate

Climate significantly affects agricultural, economic, and development activities. The continental climate typical of the Planning Area is characterized by wide daily and annual temperature variations, abundant spring rainfall, occasional high winds, and much sunshine. Frequent and abrupt weather changes occur, usually of short duration.

The Sterling Planning Area enjoys a generally beneficial climate, with relatively few disadvantages. Its long growing season offers temperatures and sunshine conducive to agricultural production. Total precipitation is adequate for the principal crops (wheat, corn, grain sorghum, soybeans, sunflowers, hay and pasture), though in some years its timing and distribution can cause problems. High winds or hail may occasionally damage crops or structures, sometimes catastrophically.

The typically mild winters mean that various outdoor recreational activities can be sustained almost all year round. Only during the coldest weeks of the year is construction restricted, or construction methods constrained. However, recurring abrupt temperature swings, and frequent, often daily, freeze-thaw cycles in winter profoundly affect the durability of road surfaces and some other building materials.

**Sunshine** The yearly average percent of possible sunshine in Sterling is 68%. On average, there are 224 sunny days per year.

**Winds** Prevailing winds are usually from the south, except in February, when they are from the north. Highest average wind speeds are in the spring, particularly in March and April. Tornadoes may occur.

**Winter Temperatures** Winters can be quite cold, but generally last only from December through February. The coldest month is typically January, with an average maximum temperature of 41°F, and an average minimum temperature of 19°F. There are about 120 days per year with a minimum temperature below freezing. The record low temperature of minus 18°F occurred on December 24, 1955.

**Summer Temperatures** Warm summer weather generally lasts for about six months each year, from mid-April through mid-October. The hottest month is typically July, with an average maximum temperature of 93°F, and an average minimum temperature of 69°F. There are usually about 68 days per year with a maximum temperature of 90°F or higher. The record high temperature of 112°F was set on June 27, 1980, and again on July 28, 2011.

**Precipitation** Average annual precipitation is about 27 inches. The largest recorded annual precipitation was 47.49 inches in 1973; the smallest was 14.64 inches in 1966.

**Rainfall & Hail** On average there are 47 days a year with at least one tenth of an inch of rainfall. Rain is generally heaviest in May and June. The heaviest one-day rainfall was 5.65 inches, on June 13, 2010. Hail typically occurs most often from mid-April through June.



**Snowfall** The number of days with snow on the ground varies radically from year to year; occasionally, a winter may pass with no significant snow accumulation at all. Snow cover generally melts within a few days. Snow is typically heaviest in February. The average seasonal snowfall is just 14.4 inches. The record annual snowfall was 48.1 inches, in 1960. On average, there are 5.8 days of snow per year.

**Growing Season** In Sterling, there is a 10% chance that the first frost of autumn will occur by October 5th, a 50% chance that it will occur by October 20th, and a 90% chance that it will occur by November 5th. There is a 10% chance that the last frost of winter will occur by March 31st, a 50% chance that it will occur by April 13th, and a 90% chance that it will occur by April 26th. The average length of the growing season is 181 days, although the length of the frost-free period may vary drastically from year to year.

## Soil Types

Soil is a valuable resource which should be protected, and some soil types are suitable for certain land uses, but not for others. When an inappropriate land use is imposed on an unsuitable soil type, both the land use and the soil are compromised.

Soils in the area about Sterling are typically well-drained loams – variously loams, fine sandy loams, and loamy fine sand – with slopes ranging between level and 5 percent. Likelihood of flooding ranges from rare to occasional to frequent, depending on location. With the exception of restrictions imposed by high water tables or flooding risk, these types of soils are well suited to both agriculture and development.

Official soil survey information, which is fundamental to many planning decisions, is provided by the USDA Natural Resources Conservation Service (NRCS) on their website *Web Soil Survey*. Information is offered on the characteristics of the soils themselves, and their suitability for farming, range management, recreational development, and wildlife protection, as well as for various urban development uses such as:

- **Building Site Development** – including restrictions on shallow excavations, basements, commercial buildings, and roads.
- **Sanitary Facilities** – including restrictions on septic tank absorption fields, sewage lagoon areas, and various types of sanitary landfills.
- **Construction Materials** – including suitable sources of roadfill, sand, gravel, and topsoil.
- **Water Management** – including limitations for pond reservoirs, and for embankments, dikes, and levees; features affecting drainage, irrigation, terraces and diversions, and grassed waterways.
- **Engineering Index Properties** – including depth, USDA textures, Unified and AASHTO classifications, fragments, sieve numbers, liquid limits, and plasticity.
- **Physical and Chemical Properties of the Soils** – including depth, percentage of clay, moist bulk density, permeability, available water capacity, pH, salinity, shrink-swell potential, erosion factors, wind erodibility, and percent of organic matter.
- **Soil and Water Features** – including hydrologic group, flooding frequency and duration, high water tables, bedrock depth and hardness, and corrosion risks for steel and concrete.

### **Using the *Web Soil Survey***

The *Web Soil Survey* is at: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>  
Click on the green "Start WSS" button to begin.

**Area of Interest** Simply zoom in on an aerial map until you find the property you are looking for, and draw your "Area of Interest" with the AOI tool. After you have drawn your AOI, you can save the web page as a link in your web browser, so you can easily return to it.

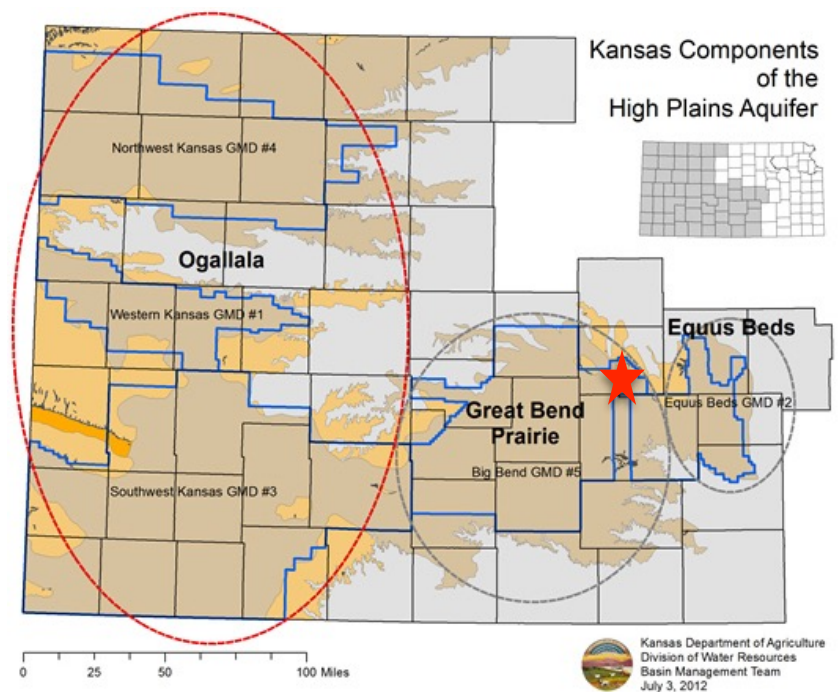
**Map & Data** After your AOI is defined, click on the "**Soil Map**" tab to see a soils map and a table showing the percentages of all the soil types in your area of interest. Click on the "**Soil Data Explorer**" tab to find information related to your soils, in hundreds of categories – from soil chemistry, erosion factors, or depth of the water table, to its suitability for building basements or a septic field, to its probable yield of corn silage when irrigated.

## Water Resources

An adequate long-range supply of fresh water is an essential foundation for any community's future development. A city must have access to a water source which is sufficient in quantity and quality to support both its current and anticipated needs, and must also have legal access through water rights to utilize that source.

Sterling's local water supply comes from groundwater in the aquifer beneath the City, accessed through four municipal wells. Many aquifers in the American west are being mined beyond sustainable levels. However, according to the Kansas Geological Survey, the water table in the Sterling area during 2009-2011 was actually above its level in 1996-1998.

The High Plains aquifer system lies in the southern part of the Great Plains, underlying portions of eight states, including Kansas. It is the shallowest and most abundant source of water in the region. In Kansas, the High Plains Aquifer system has three major components: the Ogallala aquifer to the west, the Great Bend Prairie aquifer in the center, and the Equus Beds Aquifer to the east. Sterling's wells draw groundwater from the northeastern edge of the Great Bend Prairie Aquifer.



Groundwater in most of the Sterling Planning Area is managed by the **Big Bend Groundwater Management District #5 (GMD #5)**.

Only the four southernmost square mile sections of the Sterling Planning Area, south of Avenue Y, are not within its jurisdiction, and in fact, are not within the jurisdiction of any Groundwater Management District. Management District goals include limiting groundwater withdrawals to balance annual groundwater recharge, and maintaining the water quality of the aquifer. More information on GMD #5 is available at [www.gmd5.org](http://www.gmd5.org).

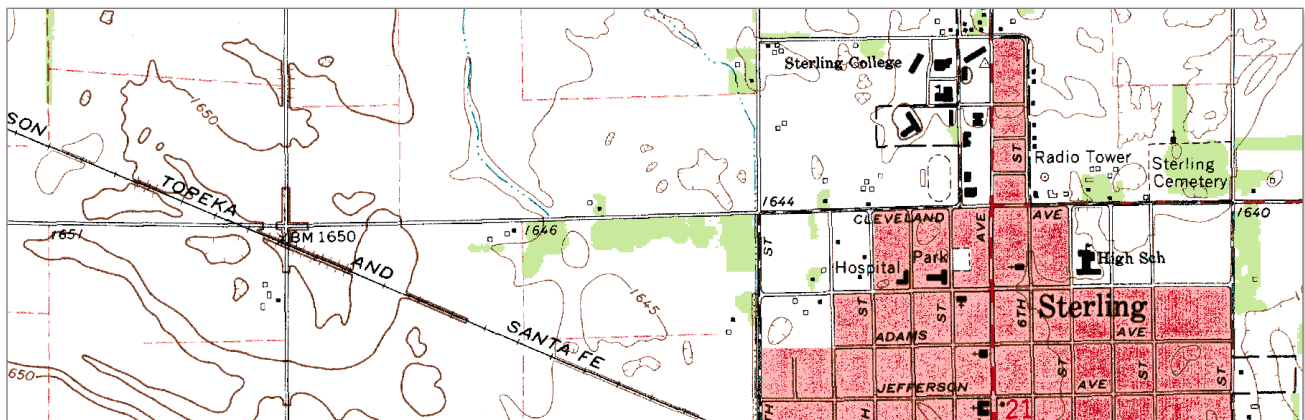
## Topography, Drainage & Floodplains

The topography of local landforms, and the drainage patterns that result, significantly impact potential land uses. The location and design of some facilities—such as water towers, sewage treatment plants, stormwater management structures, and cell towers – are powerfully influenced by relative land elevations.

Elevations inside the city limits of Sterling range from 1645 feet above mean sea level on the north and west, down to 1635 on the southeast – only a 10-foot difference in grade across the entire City. Within the Sterling Planning Area, the highest elevation (1685 feet) is in the southwest, on the bluffs south of the river. The lowest elevation (1610 feet) is in the southeast corner, near where the Arkansas River flows out of the Planning Area. Drainage across the majority of the Planning Area (north of the River) runs generally from northwest to southeast.

Most of the Planning Area is drained by the Arkansas River, which flows from west to east across its southern edge. The northeast portion of the Planning Area drains into Cow Creek, which drains into the Arkansas River farther downstream. Water in the Arkansas River flows into the Mississippi River and eventually on to the Gulf of Mexico.

The relatively flat topography and rich well-drained soil around Sterling, in combination with a generally good climate, make much of the Planning Area ideal for agriculture.



Topographic maps from the U.S. Geological Survey are available for viewing or download from the TopoQuest website at [www.topoquest.com](http://www.topoquest.com). The Planning Area is covered by four maps: Sterling, Lyons, Alden, and Chase. Maps can be searched for by name.

## **Floodplains**

Historically, relatively flat land adjacent to waterways attracted people as a place to settle and build, with its easy access to water and typically rich soils. Unfortunately, such land is also prone to high water flooding, making it potentially dangerous for both people and structures.

In the United States, the Federal Emergency Management Agency (FEMA) is responsible for mapping floodplains. The Flood Insurance Rate Maps produced and updated by FEMA classify floodplains into various flood hazard areas, based on degree of risk. The three broadest categories of floodplain designation are floodway, 100-year flood zones, and 500-year flood zones. A **floodway** is the channel of a river or stream. Areas designated as **100-year flood zones** have a 1% chance each year of being inundated. Areas designated as **500-year flood zones** have a 0.2% chance each year of being inundated.

Since private insurers were generally unwilling to cover structures in floodplains, in 1968 Congress created the National Flood Insurance Program (NFIP), to help floodplain property owners protect themselves financially against property losses due to flooding. Communities participating in the NFIP agree to adopt and enforce ordinances to reduce the risk of flooding, which meet or exceed FEMA requirements. The NFIP then offers subsidized flood insurance to local landowners, with rates based on degree of risk, as determined by the Flood Hazard Area in which their property is located.

One of the inadvertent side-effects of this law was to encourage people to build in floodplains. Over the ensuing decades, numerous major floods across the nation resulted in extraordinarily high costs to federal taxpayers. Various revisions of the NFIP resulted, in attempts to bring insurance rates into alignment with actual risk, and to more strongly discourage people from building in floodplains. These revisions included the Flood Insurance Protection Act of 1973, the Flood Insurance Reform Act of 2004, the Biggert-Waters Flood Insurance Reform Act of 2012, the Consolidated Appropriations Act of 2014, and the Homeowner Flood Insurance Affordability Act of 2014.

Participation in the National Flood Insurance Program is required by various federal grant programs, and is required in order to be eligible for mortgages backed by federal guarantees, such as VA and FHA loans.

More information, including maps of floodplains, is available from the FEMA Flood Map Service Center at <http://msc.fema.gov/portal>.

Though the City of Sterling is located a couple of miles from the Arkansas River, floodplains in the flat landscape of Kansas are very extensive, and much of the City is within designated Flood Hazard Areas. In fact about 43% of the land within the city limits is within one floodplain zone or another, and 53% of the Planning Area is floodplain.

*– Connect Sterling –*  
*Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035*

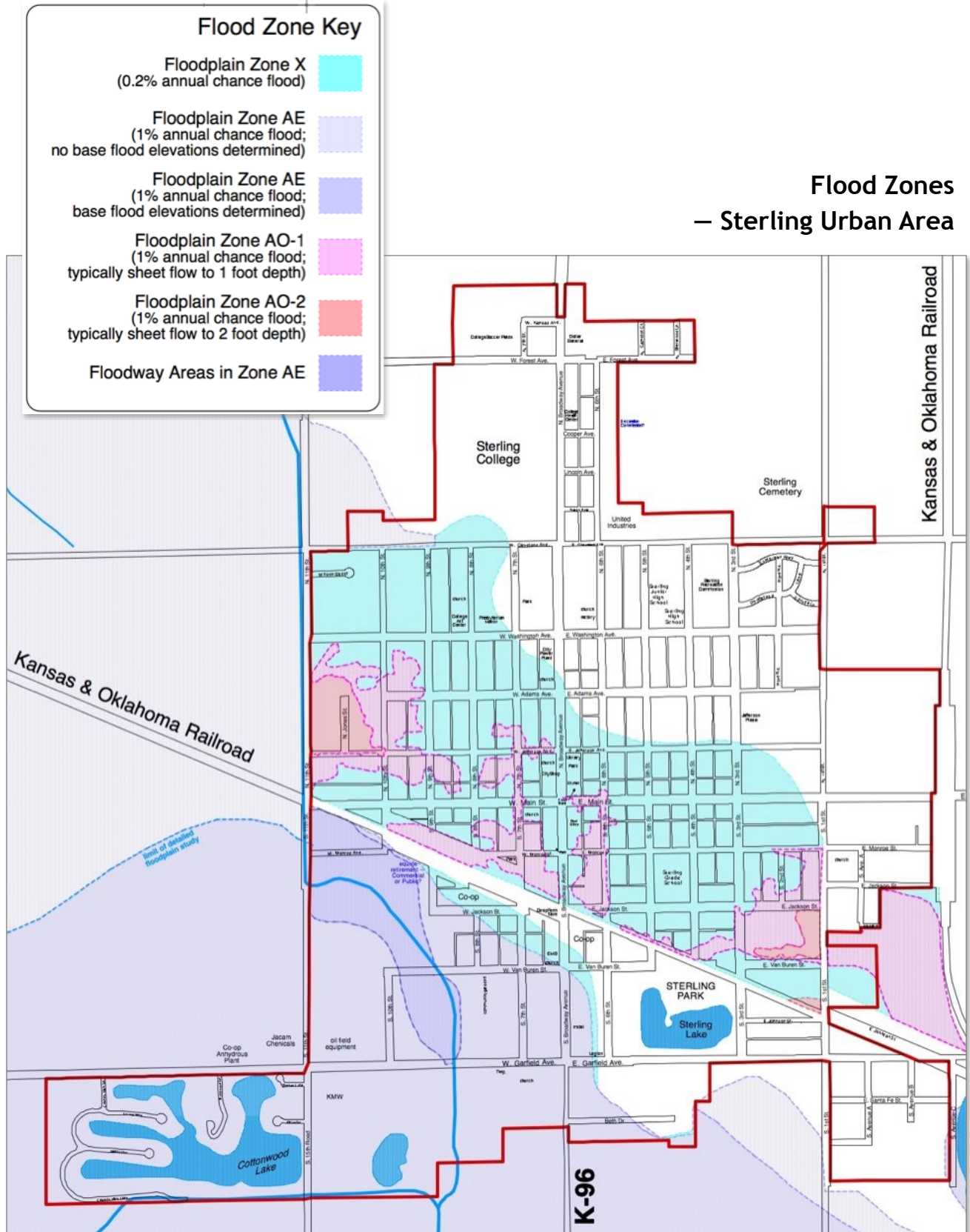
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Rice County has participated in the NFIP since 1978, and has updated its regulations twice since then, in 1987 and 1991. Floodplain requirements for unincorporated areas of Rice County, including all of Sterling's Planning Area outside of the City, are administered by the County's Floodplain Administrator, working out of the County Environmental Planning and Zoning Office in Lyons.

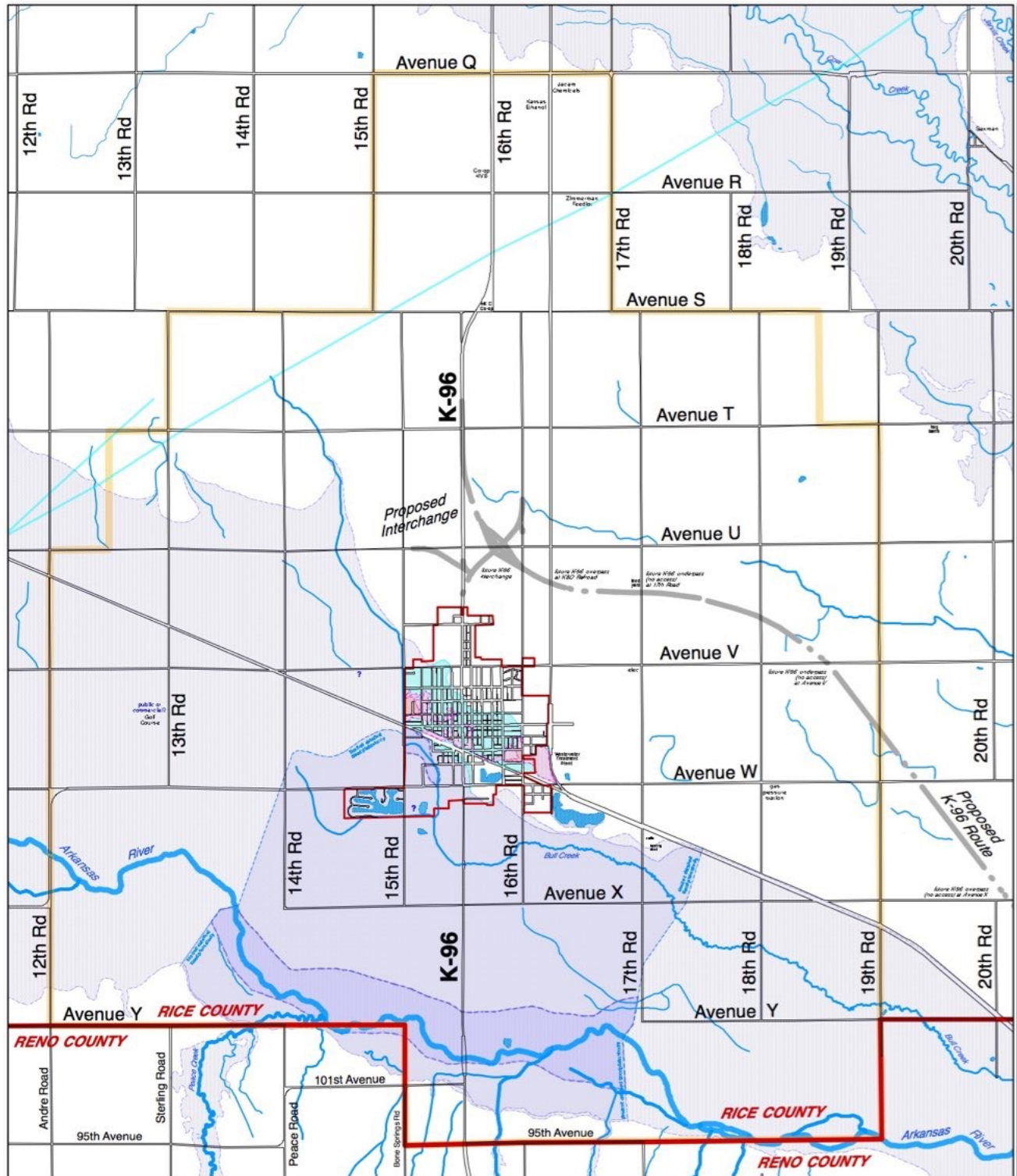
Rice County requires residential structures (including manufactured/mobile homes) to have their lowest living floor no lower than the base flood level for the grade defining the Zone A flood hazard area. Neither the City nor the County has applied for a "basement exemption" which would permit the construction of basements by following certain floodproofing criteria. The Rice County Floodplain regulations do not address requirements for private wells or onsite wastewater treatment systems in floodplains.



– Connect Sterling –  
 Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035



Flood Zones  
– Sterling Planning Area





## Community Forest



## Shelter Belts

Woodlands in the Sterling Planning Area are located primarily along the River, creeks and major drainage ways, and in shelter belts. The value of these woodlands lies not in their price as timber, but in their environmental significance. Woodlands reduce soil erosion, help prevent flooding, improve air and water quality, and serve as a habitat for wildlife.

Riparian forests along the banks of streams are a crucial element in protecting surface water and helping to recharge the aquifer—and a sufficient supply of fresh water is critical to the community's long-term survival. Shelter belts are an essential safeguard for farming on the prairie, yet throughout Kansas they are showing a decline in vigor due to the advanced average age of the trees.

Although woodlands in Sterling's Planning Area cover only a small relative acreage, they are critically important to the long-term health of the soil and water on which much of the Sterling area economy depends. Every effort should be made to sustain and enhance these woodlands. In particular, many shelter belts in the Planning Area are in need of rehabilitation, and others have been lost entirely over the years and should be reestablished.

## Urban Forest

When individual trees by houses, in parks, and along streets are considered collectively, they form an urban or community forest. This forest is an important resource affecting the livability of the community. The benefits of urban trees and associated landscaping are well documented, and include providing shade, reducing noise levels, decreasing air and water pollution, diminishing summertime energy use, furnishing wildlife habitat, screening undesirable views, serving as buffers between land uses, and raising property values. Additionally, a well-maintained and well-planned urban forest enhances the community's character, and its quality of life.

Trees in Kansas have come under extraordinary stress in recent years, from ice storms, drought, hot and cold spells ferocious even by Kansas standards, and insect and disease outbreaks, particularly diseases affecting pines and ash trees. In Sterling, many mature trees planted during the early years of the City's development are nearing the ends of their lives. To maintain the benefits of a healthy community forest, Sterling's public trees will likely need serious attention over the next twenty years.

Cities are authorized under K.S.A. 12-3201 *et seq.* to regulate the planting, maintenance, treatment, and removal of trees and shrubbery upon all street and alley rights-of-way. Abutting property owners hold "title to and property in" such trees and shrubbery which are located between their property line and the curb line, sometimes called the parking or planting strip. Property owners can recover damages to such trees, and initiate actions to prevent their destruction. Cities can designate acceptable street trees for such areas. Some cities conduct periodic stump removal programs.

Maintaining a healthy community forest over the long-term requires expertise and ongoing efforts by City staff, a commitment by City officials to dedicate necessary resources to the task, and broad public support and understanding of the value of trees to the community's quality of life.

Consider implementing a comprehensive City Tree Plan, to plan an ongoing care and replacement schedule for trees in rights-of-way and on other public properties. The first step would be to conduct a baseline study of the City's existing trees, establishing their species, size, and condition, as well as identifying locations in need of new trees. Also consider developing a street tree plan, to enrich the visual character of the community's main traffic corridors.

**Tree Board** One way to provide the leadership and long-term focus on the issues necessary to sustain a healthy community forest is to establish a Tree Board. Such a Board is established by a City ordinance, which must describe the terms of office and responsibilities of members. A Tree Board usually has five to seven members, and typically advises the governing body on tree related issues, prepares a comprehensive tree plan, initiates tree planting and maintenance projects, and works to educate the public on the benefits of trees. Currently, Sterling does not have a Tree Board.

**Tree City USA** Established and managed by the Arbor Day Foundation, this program provides a framework for community forestry management. It requires a city to maintain a tree board or department, have a community tree ordinance, budget at least \$2 per capita annually on urban forestry, and celebrate Arbor Day. Sterling was once one of more than 100 Tree City USA communities in Kansas, but is no longer actively participating in the program. More information on the Tree City USA program is available at [www.arborday.org](http://www.arborday.org).

For information on other helpful organizations, and on funding programs that can help improve your community forest, see the Kansas Forest Service website at [www.kansasforests.org](http://www.kansasforests.org).

## Major Constructed Features

Large physical features constructed by people also influence development patterns. For example, transportation routes typically stimulate development, particularly at major intersections. Other facilities, such as wastewater treatment plants or large utilities installations, provide services essential to attract residents to a community, yet may repel residential development in their immediate area.

One line of the **Kansas & Oklahoma Railroad** divides the northern and southern parts of Sterling, while another is a potential barrier to development toward the east. Though the City was originally platted with the assumption that the center of downtown would be the intersection of Broadway Avenue and Main Street, development actually occurred closer to the railroad, and the intersection of Broadway and Monroe became the heart of downtown.

Sterling's **Wastewater Treatment Plant** is southeast of the bulk of the City's developed area, north and east of the junction of the railroad tracks. Due to prevailing winds from the south, potential residential development to the north of this facility would be problematic.

Prevailing winds are also a factor that should be considered regarding future development of the **industrial area** southwest of the City. Much of Sterling lies upwind of these facilities, and could be impacted by potential airborne emissions from industrial development.

Industrial areas in the northern part of the Planning Area, adjacent to the railroad tracks and south of Avenue Q, will impact potential land uses in their immediate vicinity.

Currently, Highway K-96 runs through the heart of Sterling, along Broadway. The construction of the **K-96 Bypass and interchange** will have a major impact on the community's future development.

## CHAPTER 5. Population

Population information in this chapter is based on the 2010 Census. The U.S. Census is taken only once every ten years, so the *American Community Survey (ACS)*, which is also administered by the Census Bureau, provides updates in the years between censuses. The updates are provided once every three years to small communities, and annually to larger cities. Though more current, the *American Community Survey* is based on a much smaller sample size, so if at any point there is a discrepancy between the two sources, information from the Census is regarded as the official data.

Population information is available in more detail from the U.S. Census Bureau FactFinder website at <http://factfinder2.census.gov>, where typing in the name of a place brings up the available data sets for that location. More detailed Kansas information, including historical demographic data, is available from the *University of Kansas Institute for Policy & Social Research*, at [www.ipsr.ku.edu/ksdata](http://www.ipsr.ku.edu/ksdata).

A reasonably accurate determination of future population is an essential foundation for predicting Sterling's planning needs over the next two decades. Analyzing the characteristics of the people now living in Sterling helps to estimate the potential future population by the end of the twenty-year Planning Period. Understanding the physical, social and economic characteristics of the people in the Sterling Planning Area helps community leaders develop policies to effectively meet residents' needs.

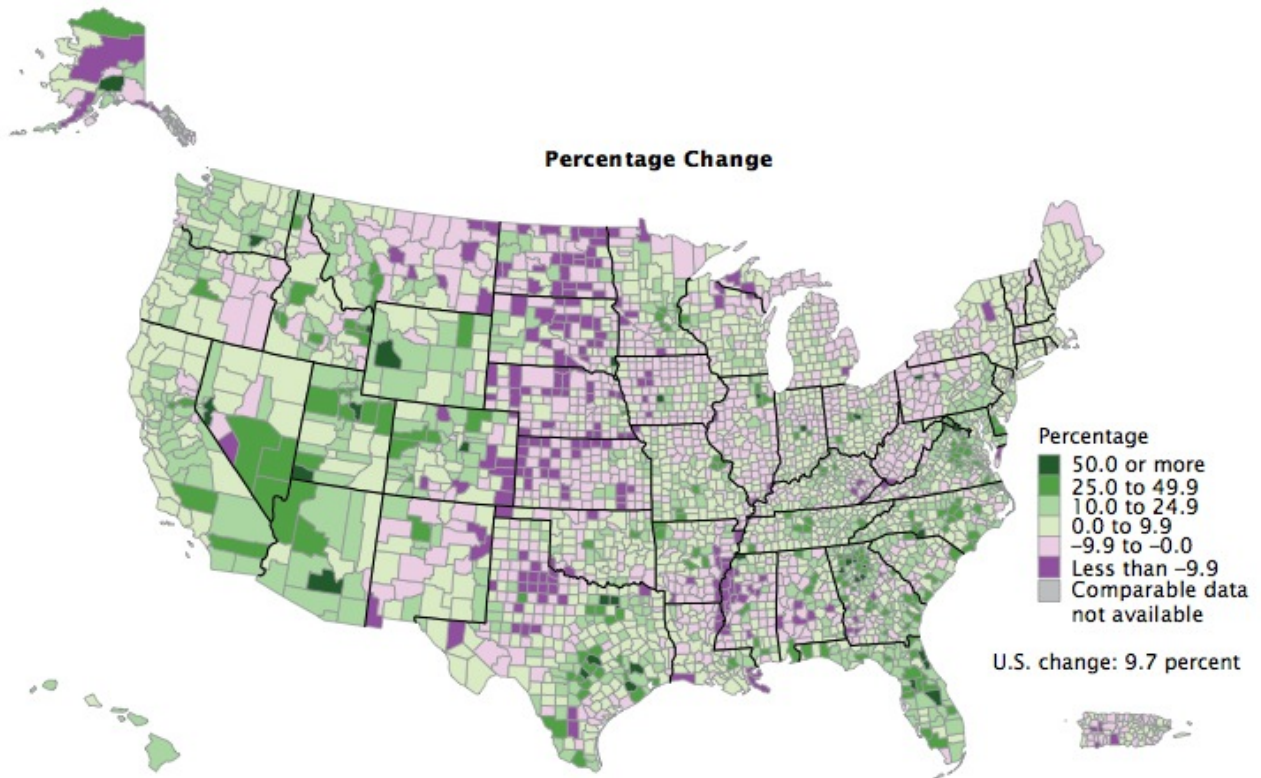
### Historical Population Trends

After the American population boom in the post-World War II era, rates of growth became more stable during the fifty years from 1960 to 2010. As detailed in the following table, the population of the United States has been growing by an average of about 11.5% per decade for the last fifty years, while Kansas has been growing by about 5.6%. During that same time frame, Rice County's population has been decreasing by an average of 6.1% per decade. Such a decrease is not unusual for rural counties in America's heartland.

	U.S.		Kansas		Rice County	
	Population	% Change	Population	% Change	Population	% Change
<b>1950</b>	151,325,798		1,905,299		15,635	
<b>1960</b>	179,323,175	18.5%	2,178,611	14.3%	13,909	-11.0%
<b>1970</b>	203,211,926	13.3%	2,246,578	3.1%	12,320	-11.4%
<b>1980</b>	226,545,805	11.5%	2,363,679	5.2%	11,900	-3.4%
<b>1990</b>	248,709,873	9.8%	2,477,574	4.8%	10,610	-10.8%
<b>2000</b>	281,421,906	13.2%	2,688,418	8.5%	10,761	1.4%
<b>2010</b>	308,745,538	9.7%	2,853,118	6.1%	10,083	-6.3%

### National Population Trends

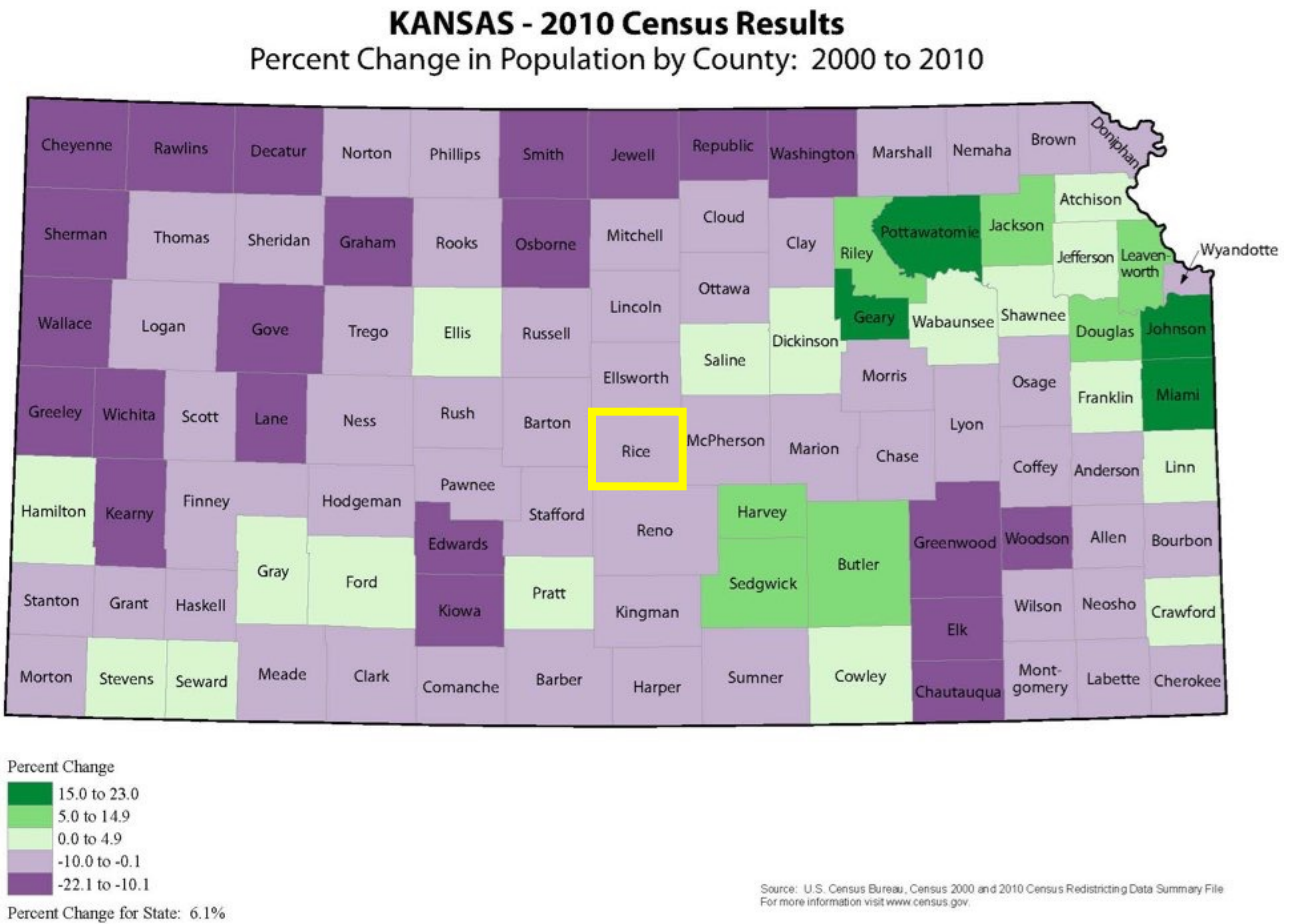
Recent national population trends show some states and counties losing population, as people move from rural areas to cities, and from the northeast and midwest to the south and west. This map shows the percentage of population change between 2000 and 2010, for each county in the country. Green shades indicate growth; purple shades indicate population loss; the darker the color, the more intense the change.



Source: U.S. Census Bureau, 2010 Census and Census 2000.

### Kansas Population Trends

A similar map for the state of Kansas shows that most population growth in the last decade has taken place in the northeast part of the state (around Kansas City, Topeka, and the university towns of Lawrence and Manhattan), and around Wichita. Between 2000 and 2010, Rice County's population decreased by 6.3%.



These national and regional trends certainly influence Sterling. Many rural midwestern towns have seen significant population loss in recent decades, but Sterling's assets as a community, and its proximity to Hutchinson, McPherson, and Great Bend, give it an opportunity to mitigate or even reverse that trend.



## Sterling's Population History

The population of the City of Sterling grew substantially in the 1930s, and held fairly stable from the 1940s through the 1980s. According to the U.S. Census, the population then grew by 21% in the 1990s, and fell by 12% in the 2000s, however some question has been raised about the accuracy of the 2000 Census population figure for Sterling.

Sterling					
Census	Population	% Change	Census	Population	% Change
1900	0	—	1960	2,303	3%
1910	2,133	—	1970	2,312	0%
1920	2,060	-3%	1980	2,312	0%
1930	1,868	-9%	1990	2,191	-5%
1940	2,215	19%	2000	2,642	21%
1950	2,243	1%	2010	2,328	-12%

The 2000 Census, which was taken on April 1st, shows 727 students living in the census blocks that comprise the campus of Sterling College. According to the Registrar's office, total enrollment for Sterling College in the spring term of 2000 was only 390, a number which includes students living off-campus. Since only students are resident on campus, the census count therefore appears to be high by at least 337 people (727-390=337).

In 2010, the Census showed 471 people living in the census blocks comprising the campus, at a time when the College enrollment was 628. These numbers seem more realistic, and would indicate that about 75% of the student body lived on campus. If that percentage is applied to the 2000 enrollment of 390, there could have been about 292 students living on campus, which would imply that the census count was high by about 435 people.

**If indeed there was an error in the 2000 Census population number for Sterling, with an over-count of somewhere between 337 and 435 people, then the 21% jump in population between 1990 and 2000, and the 12% drop in the following decade did not in fact occur. If, as an exercise, we take the average of those two numbers, and subtract 386 people from the 2000 Census population number, then Sterling would have had a population of about 2256 in 2000, and a population increase of about 3% in each of the two decades between 1990 and 2010. These percentages seem much more plausible, and probably reflect a more realistic view of the City's population change in recent years.**

Given this doubt, Sterling's *official* 2000 population number should not be given undue influence on planning decisions. **More important is the fact that the City's population grew by 6% in the twenty years between 1990 and 2010.**

## Planning Area Population Estimates

The U.S. Census does not provide population data sorted by "Planning Area", so other means are used to arrive at a reasonable estimate of the Planning Area population.

**Household Size** The Land Use Survey in November 2014 counted **89 housing units** in the Sterling Planning Area, outside of the City. According to the 2010 Census, the average household size in Sterling was **2.31 people per household**. Multiplying yields a rough estimate of about **206 persons** in the Planning Area.

**Family Size** If most of the 89 rural housing units contain families, as seems likely, then making an estimate based on the average family size in Sterling in 2010 (**2.89 people per family**) yields a rough estimate of about **257 persons** in the Planning Area.

Depending on which estimate is used, the Planning Area population outside the City ranges from 206 to 257 persons, with an average of **232 people estimated in 2010 in the Planning Area, outside of the City**. The 2010 population for the City of Sterling was 2328 people, for an estimated total of **2560 people in the entire Planning Area, including the City, as of 2010**.

These estimates indicate that the population in the Planning Area outside the City is approximately **10%** of the City's population.



## Population Data—U.S. Census Bureau

In this section, information from the 2010 Census will be used to discuss Sterling's population growth, age distribution, and household and family characteristics. Information from the 2009-2013 American Community Survey 5-Year Estimate will be used to discuss citizenship, veterans status, ancestry, race, marital status, and educational attainment.

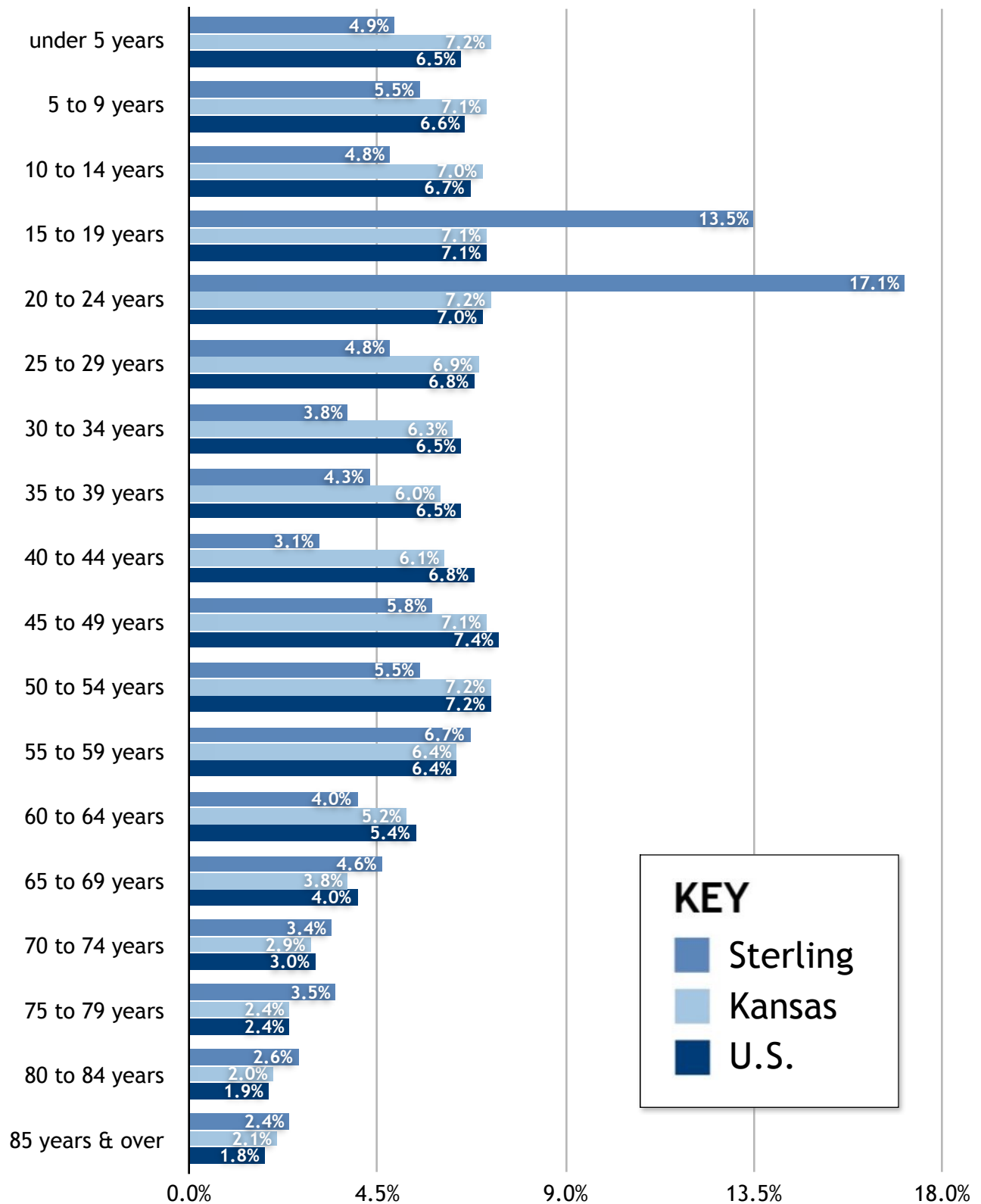
### POPULATION DATA FROM THE 2010 CENSUS

	Sterling			Rice County		
	2000	2010	Change	2000	2010	Change
<b>Total Population</b>	2,642	2,328	-11.9%	10,761	10,083	-6.3%
<b>Median Age (in years)</b>	23.2	29.5	6.3	37.6	39.3	1.7
<b>% Male</b>	45.9%	50.2%	4.3%	48.0%	50.2%	2.2%
<b>% Female</b>	54.1%	49.8%	-4.3%	52.0%	49.8%	-2.2%

According to the U.S. Census, Sterling's total population decreased between 2000 and 2010 by 11.9%, a rate which was nearly twice that of Rice County (-6.3%). However, as discussed on page 5-4, there is considerable doubt as to the accuracy of the Census 2000 population figure for Sterling, and an error in Sterling's population number would likely have also resulted in an error in the Census population for Rice County.

It is likely that the population of Sterling increased at a moderate rate, something on the order of 3% per decade between 1990 and 2010. Between 2000 and 2010, the population of Kansas increased by 6.1%, and the population in the nation increased by 9.7%.

### 2010 Census—Population by Age



**Population by Age / Age Distribution** The chart on the previous page shows the percentage of each age category for Sterling residents, compared to figures for Kansas and the United States. Sterling's population shows an extremely high percentage of young adults in the categories from 15 to 24 years of age, almost certainly due to the presence of Sterling College.

### **Adjusting Percentages for the College Population**

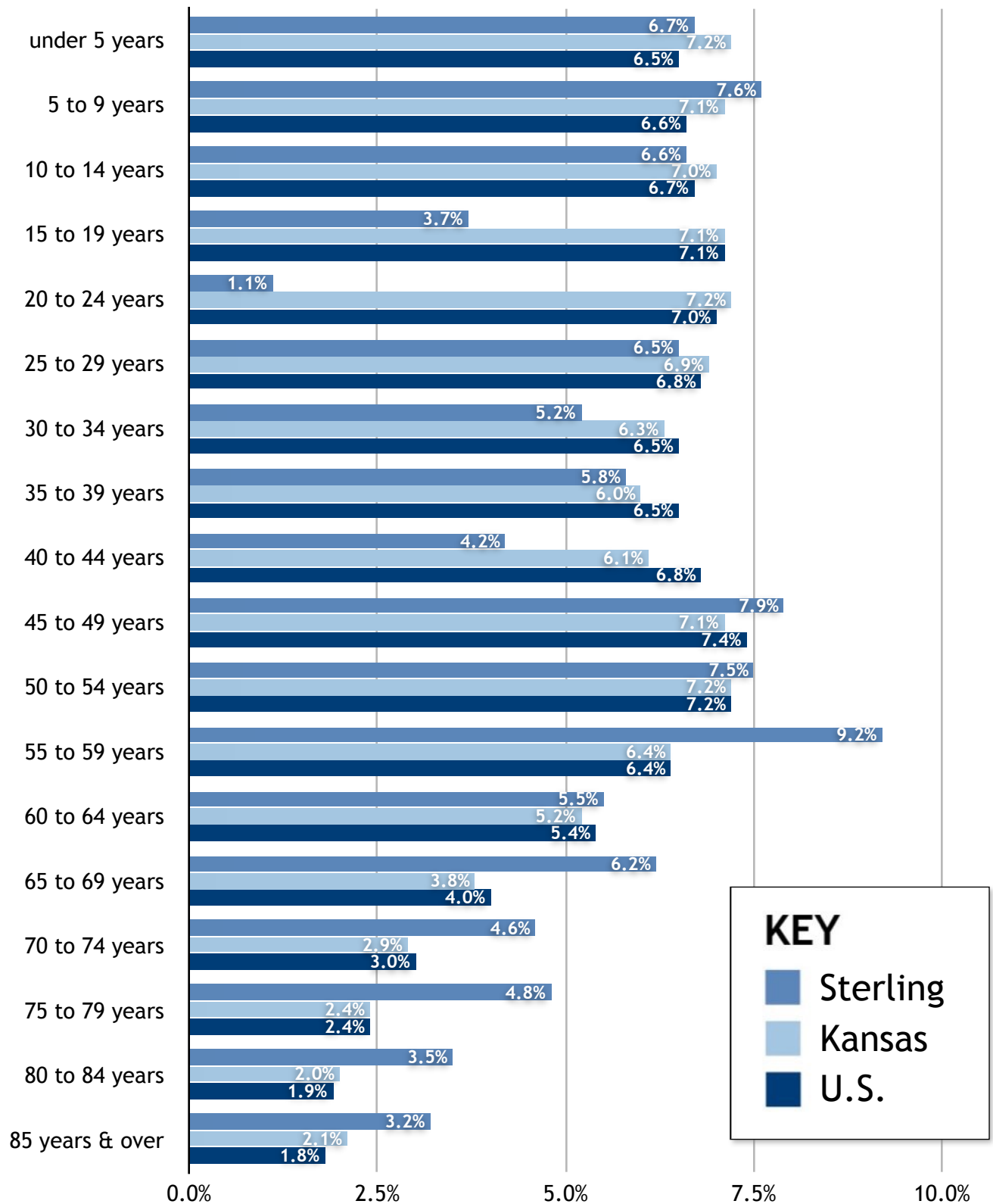
Because the chart shows percentages, the high proportion of college students can make other age categories look lower than they otherwise would, relative to state and national averages. By subtracting the College student population from the total City population, and from the age groups to which they likely belong, an adjusted Age Distribution Chart can be generated which compensates for the effect of the college student population. This adjusted Age Distribution Chart is not put forward as statistically precise—it is simply intended to offer another perspective on the age distribution data for Sterling's population.

In the 2009 fall enrollment period, Sterling College had 521 students living on campus in residential dormitories, and in 2010 there were 536, for an average of about **530** college students living in dorms at the time of the 2010 Census. The College also has approximately **100** to 150 commuter students; although some may be members of local families, most are probably living in rental housing in Sterling. A working number of **630** college students within the total Sterling population will be used to produce an adjusted Age Distribution Chart.

If two fifths of that number (252) are removed from the 15 to 19 year old category (to compensate for College-generated 18 and 19 year olds), and three fifths (378) are removed from the 20 to 24 year old category, to compensate for 20, 21, and 22 year old college students, the resulting chart should give a rough approximation of how Sterling's age categories might look without its college student residents. Percentages are based on a total 2010 population reduced by those 630 students to 1698 people.

The Adjusted chart that follows shows a Sterling population with age distributions that are closer to Kansas and national norms in most categories. However, as is typical for many small Kansas cities, Sterling is apparently losing many of its young adults, likely because they are leaving town to find work or affordable housing. The City also has significantly higher percentages of people in every age category from 65 years old and older, likely due to the presence of facilities in the City that allow residents to age in place, such as Presbyterian Manor.

### 2010 Census—Population by Age, Adjusted



– Connect Sterling –  
 Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035

Households & Families in Sterling		
<b>Family Households</b>	<b>510</b>	<b>64.9%</b>
<i>Husband &amp; Wife (no children in household)</i>	262	33.3%
<i>Husband &amp; Wife with own Child(ren) under 18 years</i>	152	19.3%
<i>Male with own Child(ren) under 18 years</i>	15	1.9%
<i>Female with own Child(ren) under 18 years</i>	36	4.6%
<i>Male householder with other relatives</i>	11	1.4%
<i>Female householder with other relatives</i>	34	4.3%
<b>Non-Family Households</b>	<b>276</b>	<b>35.1%</b>
<i>Male living alone (under 65 years)</i>	67	8.5%
<i>Male living alone (65 years and over)</i>	37	4.7%
<i>Female living alone (under 65 years)</i>	54	6.9%
<i>Female living alone (65 years and over)</i>	79	10.1%
<i>Other non-family households</i>	39	5.0%
<b>TOTAL HOUSEHOLDS</b>	<b>786</b>	<b>100.0%</b>

- **Children/Seniors** Out of 786 households in Sterling, 219 (27.9%) had children under 18 years of age in the household, and 245 (31.2%) had individuals 65 years of age or older in the household.
- **Household & Family Size** As counted by the 2010 Census, the average household in Sterling had **2.31 people**, and the average family had **2.89 people**. Between 2000 and 2010, the average household size changed from 2.34 to 2.31 persons per household, a decrease of 1.3%; the average family size changed from 2.94 to 2.89 persons per household, a decrease of 1.7%.
- **Single-parent Families** Out of 203 family households where adults are living with their own children under 18 years old, 25% of them were single-parent families.
- **Between 2000 and 2010**, the number of family households in Sterling decreased by 5.4%. The number of non-family households decreased by 1.4%. **The total number of households decreased by 4.0%**. If there was indeed an error in the 2000 Census data for Sterling, these comparisons may be inaccurate.

## POPULATION DATA FROM THE *AMERICAN COMMUNITY SURVEY*

Information in this section originates in the *2009-2013 American Community Survey 5-Year Estimate*, since some social information was not collected in the 2010 Census. There are discrepancies between the two data sets; for instance, the number of households utilized by the *Survey* (819) is different than the official 2010 Census figure for number of households (786). To maintain consistency within the following data, *Community Survey* numbers are used throughout this section.

- **Citizenship** Out of a total population of 2,269 people in Sterling, 2,170 were born in the U.S., and 29 were born either in U.S. territories or to American parents abroad. Out of 70 foreign-born residents in Sterling, 15 are naturalized U.S. citizens, and 55 are citizens of other nations.
- **Veterans** Of the 1,867 people in Sterling who are civilians and 18 years old or older, 172 (9.2%) were military veterans.
- **Ancestry** The percentage of Sterling residents indicating various ancestries included German (38.5%), English (12.2%), Irish (7.8%), American (4.8%), Swedish (3.2%), Italian (3.0%), Norwegian (2.6%), Scotch-Irish (2.5%), Danish (2.0%), Czech (1.8%), Dutch (1.5%), Russian (1.5%), Scottish (1.3%), Polish (1.1%), Welsh (1.1%), French (except Basque) (0.8%), Portuguese (0.5%), Sub-Saharan African (0.5%), Arab (0.4%), Swiss (0.4%), West Indian (excluding Hispanic origin groups) 0.3%, and French Canadian (0.2%).
- **Race** Racially, Sterling is quite homogenous: 95.0% white, 1.7% Black, 1.6% multi-racial, 1.1% Asian, 0.3% Pacific Islander, and 0.3% some other race. Only 3.6% of Sterling's population is Hispanic, of which 2.9% is Mexican, 0.5% is Puerto Rican, and 0.2% is other Hispanic or Latino.
- **Disability** Of the total civilian non-institutionalized population in Sterling (2,245 individuals), 316 people or 14.1% of them have a disability. Of those 316 with a disability, 115 are between the ages of 18 to 64 years, and 201 are 65 years of age or older.

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Sterling Marital Status	Males (15 and over)		Females (15 and over)		All (15 and over)	
	Count	Percentage	Count	Percentage	Count	Percentage
Never Married	271	30.1%	324	31.2%	595	30.7%
Married	557	62.0%	514	49.5%	1,071	55.3%
Separated	11	1.2%	0	0.0%	11	0.6%
Widowed	12	1.3%	123	11.8%	135	7.0%
Divorced	48	5.3%	77	7.4%	125	6.5%
<b>Total</b>	<b>899</b>	<b>100.0%</b>	<b>1,038</b>	<b>100.0%</b>	<b>1,937</b>	<b>100.0%</b>

**Never Married** The proportion of Americans who have never married has been increasing across all age categories in recent decades. This trend has significant planning implications for both housing needs and social services.

Of people in Sterling 15 or older, **30.7% have never married**. In Rice County, **22.3%** had never married; in Kansas, **28.1%**; in the U.S., **32.2%**. The proportion of never-married people in Sterling is higher than that for Rice County and Kansas, but lower than the nation as a whole, which is approaching one third of American adults.

Sterling Educational Attainment (25 years old and over)		
Less than 9th grade	18	1.4%
9th to 12th grade, no diploma	40	3.0%
High school graduate (including equivalency)	430	32.7%
Some college, no degree	302	23.0%
Associate's degree	73	5.6%
Bachelor's degree	296	22.5%
Graduate or professional degree	156	11.9%
<b>Total</b>	<b>1315</b>	<b>100.0%</b>

Sterling's population is very well educated. Of people in Sterling 25 years old or older, 95.6% had a high school degree or higher, compared to 89.8% in Kansas and 86.0% nationally. Of people in Sterling 25 years old or older, 34.4% had a bachelor's degree or higher, compared to 30.3% for Kansas and 28.8% nationally.



## CHAPTER 6. Housing

The variety and quality of housing options available in Sterling strongly influences the quality of life which attracts homeowners to the City.

Residential land use covers more acreage (45.4% in the City) than any other category of Sterling's developed urban land, and is the third largest category of land use (after agriculture and transportation) in the Planning Area. Residential properties are a major source for the City's tax revenues, but the economic importance of housing is not confined to the tax structure. A healthy housing market benefits many businesses—including construction, real estate, insurance, banking, building materials, design, and many retailers. As a result of the multiplier effect, the exchange of money for these services and supplies enhances the area's total economic environment. An adequate housing supply also increases the opportunity to attract new businesses and their employees.

A house is usually the largest single investment for a family or individual, and with its surroundings is a source of great influence on household happiness. While a nice house does not guarantee a happy home life, the lack of a suitable residence can certainly detract from a desirable lifestyle. Houses that are difficult to maintain can generate financial concerns and physical discomfort. Young adults, families with children, singles, couples, and retirees all need housing suited to their particular needs, and if it is not available locally they will often consider moving to another community to find it.

In the mid- to late-2000s, the nation experienced a mortgage crisis which changed lending practices. The ability to obtain a mortgage can now sometimes be as much of a barrier to buying a home as the cost of housing itself. Many communities, as well as the homebuilding and home financing industries, have reassessed their policies and techniques in order to support the development of affordable housing or starter homes. This responsibility should be assumed by both public and private interests. This chapter analyzes housing statistics and suggests ways in which desirable housing goals may be attained.

## Housing Data—U.S. Census Bureau

This section gives an overall picture of the housing situation in the City of Sterling, based primarily on information from the *2009-2013 American Community Survey 5-Year Estimates*. Housing information from the 2010 Census is also included; though very limited, it is the official data on the few points of information which were counted.

Housing information is available in more detail from the U.S. Census Bureau FactFinder website at <http://factfinder2.census.gov>, where typing in the name of a place brings up the available data sets for that location. More detailed Kansas information, including housing data from Census 2000, is available from the *University of Kansas Institute for Policy & Social Research* at [www.ipsr.ku.edu/ksdata](http://www.ipsr.ku.edu/ksdata).

### Definition of "Housing Units"

The Census count of housing units includes both occupied and vacant buildings. Recreational vehicles and the like are included only if they are occupied as someone's usual place of residence. Vacant mobile homes are included provided they are intended for occupancy on the site where they stand, but if they are on sales lots or in storage yards they are not counted as housing units. The Census does not include dormitories, nursing homes, or hospitals in their count of housing units; such buildings are defined as "Group Quarters", and are counted separately.

## HOUSING DATA FROM THE AMERICAN COMMUNITY SURVEY

The 2010 Census did not collect detailed housing information, which was instead acquired through the Census Bureau's *American Community Survey*. The *Survey* is sent to about 250,000 households each month, rather than once per decade like the Census, so data collection is ongoing and produces much more current socioeconomic information.

However, the *American Community Survey* is based on a much smaller sample size, so if at any point there is a discrepancy between it and the Census, information from the Census is regarded as the official data. For instance, the total number of housing units utilized by the *Survey* (936) is different than the official 2010 Census figure for number of housing units (933). To maintain consistency within the following data, *Community Survey* numbers are used throughout the rest of this section, unless otherwise noted.

- **Occupancy** Out of 936 housing units in Sterling, 819 (87.5%) were occupied and 117 (12.5%) were vacant. Of the 819 occupied units, 570 (69.6%) were owner-occupied, and 249 (30.4%) were renter occupied.
- **Household Size** The average household size of owner-occupied units was 2.31 persons. The average household size of renter-occupied units was 2.39 persons.
- **Fuel** Out of 819 occupied housing units, 635 (77.5%) use utility gas as the house heating fuel, 131 (16.0%) use electricity, 25 (3.1%) use wood, 22 (2.7%) use bottled or tank gas, and 6 (0.7%) use another fuel.

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Housing Types	Number	Percentage
Single, detached	802	85.7%
Single, attached	15	1.6%
2 units (duplex)	25	2.7%
3 or 4 units	14	1.5%
5 to 9 units	11	1.2%
10 to 19 units	3	0.3%
Mobile Home	66	7.1%
<b>TOTAL HOUSING UNITS</b>	<b>936</b>	<b>100.0%</b>

**Housing Types** Sterling has an unusually broad selection of housing types for a city of its size, in part as a result of the demand for short-term housing placed on the community by the presence of Sterling College.

**Mobile Homes** The number of manufactured and mobile homes (66) noted in the 2009-2013 American Community Survey 5-Year Estimates considerably exceeds the number counted in Sterling (25) during the Housing Condition Survey conducted in November of 2014. Code changes and code enforcement efforts by the City during the early 2000s likely account for the reduction in numbers of manufactured and mobile homes in the City.

Age of Housing Units	Number	Percentage
Built 1939 or earlier	341	36.4%
Built in 1940's	72	7.7%
Built in 1950's	140	15.0%
Built in 1960's	70	7.5%
Built in 1970's	169	18.1%
Built in 1980's	48	5.1%
Built in 1990's	60	6.4%
Built in 2000's	27	2.9%
Built 2010 or later	9	1.0%
<b>TOTAL HOUSING UNITS</b>	<b>936</b>	<b>100.0%</b>

**Age of Housing Units** Over one third of Sterling's houses are over 75 years old, and two thirds (66.6%) are more than 50 years old. These homes help give the community continuity and character. Like most places in America, the City experienced a housing boom in the 1950s, and another in the 1970s.

Nationally, the housing bubble of the early 2000s burst in 2006, and residential construction declined severely. Housing starts after that did not begin their slow recovery until 2009, and by 2014 were still less than half of their 2005 levels. Housing construction in Sterling reflects the national decline during those years.

Year Householder Moved into Housing Unit		
Moved in	number	percent
1969 or earlier	54	7%
1970 to 1979	63	8%
1980 to 1989	48	6%
1990 to 1999	141	17%
2000 to 2009	367	45%
2010 or later	146	18%
<b>TOTALS</b>	<b>819</b>	<b>100%</b>

#### Years of Occupancy

Of Sterling's 819 occupied housing units, 63% have residents who moved in within the last fifteen years. About 21% of Sterling's occupied housing units have residents who have lived there for more than twenty-five years.

Bedrooms per Housing Unit		
Bedrooms	number	percent
0	8	1%
1	114	12%
2	314	34%
3	317	34%
4	166	18%
5 or more	17	2%
<b>TOTALS</b>	<b>936</b>	<b>100%</b>

#### Bedrooms

Of the 936 housing units in Sterling, 47% are 0-, 1-, or 2-bedroom homes. Many of these support the community's population of college students, as well as the growing numbers of one- or two-person households which are now the typical American household.

The real estate industry uses the number of bedrooms per house as a key factor in marketing homes. In recent decades, a 3-bedroom house has been considered the standard starter home for a typical family; 34% of Sterling's housing stock falls within this category. About 20% of Sterling's houses have 4 or more-bedrooms.

- **Total Rooms** The median number of *total* rooms per housing unit in Sterling is 5.9 rooms.

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Value of Owner-occupied Housing Units	Number	Percentage
Less than \$50,000	129	22.6%
\$50,000 to \$99,999	217	38.1%
\$100,000 to \$149,999	137	24.0%
\$150,000 to \$199,999	76	13.3%
\$200,000 to \$299,999	11	1.9%
<b>TOTAL OWNER-OCCUPIED HOUSING UNITS</b>	<b>570</b>	<b>100.0%</b>

**Value** More than one in five of Sterling's owner-occupied housing units are valued at less than \$50,000. The majority (62%) are between \$50,000 and \$150,000 in value. A substantial 13% are in the \$150,000 to \$200,000 range, and 11 houses in the City are valued at more than \$200,000.

- **Median Value** The median value of owner-occupied housing units in Sterling was \$81,200.

Selected Monthly Owner Costs – Housing Units WITH a Mortgage		
	number	percent
\$300 to \$499	24	8.8%
\$500 to \$699	33	12.1%
\$700 to \$999	106	38.8%
\$1000 to \$1499	87	31.9%
\$1500 to \$1999	4	1.5%
\$2000 or more	19	7.0%
<b>TOTALS</b>	<b>273</b>	<b>100%</b>

**Housing Costs** The cost of owning a house varies significantly between those paying a mortgage, and those who do not have a mortgage to pay. Of those with a mortgage, the majority (70.7%) paid between \$700 and \$1500 per month in owner costs. Of those without a mortgage, over half paid more than \$400 per month in owner costs.

- **Mortgages** Out of the 570 owner-occupied units in Sterling, 273 (47.9%) had a mortgage, and 297 (52.1%) did not.
- **Monthly Cost** The median monthly owner cost for housing units with a mortgage was \$928, and for housing units without a mortgage was \$415.

Selected Monthly Owner Costs – Housing Units WITHOUT a Mortgage		
	number	percent
\$100 to \$199	30	10.1%
\$200 to \$299	43	14.5%
\$300 to \$399	63	21.2%
\$400 or more	161	54.2%
<b>TOTALS</b>	<b>297</b>	<b>100%</b>

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Selected Monthly Owner Costs as a Percentage of Household Income				
Percentage of Income	Housing Units WITH a Mortgage		Housing Units WITHOUT a Mortgage	
	number	percent	number	percent
less than 10%	—	—	112	37.7%
10 to 14.9%	—	—	75	25.3%
15 to 19.9%	—	—	38	12.8%
less than 20%	199	72.9%	—	—
20% to 24.9%	21	7.7%	32	10.8%
25% to 29.9%	27	9.9%	14	4.7%
30% to 34.9%	6	2.2%	6	2.0%
35% or more	20	7.3%	20	6.7%
<b>TOTALS</b>	<b>273</b>	<b>100%</b>	<b>297</b>	<b>100%</b>

**Housing Costs as a Percent of Income** Of those *with* a mortgage, more than four out of five paid less than 25% of their household income per month in owner costs. Of those *without* a mortgage, nearly two thirds paid less than 15% of their household income per month in owner costs. The 8.7% of people without a mortgage who are still paying more than 30% of their income in housing costs are likely people with a very low household income, such as elderly people on a fixed income.

Gross Rent in Occupied Units	Number	Percentage
Less than \$200	3	1.3%
\$200 to \$299	18	8.1%
\$300 to \$499	102	45.7%
\$500 to \$749	61	27.4%
\$750 to \$999	27	12.1%
\$1,000 to \$1,499	12	5.4%
<b>TOTAL OCCUPIED RENTAL UNITS</b>	<b>223</b>	<b>100.0%</b>

**Rental Rates** Of Sterling's 249 occupied rental units, 223 (89.6%) paid rent, and 26 units (10.4%) paid no rent. Nearly three quarters of Sterling's rental units (73.1%) are rented for between \$300 and \$750 per month.

- **Median Rent** The median rent of occupied rental units in Sterling was \$470 per month.

Gross Rent as a Percentage of Household Income		
Percentage of Income	Households	
	number	percent
less than 15%	40	18%
15% to 19.9%	27	12%
20% to 24.9%	26	12%
25% to 29.9%	60	27%
30% to 34.9%	17	8%
35% or more	53	24%
<b>TOTALS</b>	<b>223</b>	<b>100%</b>
not computed	26	

**Rental Costs as a Percent of Income** Of those renting housing units in Sterling, more than a quarter paid between 25% and 30% of their household income per month in housing costs. About 42% paid less than a quarter of their household income for rent. The 24% of people who are paying more than 35% of their income on rent are likely people with a very low household income, such as elderly people on a fixed income or students.

## HOUSING DATA FROM THE 2010 CENSUS

The data on housing that was collected by the 2010 Census is very limited, but it takes precedence over the far more extensive and detailed data collected from the *2009-2013 American Community Survey 5-Year Estimates*. Where the information under this heading disagrees with that previously described in this chapter, the following numbers are considered to be the official data.

- Of the 933 total housing units in Sterling, 786 (84.2%) were occupied, and 147 (15.8%) were vacant.
- Of the 786 occupied housing units in Sterling, 572 (72.8%) were owner-occupied, and 214 (27.2%) were renter-occupied.
- Of the 786 households in Sterling, 510 (64.9%) were families, and 276 (35.1%) were non-family households.
- The average household size in Sterling is 2.31 people per household. The average family size in Sterling is 2.89 people per family household.
- The average household size of an owner-occupied housing unit in Sterling is 2.41 people. The average household size of a renter-occupied housing unit in Sterling is 2.05 people.
- The homeowner vacancy rate in Sterling was 3.5%. The rental vacancy rate in Sterling was 9.8%.



## Housing Conditions in Sterling

A survey of housing conditions in a community provides baseline data on residential structures at the time of the survey. When that information is mapped and analyzed, it allows City leaders to evaluate overall levels of housing quality in the community, to individually identify dilapidated buildings, and to recognize neighborhoods where clusters of houses in substandard condition may indicate a need for particular attention.

A windshield survey of housing conditions was conducted by Sterling's Public Works Director and the planning consultant, on November 24th and 25th, 2014. Every house within the city limits was surveyed. As visible from a vehicle on the adjacent street, the front and both sides of each house were observed and evaluated, and each house was then assigned a rating in one of the following four categories.

- **Standard** – A sound house with no apparent deficiencies, or only very slight flaws which could be easily corrected by a homeowner during the course of regular maintenance. (For instance, touching up the paint on the front door, or replacing a torn window screen.)
- **Minor Substandard** – A basically sound house in need of some minor repairs, which could be accomplished by a reasonably handy homeowner as weekend projects. (For instance, painting all the window trim on a single-story house, or replacing a broken porch railing.)
- **Major Substandard** – A structure otherwise in good condition, but in need of some major repairs which are generally beyond the skills or ambition of most homeowners, and are likely to require a professional contractor's help to resolve. (For instance, painting a two-story house, or replacing a roof.)
- **Dilapidated** – A house, often vacant but occasionally occupied, in such a state of disrepair that it is not fit for habitation. A dilapidated structure has generally deteriorated to the point that it is not economically feasible to rehabilitate, and inflicts a blighting influence on nearby properties.

These ratings are based on the condition of a house's exterior alone, but to a trained eye the state of a building's exterior generally provides a reasonable indication of its overall condition. It is also recognized that a certain degree of subjectivity is inherent in a survey of this nature, especially when a house is on the borderline between categories. Despite these limitations, a housing condition survey is a worthwhile endeavor, and provides useful insights into the overall state of the City's housing inventory.

Housing Conditions in City of Sterling (as of November 24 & 25, 2014)						
Single-household Dwellings	Detached Houses		Manufactured / Mobile Homes		TOTALS by Condition	
	Buildings	%	Buildings	%	Buildings	%
Standard	603	75.4%	13	52.0%	616	74.7%
Minor Substandard	93	11.6%	3	12.0%	96	11.6%
Major Substandard	99	12.4%	9	36.0%	108	13.1%
Dilapidated	5	0.6%	0	0.0%	5	0.6%
<b>TOTALS</b>	<b>800</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>825</b>	<b>100.0%</b>

### Detached Houses

Considering the typical age of Sterling's homes, and the amount of the City's area that is within floodplains, the community's housing stock is in remarkably good condition overall. More than three quarters of Sterling's 800 detached houses were rated "Standard", indicating very good condition. There were a total of 696 houses (87%) in either "Standard" or "Minor Substandard" condition, implying a superior level of care from Sterling's homeowners.

Most of the 99 (12.4%) detached houses in Sterling that were rated "Major Substandard" were actually in good condition overall, but typically had one of three serious problems: the roof needed to be replaced, there were structural cracks in the foundation walls, or chimneys needed to be repointed or rebuilt entirely.

Roofs in Kansas are often damaged by wind or hail, so it is not unusual to see a large number of houses with that problem. Foundation issues or degraded mortar in chimneys are very typical of older homes, and two thirds of Sterling's houses are more than 50 years old. However, many homeowners do not have construction experience, and may not notice these defects or recognize their implications. A public education effort on the City's part could help jog local residents into pursuing repairs before these problems further compromise the soundness of these cherished older homes.

Only a small proportion of houses that were rated "Major Substandard" were in need of multiple repairs, or in overall poor condition that fell short of being evaluated as dilapidated. Only five houses in Sterling were actually rated as "Dilapidated". This is in large part a result of the City's ongoing and aggressive code enforcement efforts, which work to prevent such buildings from spreading blight.

### Manufactured / Mobile Homes

Out of the 25 manufactured or mobile homes in Sterling, over half were in "Standard" condition, and only three were rated "Minor Substandard". None were evaluated as "Dilapidated". Four of the nine manufactured/mobile homes that were rated as "Major Substandard" were scattered around the City, but five of them were located in a single mobile home park in the southwest part of Sterling.

### Multiple-family Dwellings

Sterling has 31 duplexes (with 62 housing units), 3 fourplexes (with 12 housing units), and one apartment building with 6 housing units, for a total of 80 dwellings within multiple-family structures. Of the 34 buildings, 33 are in "Standard" condition, and well-cared for by their owners. One duplex was rated in "Major Substandard" condition.

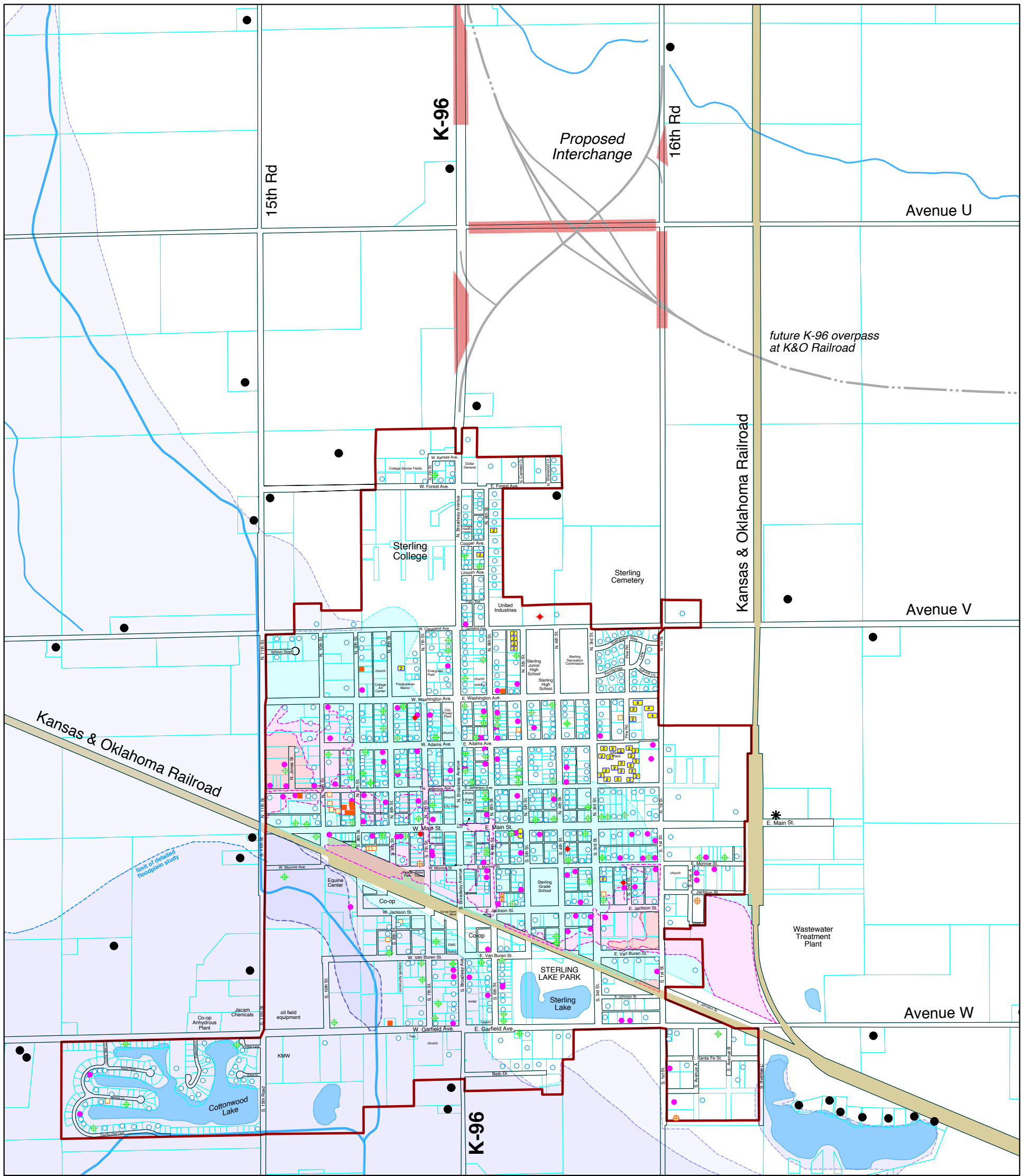
Housing Conditions in City of Sterling (as of November 24 & 25, 2014)								
Multiple-household Dwellings	2-Unit Buildings		4-Unit Buildings		6-Unit Buildings		TOTALS by Condition	
	Buildings	%	Buildings	%	Buildings	%	Buildings	%
Standard	30	96.8%	3	100.0%	1	100.0%	33	97.1%
Minor Substandard	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Major Substandard	1	3.2%	0	0.0%	0	0.0%	1	2.9%
Dilapidated	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>TOTALS</b>	<b>31</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>

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The *Housing Conditions Map—Urban Area*, Figure 6-A, is inserted following this page.

This map shows the location and condition rating of every house, manufactured / mobile home, and multiple-family residential building in the City of Sterling.

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**Key**

- City Limits ▭
- Planning Area ▭
- Rural House ●
- Rural Manufactured Home ✱

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PLANNING CONSULTANTS  
WICHITA, KANSAS

**Key**

- Floodplain Zone X (0.2% annual chance flood) ▭
- Floodplain Zone AE (1% annual chance flood; no base flood elevations determined) ▭
- Floodplain Zone AE (1% annual chance flood; base flood elevations determined) ▭
- Floodplain Zone AO-1 (1% annual chance flood; typically sheet flow to 1 foot depth) ▭
- Floodplain Zone AO-2 (1% annual chance flood; typically sheet flow to 2 foot depth) ▭
- Floodway Areas in Zone AE ▭

**Base Map:**

- Base Map information provided by Kimble Mapping, Inc. of Manhattan, Kansas; & Rice County Appraiser's Office.
- Additions and revisions by Rice Foster Associates P.A., October 2014.

**Floodplain information from FEMA Flood Insurance Rate Maps:**

- City of Sterling, Kansas, Rice County — Community Panel Number 200297 0001 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) — Community Panel Number 200290 0005 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) — Community Panel Number 200290 0008 C, revised September 3, 1997.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0050F, map revised January 6, 2010.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0075F, map revised January 6, 2010.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0090F, map revised January 6, 2010.

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**City Housing Conditions**

- House — Standard ○
- House — Minor Substandard +
- House — Major Substandard +
- House — Dilapidated ✱
- Manufactured / Mobile Home — Standard □
- Manufactured / Mobile Home — Minor Substandard +
- Manufactured / Mobile Home — Major Substandard +
- Manufactured / Mobile Home — Dilapidated ✱
- Multi-family / units per building / Standard ▭
- Multi-family / units per building / Major Substandard +

Housing Condition Field Survey by Rice Foster Associates PA, and City of Sterling Public Works Director, November 24 & 25, 2014.

FIGURE 6-A  
HOUSING CONDITIONS — URBAN AREA

## COMPREHENSIVE DEVELOPMENT PLAN

### STERLING AREA RICE COUNTY, KANSAS

0' 400' 800' 1600'

Plotted Scale 1:4800

## CHAPTER 7. Economy

Very limited published economic data is available for cities with a population of less than 10,000. Kansas sales tax records, which report annually on retail trade, are compiled by counties, not by cities. The federal Census and the *American Community Survey* do provide information sorted by cities, but not by Planning Areas. Within the limits of these constraints, this chapter provides an analysis of the economic characteristics of Sterling, and assesses the potential and needs for future economic development activity.

Unlike previous censuses, the 2010 Census did not ask for detailed social and economic information. Instead, such data is now collected through the *American Community Survey*, which is also administered by the Census Bureau. The *Survey* is sent to about 250,000 households each month, so that data collection is ongoing, rather than only once every ten years. The *American Community Survey* can therefore produce much more current socioeconomic data, providing updated information each year to larger cities, and once every three years to smaller communities.

Economic information is available in more detail from the U.S. Census Bureau FactFinder website at <http://factfinder2.census.gov>, where typing in the name of a place brings up the available data sets for that location. More detailed Kansas information, including economic data from Census 2000, is available from the *University of Kansas Institute for Policy & Social Research*, at [www.ipsr.ku.edu/ksdata](http://www.ipsr.ku.edu/ksdata).

### Census Definitions

Certain terms used in the following discussion are defined precisely by the Census Bureau, with differences from standard usage which have significant implications for correct understanding of the data.

**Family / Household:** A *family* consists of two or more related people residing in the same housing unit. A *household* consists of all people who occupy a housing unit regardless of relationship, and may refer to a person living alone.

**Median / Mean:** A *median* is the middle number in a distribution of numbers, such that there is an equal probability of being above it or below it. A *mean* is generally understood as the "average" of a set of numbers, calculated by adding all the numbers in a set and then dividing by the total number of numbers. While a mean may be skewed by a single out-of-the-norm number in the set, a median typically gives a fairly accurate picture of "normal".

## Economic Data—U.S. Census Bureau

Information in this section originates in the *2009-2013 American Community Survey 5-Year Estimate*. Economic information was not collected in the 2010 Census, so there are discrepancies between the two data sets. For instance, the number of households utilized by the *Survey* (819) is different than the official 2010 Census figure for number of households (786). To maintain consistency within the data, *Community Survey* numbers are used throughout this section.

Also, information in this section applies only to people living *within* the city limits of Sterling, and does not include data on those living in the Sterling Planning Area. Therefore, the extensive agricultural component of the local economy does not appear proportionately in the data shown.

### Income & Earnings

The per capita income figure is a mean, derived by dividing the total income of every person 16 years old and over in a geographic area by the total population in that area. This figure is useful primarily when compared to the same datum for other geographic areas, and should not be construed as an accurate representation of actual income or earnings for a typical Sterling resident.

Annual Per Capita Income	
United States	\$28,155
Kansas	\$26,929
Rice County	\$23,068
<b>Sterling</b>	<b>\$26,091</b>

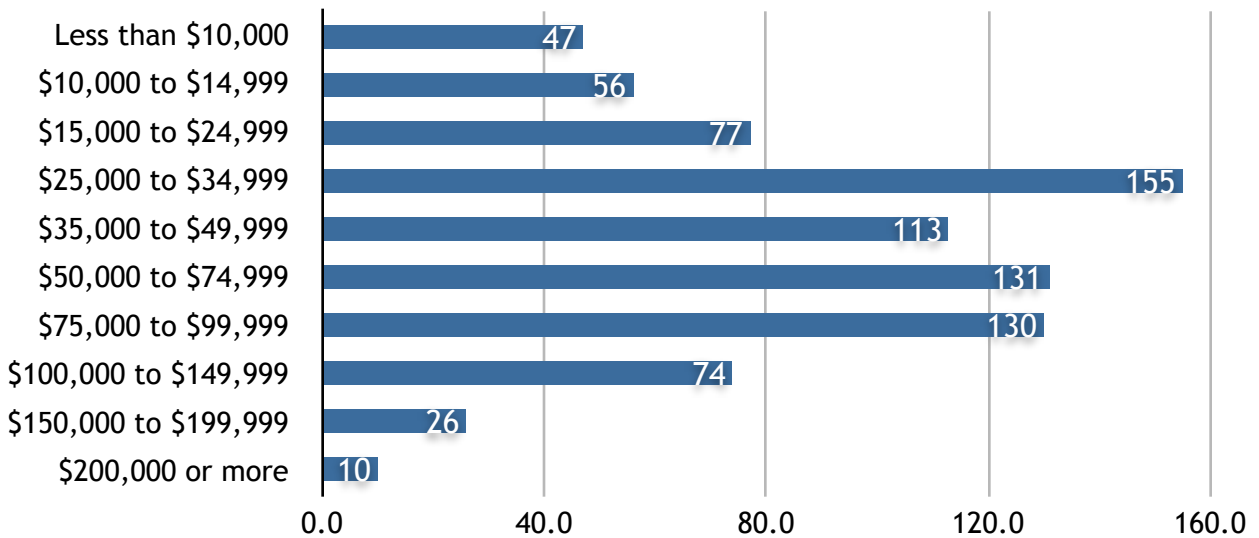
Median earnings noted below are for full-time, year-round workers.

	2009-2013 ACS 5-year Estimate			
	Median Earnings		Median Income	
	Males	Females	Household	Family
Rice County	\$42,284	\$28,297	\$45,336	\$57,196
<b>Sterling</b>	<b>\$44,200</b>	<b>\$32,143</b>	<b>\$43,438</b>	<b>\$62,344</b>



In the 2009-2013 American Community Survey 5-Year Estimate, out of 819 households in Sterling, **annual household income and benefits** were distributed as shown; the bars indicate the number of households in each income range. Incomes are shown in 2013 inflation-adjusted dollars.

**Annual Household Income & Benefits**



**Census 2000 to ACS 2009-2013:** In the 14 years from 1999 to 2013, per capita income levels for residents in the City of Sterling increased by over 97%.

Income Comparisons	Income 1999	Income 2013	Percentage Increase
Per Capita Income	\$13,229	\$26,091	97.2%
Median Household Income	\$35,282	\$43,438	23.1%
Median Family Income	\$40,739	\$62,344	53.0%

### Types of Employment

From the 2009-2013 American Community Survey 5-Year Estimate: Out of a population of 2,269 persons, there were 1,909 people (84%) in the City of Sterling who were 16 years of age and older. Of those, 1,130 were in the labor force (59.2% of those 16 and up). Of those in the labor force, none were in the armed forces, 119 (6.2%) were unemployed, and 1,011 (53.0%) were civilians and employed. The following three tables show data for those 1,011 employed civilians, by occupational category, by the industry in which they were employed, and by the class of worker.

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Occupational Category	Persons	Percentage
Management, business, science, and arts	385	38.1%
Sales and office	231	22.8%
Service	192	19.0%
Natural resources, construction, and maintenance	105	10.4%
Production, transportation, and material moving	98	9.7%

Industry in which Employed	Persons	Percentage
Educational services, and health care and social assistance	300	29.7%
Arts, entertainment, and recreation, and accommodation and food services	117	11.6%
Manufacturing	103	10.2%
Professional, scientific, and management, and administrative and waste management services	93	9.2%
Construction	91	9.0%
Retail trade	59	5.8%
Public administration	58	5.7%
Agriculture, forestry, fishing and hunting, and mining	47	4.6%
Wholesale trade	41	4.1%
Finance and insurance, and real estate and rental and leasing	40	4.0%
Other services, except public administration	37	3.7%
Information	15	1.5%
Transportation and warehousing, and utilities	10	1.0%

Class of Worker	Persons	Percentage
Private wage, salary, and commission workers	788	77.9%
Government workers (working for federal, foreign, international, tribal, state or local government)	179	17.7%
Self-employed (in own not incorporated business)	44	4.4%
Unpaid family workers	0	0.0%

Of the 1,011 employed civilians over 16 in the City of Sterling in 2013, close to a third were employed in education (29.7%). A significant majority (77.9%) were privately employed.

Out of the 1,909 people in the City of Sterling who were 16 years of age and older, a total of 779 (40.8%) residents were not in the labor force. People in this category are typically retired, students, disabled, or full-time homemakers.

### Unemployment

The *2009-2013 American Community Survey 5-Year Estimate* defines the labor force as those individuals, 16 years old or older, who are employed or seeking employment.

Employment	Sterling		Rice County		Kansas	
	Persons	%	Persons	%	Persons	%
Labor force	1,130		4,989		1,509,187	
Employed / military	0	0.0%	0	0.0%	17,775	1.2%
Employed / civilian	1,011	89.5%	4,673	93.7%	1,387,071	91.9%
<b>Unemployed civilians</b>	<b>119</b>	<b>10.5%</b>	<b>316</b>	<b>6.3%</b>	<b>104,341</b>	<b>7.0%</b>

In a time frame when the U.S. unemployment rate was **9.7%**, Rice County was doing considerably better than the nation (**6.3%**), and somewhat better than the state as a whole (**7.0%**). Unfortunately, the City of Sterling's unemployment rate was worse than the national average, at **10.5%**.

### Commuting

Workers in Sterling, 16 years old or older, commuted to work as shown in the following table. The mean travel time to work for them was 16.4 minutes. The national average commute time was 25.5 minutes, in Kansas it was 19.0 minutes. and in Rice County it was 17.6 minutes.

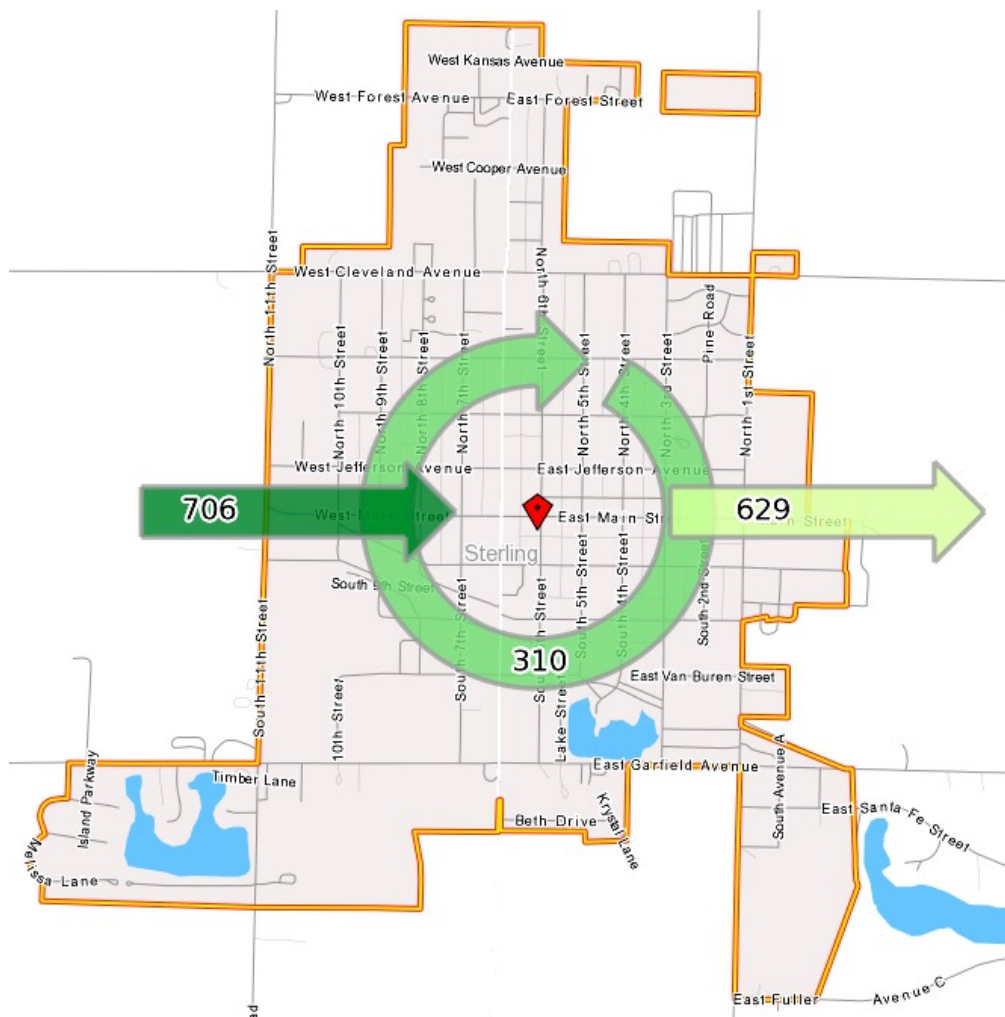
Commuting	Persons	Percentage
Drove in car, truck or van—alone	701	71.8%
Drove in car, truck or van—carpooled	175	17.9%
Walked	80	8.2%
Other means	14	1.4%
Worked at home	6	0.6%
Public transportation (excluding taxicab)	0	0%

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**Inflow / Outflow Job Counts** Based on **2011** Census information, of the 1,016 people employed in Sterling, 706 (69.5%) commute into the city from elsewhere. Of the 939 employed people *living* in Sterling, 629 (67%) commute out of the city to work elsewhere. There are 310 people who both live and work in Sterling.

- 706** –Commute into Sterling for work
- 310** – Both live and work in Sterling
- 629** – Live in Sterling and work elsewhere



## Economic Data–Community Questionnaire

### Shopping Patterns of Sterling Residents

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents both inside and outside the City were asked where they did most of their shopping for various categories of items.

Community Questionnaire – Shopping Locations										
Shopping Location	STERLING		LYONS		HUTCHINSON		ELSEWHERE		INTERNET	
	All	%	All	%	All	%	All	%	All	%
Groceries	108	66%	5	3%	47	29%	3	2%	0	0%
Medicine	83	62%	6	5%	35	26%	9	7%	0	0%
Clothing	2	1%	3	2%	85	59%	36	25%	18	13%
Furniture	0	0%	3	3%	58	48%	59	49%	0	0%
Appliances	5	4%	4	3%	72	57%	42	33%	3	2%
Hardware	60	35%	34	20%	65	38%	10	6%	3	2%
<b>Total Responses</b>	<b>258</b>	<b>30%</b>	<b>55</b>	<b>6%</b>	<b>362</b>	<b>42%</b>	<b>159</b>	<b>19%</b>	<b>24</b>	<b>3%</b>

The pattern of local shopping behavior reflects the variety of retail options in Hutchinson, about a half hour's drive away. The large number of people who shop "Elsewhere" may indicate shopping trips to Wichita's NewMarket Square shopping district at 21st and Maize Road (about 62 miles or a little over an hour's drive away from Sterling). Overall, 42% of respondents shop in Hutchinson, 30% shop in Sterling, and 19% shop "elsewhere", at least for these categories of items.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked their reasons for shopping elsewhere than in Sterling.

Community Questionnaire – Reasons for Shopping Elsewhere						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
Items unavailable locally	94	33%	8	31%	<b>102</b>	<b>33%</b>
Wider selection of goods	87	31%	7	27%	<b>94</b>	<b>31%</b>
Price is better	50	18%	6	23%	<b>56</b>	<b>18%</b>
Convenient to place of work	6	2%	0	0%	<b>6</b>	<b>2%</b>
Store hours	35	12%	4	15%	<b>39</b>	<b>13%</b>
Store personnel	3	1%	0	0%	<b>3</b>	<b>1%</b>
Product service	7	2%	1	4%	<b>8</b>	<b>3%</b>

Availability of desired items and a wider selection of items are the major reasons noted for shopping elsewhere than in Sterling.

### Location of Employment

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked the location of employment for persons in their household.

Community Questionnaire – Location of Employment						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
<b>Sterling</b>	79	59%	4	44%	<b>83</b>	<b>58%</b>
<b>Lyons</b>	18	14%	1	11%	<b>19</b>	<b>13%</b>
<b>Hutchinson</b>	16	12%	0	0%	<b>16</b>	<b>11%</b>
<b>Great Bend</b>	1	1%	0	0%	<b>1</b>	<b>1%</b>
<b>McPherson</b>	1	1%	0	0%	<b>1</b>	<b>1%</b>
<b>Other</b>	18	14%	4	44%	<b>22</b>	<b>15%</b>
<b>Total Responses</b>	<b>133</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>142</b>	<b>100%</b>

While substantial numbers of Sterling area residents are employed in Lyons and Hutchinson, 58% are employed in Sterling, which is a very good percentage for a city of Sterling's size.

### Tax Rate Perceptions

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked how they would rate the City tax rate and the School District tax rate.

Community Questionnaire – City Tax Rate								
	High		Reasonable		Low		Don't know	
<b>In City of Sterling</b>	51	43%	50	42%	0	0%	18	15%
<b>Outside City / In Planning Area</b>	2	22%	3	33%	0	0%	4	44%
<b>Total Responses</b>	<b>53</b>	<b>41%</b>	<b>53</b>	<b>41%</b>	<b>0</b>	<b>0%</b>	<b>22</b>	<b>17%</b>

Community Questionnaire – School District Tax Rate								
	High		Reasonable		Low		Don't know	
<b>In City of Sterling</b>	46	39%	51	44%	0	0%	20	17%
<b>Outside City / In Planning Area</b>	4	40%	4	40%	0	0%	2	20%
<b>Total Responses</b>	<b>50</b>	<b>39%</b>	<b>55</b>	<b>43%</b>	<b>0</b>	<b>0%</b>	<b>22</b>	<b>17%</b>



## Local Tax Levies

Property tax rates are expressed in mills, or tax dollars due per one thousand dollars of the assessed valuation of property. Assessed value is substantially lower than market value. Assessments are made and millage is levied in one year for tax payments due in the following year.

2013 Levy	in mills
State of Kansas	1.500
Rice County	42.858
Sterling USD 376	74.655
Hospital District #1	13.154
<i>Subtotal</i>	<i>132.167</i>
City of Sterling	
General	37.396
Library	4.999
Fire Equipment Reserve	2.000
Special Street	1.231
Cemetery	4.999
<i>Subtotal</i>	<i>50.625</i>
<b>Total 2013 Levy</b>	<b>182.792</b>

This table shows the official 2013 ad valorem tax levies for the City of Sterling, as listed by the Rice County Clerk at <http://ricecounty.us/departments/clerk/>.

The total City 2013 tax levy of 50.625 is slightly higher than the 2012 rate of 48.951.

Rice County taxes pay for county government, road and bridge maintenance, health and emergency medical services, senior citizen services, mental health services, noxious weed control, Agricultural Extension, the County Fair, the Agricultural Building, the Conservation District, and economic development, among other purposes.

The 2013 assessed valuation of property in Sterling was \$9,326,194. Applying the 2013 total mill levy of 182.792 would produce total property taxes of \$1,704,754, to be paid from Sterling property owners in 2014, to the state, county, school district, hospital district, and the City.

Cities in Rice County	Total Assessed Valuation	2013 City Levy in mills
Chase	\$976,644	106.853
Bushton	\$816,666	89.393
Geneseo	\$620,475	75.049
Little River	\$1,707,384	55.840
Lyons	\$14,504,396	51.754
<b>Sterling</b>	<b>\$9,326,194</b>	<b>50.625</b>
Raymond	\$225,598	25.068
Alden	\$678,441	16.589
Frederick	\$98,192	0.167

Of the nine cities in Rice County, Sterling had the second highest Total Assessed Valuation, and the fourth lowest mill levy.

## **Section 3 – Systems & Facilities**

- CHAPTER 8. Transportation Systems
- CHAPTER 9. Utilities and Stormwater Management Systems
- CHAPTER 10. Community Facilities & Services

## CHAPTER 8. Transportation Systems

A good transportation system impacts other societal goals, including economic vitality, air quality, social equity, environmental resource preservation, and overall quality of life. A transportation plan is intended to create and maintain a transportation system that serves community facilities, responds to both existing and future land use patterns, and supports desired development.

A transportation system should include various modes of travel and transport, for both passengers and freight. Transport modes include roads, railroads, air travel, public transit, bicycle and pedestrian paths, and sidewalks. Modes should interconnect, to allow someone to use multiple means of transport in a single trip. When developing a transportation plan, consider all potential transport modes, and select alternatives based on economic feasibility, energy efficiency, and low long-term maintenance costs.

Sterling has a good local road system, as well as direct access to freight train service. Regionally, Sterling's residents have fairly good access to the interstate highway system, and to air travel. The City road system is about to undergo a major change, when the K-96 / K-14 Highway is relocated to bypass Sterling, and a new K-96 interchange is constructed just northeast of the City.

### **The Core Connections Study**

The *Core Connections* study for the Main Street Corridor Project was completed for the City of Sterling by Wilson & Company in January 2014. The study documented the City's existing road system, and established a set of baseline data intended to aid Sterling "in identifying and prioritizing bicycle and pedestrian projects and updating city roadway standards to reflect a 'complete streets' approach".

The study then focused on the changes that could be expected to impact downtown Sterling and Broadway once that street is no longer a part of K-96, and discussed the City's future relationship to the new K-96 interchange. *Core Connections* identified:

- How to best connect downtown Sterling and the new K-96 interchange
- Key routes to connect downtown, community facilities, and K-96 / K-14
- Potential streetscape improvements
- Potential strategies to improve tourism and retain businesses
- Potential parking areas for special events downtown
- Potential changes to roadway design and right-of-way dedication standards
- Opportunities to improve crosswalks and lighting for pedestrian safety

## Roadways and Streets

Roads and streets in the Sterling Planning Area are typically one of three broad design types: urban gridiron streets, subdivision streets, or rural roads. The following descriptions are generalized, and are intended only to describe typical conditions for each street design type; exceptions occur.

**Gridiron streets** form a grid of 90-degree intersections, creating rectilinear blocks typically about 370 by 500 feet in size, with alleys for utility access. Gridiron streets are usually surfaced with concrete or asphalt, but in some cases may still be gravel. Paved gridiron streets typically have curbs, gutters, and drainage structures, while those unpaved have drainage ditches.

Established when the City was originally platted, nearly all the streets within the city limits of Sterling are in this category.

Lots associated with gridiron street neighborhoods are relatively small by recent expansive standards, and of uniform size and shape; multiple lots are sometimes combined into a single parcel with a single owner. Alleys provide potential vehicle access to the detached backyard garages often found in older neighborhoods.

*Gridiron streets maximize both physical and social interconnectedness.*

**Subdivision streets** usually occur in neighborhoods platted in the 1950s or later. They incorporate curvilinear streets, T-intersections, and cul-de-sacs. Rather than alleys, they use a system of easements to allow utility access. Subdivision streets are typically surfaced with concrete or asphalt, and have curbs, gutters, and drainage structures.

In the City of Sterling, only the Cottonwood Lake subdivision incorporates cul-de-sacs, and it is not a typical suburban subdivision. In the Planning Area, the primary access road for the gated community immediately to the southeast of the City circles the lake there, without T-intersections or cul-de-sacs, and so does not have a typical subdivision road pattern either.

Lots associated with subdivision street neighborhoods are large and of varying sizes and shapes. Houses often have wide driveways connecting to multi-bay attached garages.

*Subdivision streets are intended to maximize privacy.*

**Rural roads** are usually mile-line roads—straight, oriented closely to north-south or east-west, and typically about a mile apart. They may be surfaced with asphalt, gravel, or be compacted dirt. They generally have drainage ditches.

Most of the roads in the Planning Area outside Sterling's city limits are typical rural roads.

## Functional Classification System—Federal

The roads in the Sterling Planning Area are part of a nationwide system of federal street classifications, which are reviewed periodically, and revised as necessary to reflect changing conditions. Changes in classification must be approved by local County Commissioners. **Street classifications affect funding for road improvements.** A street must be in the approved federally classified roadway system before projects on that roadway can receive federal transportation funding.

Streets are classified into a function-based hierarchy depending on how they balance access to adjacent land uses against speed and traffic volume. **Arterials** maximize traffic flow and speed, but have limited access. **Collectors** balance traffic with access, and **local** roads reduce speed and traffic volume in order to maximize access to adjacent properties.

There are numerous categories and sub-categories within this general hierarchy, but only one category and two sub-categories in the federal functional classification system apply directly to the Sterling Planning Area. **Other Principal Arterials** connect urban centers and facilitate travel through rural areas. **Rural Collector Roads** typically support shorter trips than roads designated as arterials, serving travel within adjacent counties rather than statewide. Rural Collector Roads are subcategorized into **Major Collectors** and **Minor Collectors**.

**Other Principal Arterials** support high-speed travel but are not access-controlled, and so can serve abutting land uses directly. Within the Sterling Planning Area, there is only one road classified as an Other Principal Arterial:

- K-96 / K-14 Highway (In the Sterling Planning Area, K-96 and K-14 coincide)

**Major Collectors** connect towns and cities that are not on arterial routes to each other, to arterial roads, or to destinations such as consolidated schools or shipping points.

Within the Sterling Planning Area, the major collectors are:

- RS 445 – Avenue Q, east from K-96 (16th Road)
- RS 571 – Avenue T, west from K-96
- RS 572 – Avenue V, east from K-96
- RS 1534 – Avenue W, west from K-96 to 12th Road, then south one mile (across the Arkansas River), then west on Avenue X
- RS 554 – 101st Avenue, west from K-96 for one and a half miles, then south a half mile on Peace Road, then west on 95th Avenue

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**Minor Collectors** provide service to smaller communities, and connect locally important traffic generators to major collectors or arterials. Within the Sterling Planning Area, the minor collectors are:

- MCS 08006 – Avenue Q, west from K-96
- MCS 08004 – Avenue T, east from K-96 to 20th Road
- MCS 08005 (in Rice County) and MCS 07811 (in Reno County) – 12th Road and Andre Road, from Avenue X south to 95th Avenue
- MCS 08009 – 20th Road, north from Avenue V, west on Avenue S, and north on 20th Road

More information on the federal functional street classifications can be found in the 2013 Federal Highway Administration report *Highway Functional Classification Concepts, Criteria and Procedures*, available at: [www.fhwa.dot.gov/planning/processes/statewide/related/highway\\_functional\\_classifications/fcauab.pdf](http://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf).

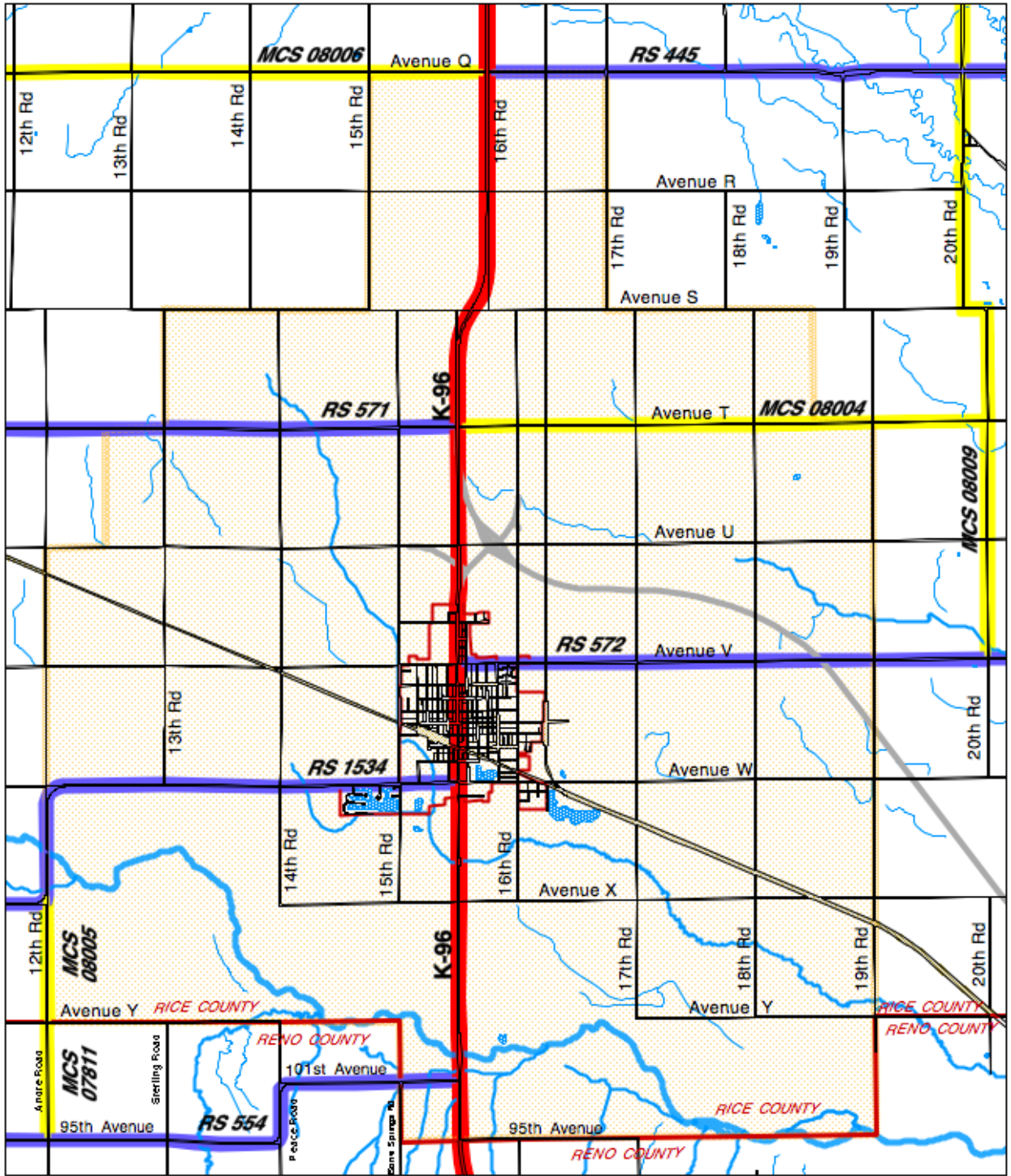
Maps showing federal functional street classifications for each county in Kansas are maintained by the state Department of Transportation (KDOT). All of KDOT's *County Roadway Functional Classification Maps* are available at: [www.ksdot.org/burtransplan/maps/CountyFunClass.asp](http://www.ksdot.org/burtransplan/maps/CountyFunClass.asp).

The map on the following page shows classifications from the 2013 KDOT *Functional Street Classification Map for Rice County* for the Sterling Planning Area, for the 5 to 10 years succeeding 2013.

KDOT Functional Street Classification Map

**KDOT Functional Street System Key**

- Other Principal Arterial █
- Major Collector █
- Minor Collector █





## Functional Classification System—Local

In addition to the federal functional street classes just described, City streets are also classified with a *local* functional system—which uses the same terminology, but applies it on a far smaller scale. Local street classifications affect maintenance priorities for snow removal and repairs.

**Arterial Streets** are major thoroughfares which carry traffic to, from, and through a city; they tend to be wider to support more traffic at higher speeds, and have fewer connections to adjacent land uses. Sterling's arterial is the **K-96 / K-14 route on Broadway**, which will continue to be the City's primary arterial even after the K-96 realignment takes place.

**Major Local Collector Streets** are rural secondary roads which connect the city to the network of county roads linking rural destinations; they tend to be medium widths, paved, with relatively light traffic and higher speeds, and infrequent connections to adjacent land uses. Major local collector streets are shown in blue on the map on the following page, and listed below.

- Avenue V, east from Broadway Avenue (RS 572)
- Avenue W, west from Broadway Avenue (RS 1534)

**Local Collector Streets** gather traffic from local streets and carry it to major collectors or arterials; they tend to be medium widths, balancing moderate traffic, speeds, and connections to adjacent land uses. In Sterling, local collector streets are shown in green on the map on the following page, and listed below.

### *East / West* –

- West Forest Avenue, for two blocks west of Broadway Avenue
- Washington Avenue – 8th Street to 3rd Street
- Main Street – 10th Street to 1st Street
- Jackson Street – Broadway Avenue to 3rd Street
- East Garfield Street – Broadway Avenue to 1st Street

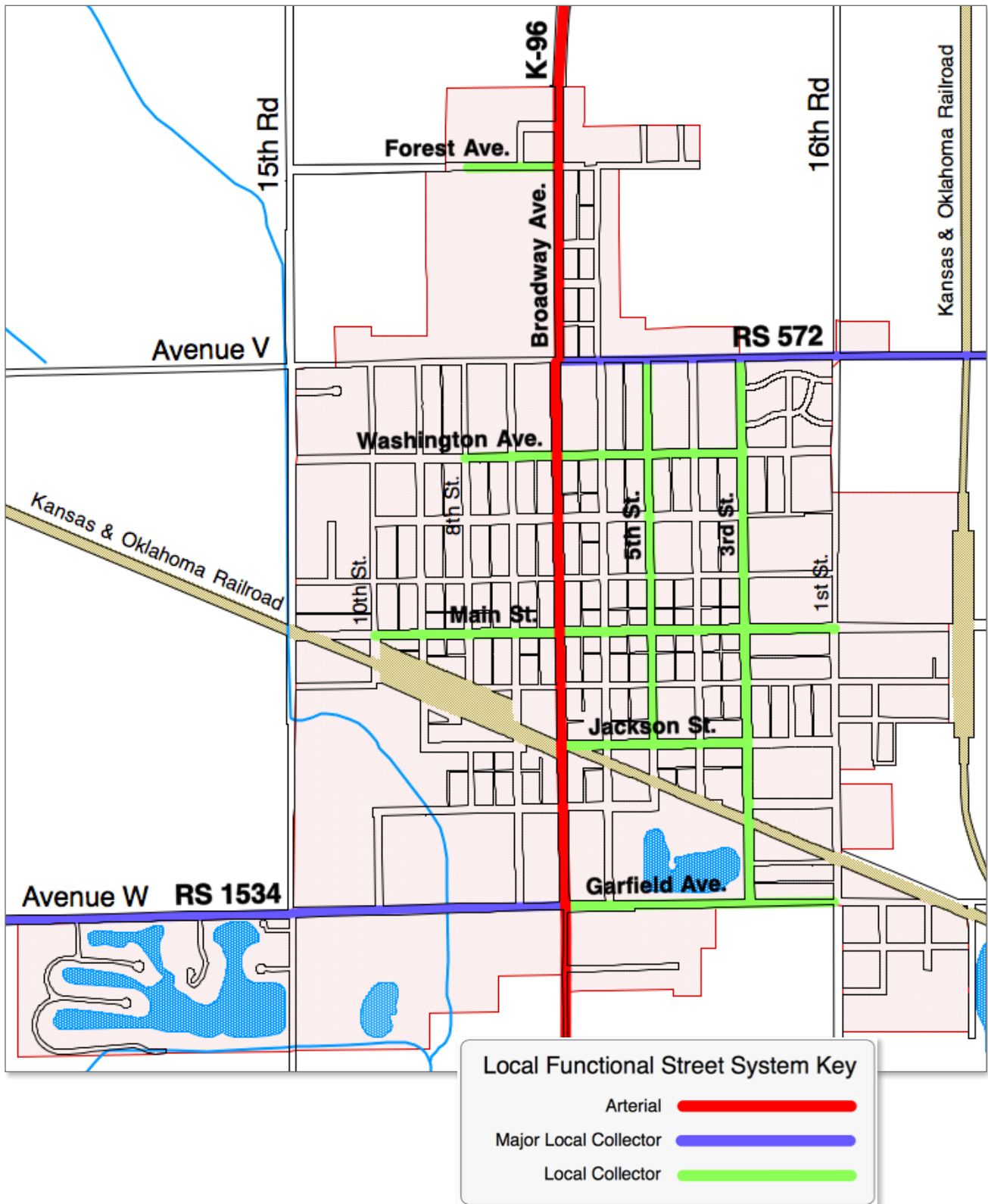
### *North / South* –

- 5th Street – Cleveland Avenue to Jackson Street
- 3rd Street – Cleveland Avenue to Garfield Avenue

**Local Streets** are the smaller streets that provide access to individual properties; they generally carry little traffic, and have slower operating speeds. All Sterling streets not specifically mentioned above are considered local streets.

The map on the following page shows local functional classifications for the Sterling Planning Area, as of 2015.

**Local Functional Classification Map**



## Street & Parking Design Standards

Each type of street in the urban classification system—arterial, collector, and local—serves a different purpose, and requires different design criteria. Though a particular street may not require all of the following elements at any given point in time, every street *right-of-way* should have sufficient width to allow for the potential future development of all of the following elements, at some stage in the street's life:

- paved traffic lanes, with adequate turning radii at corners
- curbs and gutters
- signs for traffic control and other purposes
- stormwater drainage ditches and/or structures
- underground and overhead utilities
- sidewalks
- planting areas for street trees and landscaping
- on-street parking

**Arterial Streets** serve as an area's primary links to the state and federal highway system. Their right-of-way should be 80 to 120 feet wide; roadways are typically 24 to 48 feet wide. The more of the following elements that are likely to occur, the more right-of-way may be needed:

- considerable truck traffic, or large volumes of auto traffic
- substantial on-street parking
- significant drainage problems
- bicycle/pedestrian paths (8' to 12' wide), or sidewalks
- street trees

**Collector Streets** connect neighborhoods, and provide access to facilities such as schools, parks and shopping areas. Their right-of-way should be 70 to 80 feet wide. Roadways are typically 36 to 40 feet wide, and may accommodate two 10' to 12' traffic lanes plus two 8'-wide on-street parking areas.

**Local Streets** should incorporate traffic-calming measures to reduce their use by through traffic. Their right-of-way is typically 60 to 64 feet wide; roadway widths vary, and may be as wide as 30 to 34 feet, with the latter widths dependent upon whether two traffic lanes and on-street parking are desired. Minimum street width and turning radii are often dictated by the needs of local fire-fighting vehicles.

## Complete Streets

The complete streets planning concept calls for street design that supports safe and comfortable travel by *all* users, of all ages and abilities, including pedestrians, bicyclists, public transit users, and motorists. Complete street design recognizes that public rights-of-way are meant to serve more than just vehicular traffic.

Complete streets, also called livable streets, typically include sidewalks with curb ramps, good crosswalks (often with medians for pedestrian refuge), countdown signals, and shade for pedestrians, as well as bike lanes and bike racks. Depending on local needs, they may also include on-street parking, and bus stops or bus lanes.

Complete streets vary widely because they are always designed to fit a community's specific local needs. Find more information at [www.completestreets.org](http://www.completestreets.org).

In Sterling, a complete streets strategy has already been implemented in the downtown retail area, and is recommended for renovation projects on streets in the vicinity of the College and public schools.

*"The role of streets  
is to build communities,  
not the other way around."*

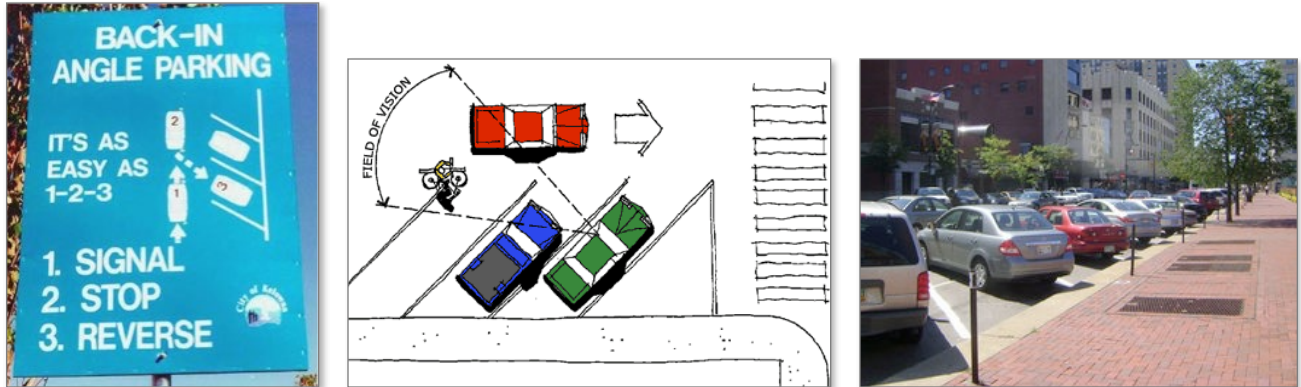
*Gary Toth – Project for Public Spaces*

## Parking

A vehicular circulation system must accommodate vehicles not only when they are traveling, but also when they are parked. An estimate derived from census data indicates that there are currently at least 1,437 vehicles based in Sterling.

- **Vehicles** According to the *2009-2013 American Community Survey 5-Year Estimates*, of the 819 occupied housing units in Sterling, 66 (8.1%) had no vehicles available, 249 (30.4%) had one vehicle available, 324 (39.6%) had two vehicles available, and 180 (22.0%) had three or more vehicles available.

Parking facilities are categorized as on-street or off-street. **On-street parking** may be parallel, angle, back-in angle (see following illustrations), or at right angles to the curb. It is generally adjacent to the sides of the street, but may under certain circumstances be in mid-street between traffic lanes. **Off-street parking** includes parking lots and public parking garages in business areas, as well as driveways, carports, and private garages in residential areas.



*Back-in angle parking (also known as reverse diagonal parking) has proven safety benefits over traditional front-in angle (diagonal) parking, including better sight lines as drivers pull out into traffic, and more safety for children because open car doors direct them toward the sidewalk rather than out into the street. For more information, see <http://www.walkinginfo.org/faqs/answer.cfm?id=3974>.*

**Residential Parking** In many older neighborhoods, streets were designed and are expected to support both traffic flow and shared on-street parking. Modern suburban developments often require off-street parking, and so devote less land to paved streets but more to driveways and garages. In both cases, there is usually adequate parking designed into residential neighborhoods to support normal residential needs.

**Parking at Schools and Parks** Particularly when they are located in or adjacent to residential neighborhoods, public facilities such as schools and parks need to provide adequate off-street parking for the large numbers of vehicles that often accumulate.

**Commercial Parking** It is important to have adequate parking to support local businesses, but it is also important not to *overbuild* parking facilities. Parking spaces and their associated aisles are surprisingly expensive to construct, they generate runoff which adds significant load to stormwater management systems (increasing their cost), and they absorb and reflect substantial amounts of radiant heat (raising air conditioning costs for adjacent buildings). Requiring every business to have its own dedicated parking spaces can exacerbate these costs, while shared public parking reduces them.

Small town main streets were traditionally designed and intended to support both traffic flow and shared on-street public parking. Though out of fashion in recent decades, this parking solution is now being recognized again as a valuable and cost-effective parking strategy. In Sterling's downtown retail district, there is a good mix of public on-street parking for customers, and back lots suitable for staff parking.

## Public Transit, Railroad, & Air Travel Services

Like many towns in Kansas, Sterling *became* a town because of its proximity to the railroad, and access to rail freight service is still important to the local economy. Sterling also has reasonably convenient access to rail passenger service via Amtrak, and to the air travel system. Public transit services are very limited.

### Public Transit Service

There is no City bus service or other public transit system in the City of Sterling.

The nonprofit Rice County Council on Aging sponsors a program called **Quivira Transit**, which provides low-cost public transportation, by reservation. For more information, see [www.ricecountycouncilonaging.com](http://www.ricecountycouncilonaging.com).



### Railroad Service

Tracks of the **Kansas and Oklahoma Railroad** pass generally southeast to northwest through Sterling on their way from Wichita and Hutchinson to Great Bend and points west, carrying agricultural commodities and industrial products. Sterling's Co-op benefits from its direct access to rail-based freight services.

The K&O line to the east of Sterling begins just southeast of the city and runs north through Lyons to Geneseo, where it becomes a combined K&O and Union Pacific line running from Geneseo west to McCracken.

According to information from the Federal Railroad Administration Office of Safety Analysis, which is voluntarily reported by the railroads and the state, the main K&O track through Sterling carries **four trains per day** on average, and the K&O line on the east side of Sterling carries one train per day. Sterling's railroad crossings are all at-grade.

**Passenger train service** is available to Sterling residents through Amtrak. The nearest station is in Hutchinson, 23 miles to the southeast, less than a half-hour's drive away.

Information on railroads in Kansas, including the *2011 Kansas Statewide Rail Plan*, is available on the website of the Kansas Department of Transportation (KDOT), at [www.ksdot.org](http://www.ksdot.org); just click on the train icon. Information on road crossings is available from the Federal Railroad Administration Office of Safety Analysis at <http://safetydata.fra.dot.gov/officeofsafety/publicsite/Query/invdetl.aspx>.

## **Air Travel Service**

Sterling residents have good access to international air travel. Wichita Dwight D. Eisenhower National Airport is 73 miles away, or about a one hour and nine minute drive, and hosts five airlines – Allegiant Air, American Airlines, Delta Air Lines, Southwest Airlines, and United Airlines.

Hutchinson Municipal Airport, just 27 miles away, is a business aviation center, with three runways capable of handling corporate aircraft, and with charter service available. Other nearby local airports include McPherson Airport, Great Bend Municipal Airport, Larned-Pawnee County Airport, Salina Regional Airport, and Pratt Regional Airport.

## **Sidewalks and Bicycle/Pedestrian Pathways**

As fuel costs continue to trend upward, the American population ages, and the obesity epidemic becomes more severe (especially among children), more communities are realizing the value of offering residents safe venues for bicycling and walking.

Walking and biking are some of the very best and most widely accessible forms of exercise. A sidewalk or pathway system not only contributes to public health, but also enhances a sense of community, as people get to know their neighbors and their neighborhoods in a way not possible from the seat of a car.

Paths that support walking and biking for recreation also provide an alternative transportation option. For children who are too young to drive, for people unable to drive, and for those who simply prefer not to drive when they can avoid it—a sidewalk and pathway network offers an alternative way to safely get where they want to go. Bicycle and pedestrian pathway networks are most successful when they connect residential neighborhoods to community destinations, including schools, parks, churches, and downtown businesses.

### **Sidewalks**

Older neighborhoods were designed to be walkable, if for no other reason than that children regularly walked to school. Subdivisions developed since the 1950s were often built with limited sidewalks, in part because lot sizes were so large that sidewalks would be very expensive, and in part because cul-de-sac street design makes pedestrian connections so difficult to achieve. As more homebuyers seek walkable neighborhoods, older homes in downtown areas are becoming more highly desirable real estate.

Sterling has sidewalks throughout the business area and in approximately half of its residential areas. Streets closer to Broadway are more likely to have sidewalks. The condition of the City's sidewalks varies from "good" to "in need of repair". The 2014 *Core Connections* study has more detailed information.



### **Bicycle / Pedestrian Pathways**

Pathway networks are usually constructed in public rights-of-way. They can be designed as *bike paths* (built within a right-of-way, but separated from the road itself), or as dedicated *bike lanes* on a road or its shoulder (defined with pavement markings), or they may simply be *bike routes* (designated with "Share the Road" signs).

The walking / biking path around the lake in Sterling Lake Park is well-loved and well-utilized, but it is more of a recreational asset to the community than a transportation alternative. Sterling currently has no other off-road bicycle paths and no designated on-road bicycle lanes or routes in its Planning Area.

Even if the City chooses to make no immediate plans to implement a pathway system, it would be wise to keep options open. Make sure that planning decisions made now do not foreclose the possibility of future development of a local bicycle/pedestrian pathway network connecting Sterling's park, schools, and downtown.

**Bicycle Racks** Even without dedicated bicycle routes, local cyclists do ride bikes on Sterling's streets and sidewalks. Encourage this activity by giving them somewhere to put their bikes when they get where they're going. Consider instituting a Bicycle Rack installation program, implemented either through the City or through volunteer efforts, or both. Determine locations where racks are needed, looking particularly at schools, the Park, the Library, downtown stores, and similar destinations.

Visit the website [www.bicyclinginfo.org](http://www.bicyclinginfo.org) to find more about criteria for bicycle facilities, and educational programs for both drivers and cyclists.

## CHAPTER 9. Utilities and Stormwater Management Systems

An adequate and dependable utilities system is essential to maintain a high quality of life for current residents, and to support future development. Utility lines are typically located within or adjacent to transportation rights-of-way or drainage easements, and are often built and maintained in conjunction with road installation or repair projects. It is essential to preserve enough space in such public corridors to accommodate future utilities. Without long-term planning, constricted utilities may limit growth, and become a financial burden on the community.

It is important to maintain accurate **records and maps** of both existing and new utilities, and to develop **procedures for installation and maintenance**. In 2013, the City completed a graphic information system (GIS) mapping and database of local utility information, including data and mapping for Sterling's water system, sanitary sewer system, and storm sewer system. The electric system was mapped in a separate project, completed in 2014. The City will need to continually update this information as changes are made to these systems, in order for this to be a valuable tool in the future for planning and efficient maintenance of the utilities.

The City has franchises with the following private, but publicly regulated, companies, which provide services in Sterling:

- Electric Power: Midwest Energy, Inc., and Ark Valley Electric Cooperative
- Natural Gas: Black Hills Energy
- Telephone: Cox Communications, MTC, and CenturyLink

It is not within the scope of this Plan to analyze such private companies, or make recommendations regarding their future operations. Developers of specific future projects should consult with each of these companies in order to insure that adequate service is available. Such companies normally maintain continuing short and long-range facility planning programs. All of the above companies maintain toll-free phone numbers and customer service websites for service contacts.

Sterling's municipal utilities infrastructure includes the water distribution system, the sewage collection and treatment system, the stormwater drainage system, the electrical distribution system and one power generation facility. Of these utilities, the gravity flow limits of the sewage collection system and drainage systems as well as the build out of electric services impose the most direct limits on future development in Sterling.

**Policies** on the placement of structures, fences and vegetation in utility and drainage easements should be adopted and rigorously enforced.

The Sterling Public Works Department operates the water and sewer systems as utilities with specific revenue designed to fund the operation and capital improvements needed to maintain a quality service for customers. The Public Works Department also maintains the stormwater drainage system that is within the City. However, the stormwater system is not funded by any revenue specific revenue source. The Electric Department operates the electrical distribution and power plant systems. The electrical distribution system and the power plant are both funded through a designated revenue system to operate and improve the systems.

Administration for these utilities is operated through three primary supervisors and the City Manager. Billing services are controlled in City Hall, located at 114 North Broadway. Headquarters for the water utility, sewer utility, stormwater system, and electrical distribution system is located at 117 North Broadway, with supervisor offices and the main equipment storage facility. Another equipment storage facility is located on East Garfield Avenue.



## Water Distribution System

The water system in Sterling supplies and distributes high quality water, and collects and treats wastewater for the City of Sterling. Services include pumping and purifying water, maintaining distribution systems, managing facilities, and planning for the City's future needs.



*Sterling Water Tower*

The Water Utility produces, treats, and distributes approximately 79,500,000 gallons of water per year for its customers. The water utility provides customers with treated water that originates in one of two well fields (No. 10 and 11) located west of town, which draw water from the *Great Bend Prairie Aquifer*; water is distributed through 19 miles of water pipe. The two current well fields were updated in 2001. Well No. 11 at 100 feet deep is rated at 750 gallons per minute and Well No. 10 at 52 feet deep is rated at 500 gallons per minute. At the well house point of treatment, chlorine disinfectant and polyphosphates are added to control iron and manganese, as well as to provide "color control". The City is also served by two backup wells located in west Sterling. Each of the backup wells are rated at 250 gallons per minute.

The well system and water tower are controlled by a SCADA (supervisory control and data acquisition) system operating with coded signals over communication channels so as to provide control of remote equipment (using typically one communication channel per remote station). These signals can alert staff members of issues with the pumps or with the tower in sufficient time to make adjustments to the distribution system for continued customer satisfaction and system performance.

Water distribution mains in Sterling are typically 6" in diameter; some are 4" in diameter. The City has made strides to improve water quality by reducing the number of "dead end" parts of the system. This has been achieved through planned "looping", connecting each part of the system to at least two others.

The Water Utility maintains 115 fire hydrants as well as the City's sole water storage facility, a 250,000 gallon Hydrapillar Water Tower. The City's water distribution system has an average daily usage of 240,000 gallons, and a peak demand of over 10,000,000 gallons per day in the month of August.

**Rural residences and commercial activities** in close proximity to Sterling are generally served by individually owned water wells. Large industrial facilities to the north of the City, between Lyons and Sterling, are served by both wells and by the City of Lyons.

## **Water Treatment**

Sterling's water is treated to remove several contaminants, and a disinfectant is added to protect users against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) study for each public water supply that treats and distributes raw source water, in order to identify potential contamination sources. The state has completed an assessment of Sterling's source water.

Our water system is required to test a minimum of two samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

**Policies** The City of Sterling requires annexation as a requirement for connecting to the City water supply. Also, to ensure proper water supply to new developments and to potential new developing areas, the City requires over-sizing and looping of water mains as necessary. The additional cost of over-sizing and looping the pipes is absorbed by the City as a trade of opportunity cost and planning.

## **Recent Improvements & Future Plans**

In 2001, the City rehabilitated two of its existing groundwater wells (Wells 10 & 11), for use as Sterling's primary water supply source. These wells are located along West Garfield. The infrastructure of the two remaining groundwater wells is in sufficient condition so they can be used in a backup situation; they were pulled from primary use due to excessive nitrate levels.

To ensure that Sterling residents have enough water for their long-term future needs, additional water sources should be investigated. The community's water is also nearing the limit for hardness levels, and plans should be made within five to ten years to investigate the costs of bringing hardness levels down.

With much of the water distribution system nearly 60 years old in many places throughout Sterling, the community has faced an increasing number of water main breaks in recent years. The average age of a Sterling water distribution line is 61 years old, and replacement is currently unfunded.

If possible, replacement water lines should be relocated out from under street infrastructure, while remaining within the road right-of-way (which typically extends to the back of adjacent sidewalks). In some cases, acquisition of additional right-of-way may be necessary.

A capital improvement plan should be established that includes a budget for replacement of outworn water lines. Such a major infrastructure project would require the community to fund improvements through a rate adjustment.

## Sewage Collection and Treatment System

A gravity flow sewer system conveys wastewater by gravity, through pipes installed with sufficient slope to keep the suspended solids moving through the system. Where local topography limits the option of gravity flow, lift stations must be employed to pump the sewage from the low point in the system up to another gravity line.

Sterling's gravity flow sewage collection system has exceeded its capacity for growth, due in part to floodplain limitations. Currently, the City system utilizes two sewage lift stations. One is located at Wishing Well Estates on the south edge of the community, and another is on Santa Fe near the Fuller Addition.

In the past, Sterling has avoided some of the cost of building additional lift stations by extending services via small sewage or grinder pumps for neighborhood areas. However, this solution is a long-term maintenance risk for the homeowners, and should be using sparingly. While more costly, a lift station has more long-term advantages.

**Gravity Flow Sewage Study** Sterling will require the experience and skill of an engineering firm to complete a gravity flow sewage study. The study should analyze the capacity of the existing sanitary sewer collection system and the ability of the system to handle added flow, determine the location of trouble spots in the system, and recommend the installation of strategic and cost-efficient placement of lift stations and any main outfall lines to serve the community as it grows. Since new growth in the community will generally trend northward, the study would also have to address the need for sewer lift stations which will be required to accommodate expected development to the north and northeast.

**Sewer Cleaning Program** The City has a sewer cleaning program that cleans 25% of the system each year; this successful program should be continued.

### Sanitary Sewer Lines

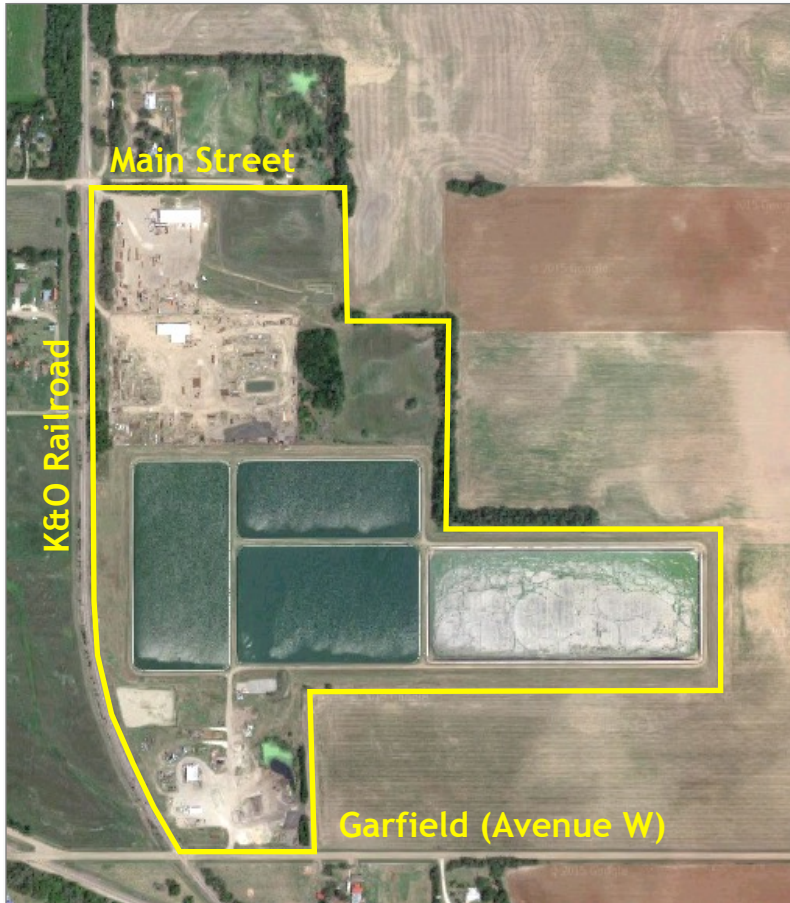
Many of Sterling's neighborhoods have sewer lines that are worn out and deteriorating. Before the end of this Planning Period, the community will need to establish a program to begin the task of rehabilitating all its older sanitary sewer lines.

Traditionally, replacing a sewer line involved digging a trench along the entire length of the existing pipe, then replacing the deficient pipe piece by piece, or building a new sewer pipe parallel to the old one in order to maintain service. Fortunately, more efficient methods now exist.

**Trenchless Sewer Replacement** Modern trenchless sewer rehabilitation techniques use the existing pipe as a host for a new pipe or liner, and can correct deficiencies with less disturbance and environmental degradation. Trenchless sewer rehabilitation methods include Slip Lining; Pipe Bursting, or In-line Expansion; Cured-in-Place Pipe; and Modified Cross Section Liner.



## Wastewater Treatment Facility



The Sterling Wastewater Treatment Facility is located between Main Street and Garfield (Avenue W), east of the K&O Railroad tracks east of town.

Sterling constructed three lagoons for wastewater treatment in 1980 and 1981. These lagoons were designed to accommodate growth up to a population of 2,300.

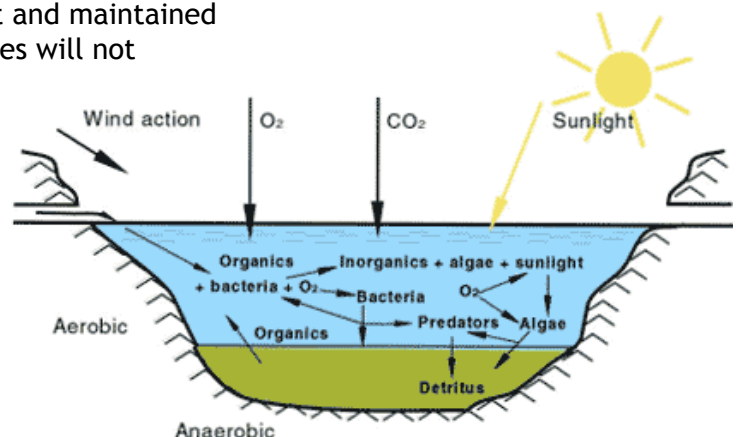
The lagoon system process produces oxygen which many of the bacteria in the water use to break down the waste. Lagoons are designed to operate by allowing the bacteria to receive enough sunlight for biological breakdown processes to take place. The amount of water in each lagoon is reduced through evaporation and wind action.

Between 2006 and 2010, the City completed a study with engineering firm Bucher Willis

Ratliff, and found that in order to serve the capacity needs of the community, another lagoon was needed. A fourth lagoon was constructed, designed to accommodate population growth up to 2,800. It increased the City's total sewage treatment lagoon surface to 26 acres.

The lagoons for the City of Sterling are built and maintained in a location where trees and other structures will not restrict sunlight exposure or air movement. A dike is constructed on all sides of the lagoon to prevent inflow of surface water and discharge of effluent.

Each lagoon is approximately four to four and a half feet deep, and the total detention period is approximately 160 days. The three original lagoons were dredged in 2000.





The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked how they would rate the Sewage Disposal System in the Sterling Planning Area.

<b>Community Questionnaire – Sewage Disposal System</b>						
	<b>Adequate</b>		<b>Inadequate</b>		<b>Don't know</b>	
<b>In City of Sterling</b>	92	80%	9	8%	14	12%
<b>Outside City / In Planning Area</b>	3	38%	0	0%	5	63%
<b>Total Responses</b>	<b>95</b>	<b>77%</b>	<b>9</b>	<b>7%</b>	<b>19</b>	<b>15%</b>

### **Rural Sewage Disposal**

Many residents and commercial operations of the Planning Area live beyond the reach of the municipal Sanitary Sewer System, and must deal with sewage disposal on their own properties, utilizing septic tanks, leach fields, and/or sewage lagoons.

In the Planning Area outside the City, permits for on-site sanitation facilities are evaluated by the Rice County Environmental Sanitarian, and issued by the Rice County Planning & Zoning Department. The Rice County Sanitation Code requires permits for all new construction or modification of on-site wastewater treatment systems. Systems must be located and designed to protect both surface water and groundwater from potential contamination.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents who live outside the City were asked what type of sewage disposal methods they use.

<b>Community Questionnaire / RURAL – Septic Tank or Lagoon?</b>				
	<b>Septic Tank &amp; Tile Field</b>		<b>Wastewater Lagoon</b>	
<b>Outside City / In Planning Area</b>	7	87.5%	1	12.5%

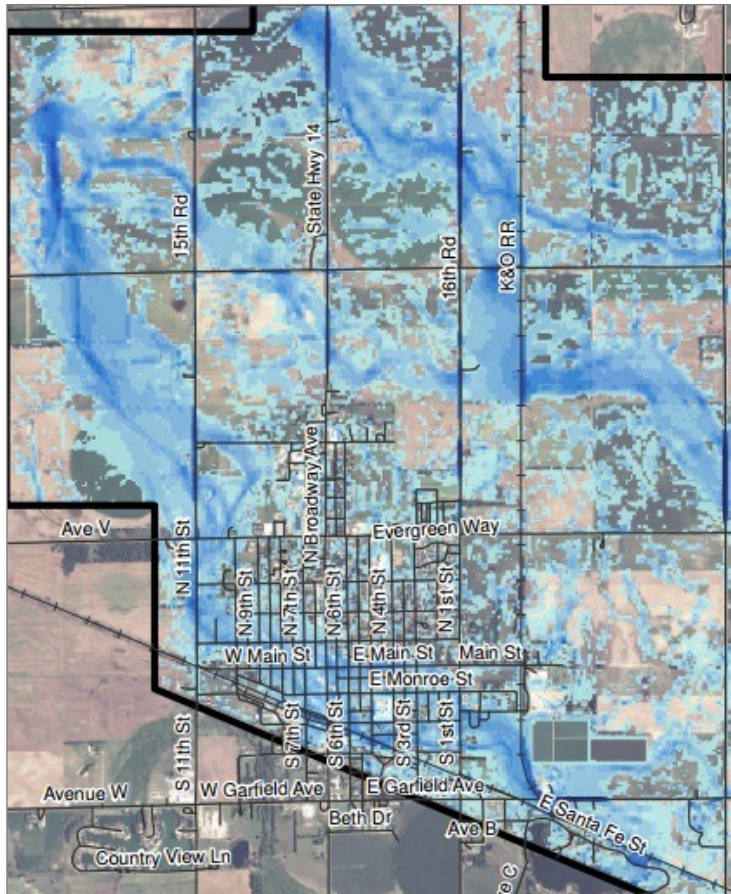
In the survey, none of the eight rural respondents indicated any issues or problems experienced with current sewage disposal methods.

## Stormwater Management System

When precipitation occurs too rapidly to be absorbed by plants and soil, water runs off the surface of the land and flows down to streams, rivers, or lakes. While this is a natural process, development creates expanses of impervious surfaces (roofs, streets, parking lots, etc.), which may generate far more runoff than natural systems can handle. Stormwater management systems prevent excess runoff from accumulating to the point where it causes localized flooding.

Drainage in Sterling has long been an issue, since nearly two-thirds of the community is located in floodplain, and there is only a 10-foot difference in elevation across the entire City. The flat terrain does not provide enough fall to allow for good drainage. In addition, the water table in Sterling is higher than in most communities – in fact, it is so high that it is often described as an underground tributary to the Arkansas River.

Sterling's stormwater drainage system discharges into tributaries of the Arkansas River. The Bull Creek tributaries transport the majority of Sterling's stormwater runoff.



FEMA Flood Insurance Rate Map for the Sterling area  
(Flood Map information available at [msc.fema.gov](http://msc.fema.gov))

Since 1977, the Federal Emergency Management Agency (FEMA) has studied the Arkansas River and Bull Creek. Changes to FEMA floodplain maps occurred in both 1997 and 2011. The current FEMA Flood Insurance Rate Maps (FIRM) for Sterling show the floodways of rivers and streams in dark blue, areas with a 1% annual chance of flooding (100-year floodplain) in light blue, and areas with a 0.2% annual chance of flooding (500-year floodplain) in turquoise.

The 2011 improvements to the Sterling FIRM's created a Zone X for floodplain management. This new zone is important for Sterling residents, because properties in Zone X are not required to have flood insurance; instead, property owners can decide for themselves if flood insurance is warranted.

The City of Sterling is the local administrator of the floodplain.

## **Understanding Stormwater in Sterling**

In the 1980s the installation of a drainage way along the main rail corridor in Sterling was undertaken. This effort captures water and directs it via the railroad right of way toward the east and eventually toward the Arkansas River system.

The underground stormwater system in Sterling is limited. Specific areas of recent concern for surface flow stormwater management in rain events are:

- Intersection at 1st and Washington
- Intersection at 9th and Washington
- Intersection at 10th and Washington
- Forrest and Broadway to Camelot Street
- East Garfield and Broadway intersections to Beth Drive and K-96

In 2005 the City enlisted engineering firm Bucher Willis Ratliff to study five areas in the community that were of common concern regarding drainage. The City should review this study to determine the current status of each project, and consider implementing recommended projects which are not yet completed.

- Area 1: 9th & Washington
- Area 2: 7th & Main
- Area 3: 6th & Main
- Area 4: 1st Street, north of the railroad
- Area 5: Forrest Street, east of 6th Street

In 2007, 2008, 2009 and 2010 the Sterling area had four consecutive years of significant rainfall, with precipitation totals between 32.4 and 39.6 inches, well above the previous ten-year average of 27.9 inches per year. This prompted more serious consideration of problems that occur due to stormwater surface runoff, particularly in the northern area of Sterling near Forrest Street.

A study of the northern part of the community was prepared by Bucher Willis Ratliff, and options for solutions were explored. One option was a directional channel heading east from Forrest Avenue, with two possible detention sites – one located directly north of Sterling Cemetery, and the other directly south of the drainage structure on Forrest Avenue. None of the suggested projects were implemented, or studied further. Instead, a drainage culvert was installed under Forrest Avenue, and the road was raised. This was deemed a temporary solution at the time; a long-term solution will still be required.

As the community continues to plan for the construction of the proposed K-96/K-14 bypass and interchange, it is imperative that avenues be explored to use the project as a catalyst for the solution of surface flow issues in existing northern sections of the community, while also preparing for future expansion of Sterling to the north.

A comprehensive hydrology study and solutions for stormwater management for the entire community should be conducted in the near future. Possible funding for implementation may exist from the Community Development Block Grant program, or from other flood prevention related resources, including FEMA.

**Sterling Stormwater Impact Review Policy** In general development, the City currently requires that the impact of development be reviewed during the issuance of a building permit (Resolution 288). This review shall include the examination of all plans for new construction or substantial improvement, to determine whether the structures or improvements will be reasonably safe from flooding hazards. Requirements under these reviews may require onsite detention, retention or other solutions including underground storage and removal.

**Clean Water Act** In addition, the City recognizes the regulatory authority established by the Clean Water Act. After a five-year study by the U.S. Environmental Protection Agency, ending in 1983, the Nationwide Urban Runoff Program concluded that heavy metals, coliform bacteria and suspended solids from urban stormwater runoff all posed a significant threat to aquatic life and the usability of the nation's surface water resources. As a result, the Clean Water Act was amended in 1987 to initiate certain permit requirements in cities, under the **National Pollutant Discharge Elimination System (NPDES)** permit program.

Since that time, a system has been implemented to both improve the quality and control the quantity of stormwater discharge for municipalities. Construction activities which will disturb one or more acres of ground must have authorization from the Kansas Department of Health and Environment (KDHE) to discharge stormwater runoff. Activities which disturb less than one acre may also have requirements, as determined by KDHE.

### **Changing Strategies**

Traditional stormwater management strategies divert stormwater away from developed areas, and into an established natural drainage system. In urban areas, runoff is typically guided by streetside curbs and gutters into underground storm sewers, while in rural areas runoff is often transported by open roadside drainage ditches.

Increasing the amount of runoff may surcharge established natural drainage systems, producing escalated flow depths and velocities that heighten the risk and intensity of localized flooding. Storm waters that produce high velocities within natural waterways may create significant erosion problems along creek banks. In addition, velocities produced by a typical rainstorm can scour creek beds and transport sediment along creeks, and into ponds and lakes. Runoff can collect trash and other pollutants and carry them into established drainage systems, which then transport them to natural waterways.

**Green Infrastructure** In recent years, stormwater management strategies have evolved to recognize the advantages of reducing runoff in the first place by reducing impervious surfaces, and increasing opportunities for precipitation to be absorbed as close to the point where it falls as possible. Utilizing green infrastructure techniques – from residential raingardens to urban bioswales to permeable parking lots – can often help **manage stormwater more effectively and less expensively than traditional methods.**

To learn more, select the tabs at the top of the Environmental Protection Agency's Green Infrastructure web page at <http://water.epa.gov/infrastructure/greeninfrastructure>.

### Public Perceptions of Stormwater Management Issues

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they had ever had a problem with flooding.

Community Questionnaire – Flooding Problems				
	Yes		No	
In City of Sterling	28	24.1%	88	75.9%
Outside City / In Planning Area	2	20.0%	8	80.0%
<b>Total Responses</b>	<b>30</b>	<b>23.8%</b>	<b>96</b>	<b>76.2%</b>

Just under a quarter of respondents have had problems with flooding.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they had ever had a problem with high groundwater.

Community Questionnaire – High Groundwater Problems				
	Yes		No	
In City of Sterling	38	34.5%	72	65.5%
Outside City / In Planning Area	3	30.0%	7	70.0%
<b>Total Responses</b>	<b>41</b>	<b>34.2%</b>	<b>79</b>	<b>65.8%</b>

Just over a third of respondents have had problems with high groundwater.



## Electrical Generation & Distribution System

Since 1916, the City of Sterling has owned, operated and maintained an electrical generation and distribution system that provides backup power within the City of Sterling, as well as in the immediate rural area. The power plant and substation are located on the southwest corner of Washington Avenue and Broadway.

The system serves approximately 1200 meters. Demand typically peaks at about 6.0 megawatts in the summer due to air conditioning loads, and peaks in the winter at around 3.5 megawatts.

The City of Sterling's electrical distribution and generation territory is regulated by the Federal Energy Regulatory Commission, as well as the Kansas Corporation Commission.

**Midwest Energy Transmission Lines** Electrical power for the community is provided primarily by Midwest Energy. Unfortunately, that power is transmitted to Sterling over just one rather old transmission line. With the current configuration of power lines in the region, it is unlikely that an additional connection could be established. However, due to local expansion of the oil and gas industry, the transmission system in the area may soon need to be upgraded. This could lead to a stronger and more reliable power connection from Midwest Energy to the City.



### City Power Plant

The City owns and operates a power plant with seven dual fuel generators, which can use either natural gas or diesel fuel. The generators have a combined capacity of 10.4 megawatts. The power plant provides backup power for the community, and proves its worth during ice storms that can disrupt electrical service in the area for many days. The generators can also be operated during peak demand conditions, which lowers demand on the Midwest Energy system, thereby reducing the likelihood of brownouts.

Sterling has a contract through 2017 with Midwest Energy, worth \$156,000 per year to the City, to have 4.0 megawatts of generation available for use by Midwest Energy.

The City has made a commitment to keep the generation equipment active, and has recently completed projects which bring the units into compliance with current environmental regulations, including the addition of mufflers and catalytic converters. Other than ongoing maintenance of existing equipment, no additional improvements to the power plant are expected to be necessary during the course of the Planning Period.

**Substation** The City of Sterling has one substation, located just west of and adjacent to the City power plant. It reduces the high voltage generated by the power plant to a voltage suitable for use by consumers. The substation is complex, because it ties the seven generators into a bus which then disperses the power to the eight distribution circuits which serve the community.

The distribution circuits are underground; from the substation, four go west across the alley to a four-pole riser structure, two go to the north, and two go to the northwest. The breakers serving the eight distribution circuits have all recently been upgraded to new units with electronic controls, so they are in excellent condition and will not require any changes for the foreseeable future.

The substation has one transformer, built in 1997, which currently has adequate capacity to meet the summer peak load. If the community's peak demand increases much further, however, it will be necessary to investigate providing additional transformer capacity – by either replacing the existing transformer with a larger one, expanding the substation and adding a second transformer, or adding a new substation at another location in the City.

The current substation site is crowded with existing equipment, and has little or no spare space. However, the City owns a lot just to the west across the alley from the substation, which might support future expansion. This solution would require vacating the alley, as well as careful engineering to redesign an expanded substation.

### **Distribution System**

Sterling's electrical distribution system has a total of 42.6 miles of primary line, 93% overhead and 7% underground. The distribution system has proven reliable, in part because it is well integrated – there is typically an alternate feed available to route power around an outage, and quickly restore service. Also, key tie lines are designed to have the capacity to carry additional load from adjacent circuits when necessary.

Maintenance standards are high, and electric department personnel regularly replace rotten poles, trim trees, and patrol the line looking for potential problems. As the system continues to age, however, maintenance activities alone will not be sufficient to sustain expected levels of service, and it will be necessary to completely replace some sections of line. For instance, there are 8.4 miles of copper line in the system, 23% of the total. Much of this copper line is over fifty years old, and cannot be expected to last much longer despite good maintenance practices.

A significant percentage of old overhead lines on the edge and outside of town were severely damaged in ice storms during the early 2010s, and therefore were completely rebuilt, dramatically improving their reliability.



**Maintenance Access Issues** There are a number of locations in the City where maintenance access to power lines has been compromised over the years. Adjacent landowners have built structures such as sheds or fences, or extended landscaping, blocking access to power lines by City crews. Poor maintenance access to power lines can put City electrical department staff at risk, and add significantly to outage times.

In some cases, landowners adjacent to alleys with power poles have intruded into the public right-of-way. In other cases, at some point in the past power lines were constructed through the middle of blocks without platted alleys, on private property.

If alleys or easements exist, adjacent homeowners should be informed of their responsibility to maintain access for maintenance crews. Landscape and structures may need to be relocated, and trees may need to be trimmed back. For utilities that exist on private property, the City should pursue establishment of an easement; relocating power poles and lines is not an economically feasible option. The City may also need to enact additional ordinances, to keep alley rights-of-way clear for both traffic and utility maintenance access.

**Future Electrical Distribution Improvements** Together with ESC Engineering, Inc., the City prepared a Construction Work Plan for the electrical distribution system, for 2015 through 2019. The Work Plan analyzed the capacity and condition of existing facilities, and determined what system improvements are necessary to meet expected load growth, and to provide adequate and economical service to the citizens of Sterling through 2019.

**Public Expectations** There is growing public awareness of the visual impact and sometimes noise made by utility equipment, and an increasing public expectation that electric, telephone and TV cable lines should be installed underground. Though underground utilities are more costly to install, they are far less prone to service outages during inclement weather, and can reduce long-term maintenance costs.

The City of Sterling makes every effort to install utilities for new development underground. In future, the City should consider a policy requiring the installation of utilities underground.

## CHAPTER 10. Community Services and Facilities

A community's quality of life depends very much on the caliber of its public services and facilities. Today, public expectations for municipal services extend beyond basic fire and police protection, and include a high demand for community facilities related to health, education, and leisure time activities.

In Sterling, some public services (such as Solid Waste Management and Cable TV & Internet service) are provided by private firms, but most essential public services are supported by public funds, and maintained under public control. Utilities and stormwater management services were addressed in the previous chapter; this chapter will address other public services provided to the Sterling community, including:

- Sterling City Hall
- Law Enforcement
- City Services Building
- City Equipment & Bulk Storage Yard
- City Compost / Burn Site
- Parks & Recreation
- Sterling Volunteer Fire-Department
- Emergency Medical Services
- Health Care Facilities
- Educational Facilities
- Sterling Free Public Library
- Sterling Community Cemetery

When planning for future community facilities, it is very important to determine the optimum location for each facility – in relation to land use, streets, and developmental influences – in order to maximize its efficiency and economy in serving the public. **It is crucial to identify and acquire suitable sites in advance of need;** they may otherwise be preempted for other purposes. Subdivision plats and rezoning applications should be reviewed in light of the need for land acquisitions appropriate for public facilities.

It is also vitally important to provide adequate staff and budgetary support for maintenance of public facilities. **A good maintenance and capital improvement program is the most cost-effective investment a City can make in preserving the quality of its community facilities.**

Most of Sterling's existing public facilities are in good condition, though a few are in need of updating and improvement – particularly the Library and City Services Building. This chapter evaluates how well each facility will continue to serve through the Planning Period to 2035, and projects future needs for public facilities in the Sterling Planning Area during the twenty-year Planning Period.

## Sterling City Hall

The City Hall supports many City services, with a Governing Body Chamber which is used for both City Commission and Municipal Court, offices for City staff, and space for the Police Department. The north end of the building houses the Sterling Police Department (1,500 square feet), and the south end houses City administrative functions.

The Sterling City Hall is located at 114 North Broadway. Originally built in the early 1900s, the office and storage areas of the building total approximately 2,800 square feet, with an additional 900 square feet for the Governing Body Chambers. An interior renovation of the structure was completed in the early 1990s.

The City Hall provides meeting facilities for the City Commission, other boards, and the municipal court. Office space is provided for the City Manager, City Clerk, City Treasurer, and Office Clerk/Receptionist.

### Major Functions

- Governing Body Policy Making
- All Boards & Task Forces
- Planning and Zoning Administration
- Floodplain Administration
- City Management Functions
- Accounts Receivable and Payables
- Utility Billing

Parking for community members is limited to on-street public parking. There is limited parking for staff, resulting in two or three on street spaces having to be used by staff or law enforcement personnel.

The City does not currently accept online or non-cash/check payment.

### Future Facility Needs / Issues to Consider

The City continues to make improvements on the City Hall facility. In 2015, a storage area is to be expanded to accommodate regulatory record management requirements. Additionally, after a 21-year life, the roof at City Hall is to be replaced in 2015.

Specific needs for the facility include minor renovation items, as many of the updates from the 1990s have met their useful life span. To ensure the facility meets the needs and standards of the community throughout the Planning Period, certain items should be addressed:

- Complete roof replacement
- Complete minor painting
- Validate and replace any insulation as necessary
- Study and complete facade improvements as necessary
  - Address failing mortar on structural bricks
  - Address efficiency and effectiveness of existing front windows
- Consider and complete analysis regarding the establishment of online pay/credit-debit card payment of City utility bills or other invoices
- Replace carpet
- Complete storage expansion

## Law Enforcement

The Sterling law enforcement facility is located in the same building as City Hall at 116 North Broadway Avenue. Originally built in the early 1900s, the office and storage areas of the building total approximately 1,500 square feet.

The City Police Department provides 24/7 service to the community, and is currently staffed by five officers including the Chief of Police. There are two reserve officers available for shift cover or special events. Rice County Jail is used for any incarcerations.

There are currently two patrol vehicles in service. Patrol vehicles are replaced about every 4 to 5 years, when they have approximately 90,000 miles of service.

**Animal Control** services are conducted in-house, aided by contracted labor for rescue and transport of animals to the veterinary clinic or pound for disposition. The City does not have its own animal containment facilities.

**Dispatch services for 911 calls** currently operate out of the Rice County Emergency Operations Center in Lyons, and follow state E-911 procedures. The dispatch services and City Police Department follow National Incident Management System procedures during an emergency. Rice County Dispatch, in cooperation with the other local agencies, will be migrating to the Next Generation 911 system in 2016.

Rice County Emergency Management officials and local agencies are also studying the possibility of migrating to an enhanced radio communication system that meets federal communications requirements for bandwidth.

In 2014 the Sterling Police Department began using a software aided records management system that allows cases and other incidents to be tracked and updated digitally. The Department utilizes body worn cameras as well.

Parking for community members is limited to on-street public parking. There is limited parking for staff, resulting in one or two on street spaces having to be used by law enforcement personnel.

## Major Functions

- Investigate burglary, theft, criminal damage to property, sexual assault, child abuse, Children in Need of Care, elder abuse, domestic violence, drug violations, and alcohol related crimes
- Enforce Standard Traffic Ordinances and Uniform Public Offense Codes and City of Sterling Codes including environmental and nuisance codes
- Routine Patrol, checking buildings for unlocked/open doors, observation of lights, movement in building, residential patrol checking house and garages, sometimes by request of citizens that are out of town
- Register various property
- First respond to all EMS calls
- Assists other city departments within the City of Sterling as needed, as well as outside agencies
- A Police Officer does foot patrol at the Junior High, High School, and Grade School each day class is in session



## Future Facility Needs / Issues to Consider

The City continues to make improvements on the facility. In 2014, a kitchenette area was renovated. Additionally, after a 21-year life, the roof at the police department is to be replaced in 2015. The facility has plenty of space for future reconfiguration to meet expected growth.

Effective communication is a vital part of City law enforcement service, and a public and officer safety necessity. The City will need to work with Rice County to establish and migrate to a communications system that meets the needs of the entire county. This is expected to require budgeted dollars for equipment, as well as tower infrastructure. The City should budget dollars for radio acquisition over time to avoid being hit with one large expenditure.

To ensure the facility meets the needs and standards of the community throughout the Planning Period, certain items should be addressed:

- Work with Rice County to establish and migrate to an enhanced radio communications system
- Validate and replace any insulation as necessary
- Replace carpet
- Study and complete facade improvements as necessary
  - Address failing mortar on structural bricks
  - Address efficiency and effectiveness of existing front windows

## City Services Building

The City Services Building, located in the north 100 block of Broadway, provides offices and equipment storage for the Electric Department (excluding power generation) and various public works operations including Water, Sewer, Street and Parks. The Plan Review area and the City Map Repository are also located in this facility. The structure is approximately 7,250 square feet in area.

Parking for community members is limited to on-street public parking. There is limited parking for staff, resulting in at least one on street space having to be used by City workers. Additional downtown parking stalls may need to be utilized for City equipment during the course of daily business.

### **Major Functions – Public Works Administration and Labor**

- Provide safe, smooth, drivable and attractive street surfaces in a financially sustainable manner
- Provide safe, attractive and functional public facilities
- Deliver continuous safe drinking water which meets relevant state and federal standards
- Maintain environmentally safe sanitary sewer collection and disposal system, in compliance with state and federal standards, with minimal stoppages
- Maintain storm sewer system
- Maintain city facilities assigned to Public Works in a cost-effective and operable manner
- Maintain and manage customer friendly, attractive cemetery operations
- Issue and enforce Building Codes
- Respond to utility locate calls
- Trouble calls - 24/7 on call status to troubleshoot and repair water/sewer/street services

### **Major Functions – Electrical Distribution Administration and Labor**

- Sub-station maintenance and troubleshooting
- Power Quality - Load balance issues, Power Factor, Voltage monitoring, customer side troubleshooting
- Electrical distribution equipment installation, maintenance and removal, including poles, lines, meters, & transformers/switches
- Tree trimming and tree removal from power lines and rights-of-way, annually, both contractor and in-house
- System Design - power line construction, including poles, lines, conductors, transformers, service sizing and revenue metering
- Trouble calls - 24/7 on call status to troubleshoot and repair electric service issues and outages
- Utility connects and disconnects (daily)
- Respond to utility locate calls
- Street Lights - installation, repair and maintenance
- PCB oil - transformer oil testing, handling and documentation, annual audit
- Issue and enforce Building Codes as related to electric utility

### **Future Facility Needs / Issues to Consider**

The City organization needs to analyze the establishment of an effective work order/trouble call system that allows information to flow and to be tracked efficiently through digital means. Not only would this assist internal operations, but an ideal system would allow direct reporting from the customer or resident to the necessary party regarding an issue or concern.

The City Services Building, which combines electrical distribution and public works functions under one roof, no longer adequately meets the needs of the City. Equipment and inventory storage requirements have gotten bigger over time, and the size of the space is simply no longer sufficient. The lack of adequate storage facilities in the current building, for both inventory and equipment, results in ongoing safety concerns. Also, many pieces of equipment are stored on adjacent public right-of-way to the southwest of the current structure, which exposes the equipment to the weather and the elements, reducing the life expectancy of some parts.

Although there are some advantages to having the two entities together, the City Services Building would be more efficiently used by removing one function, and relocating either public works or electrical distribution to a different structure. (Moving the electrical *generation* facility would be impractical on both a financial and an operational level, but the electrical *distribution* function could be relocated.) The Wastewater Treatment Plant site is currently used for bulk storage of some inventory and equipment, and may be an option for an alternative location for either public works or electrical distribution.

To ensure the facility meets the needs and standards of the community throughout the Planning Period, certain items should be addressed:

- Consider relocating Public Works or electrical distribution to a new facility located on City-owned land near the Wastewater Treatment Plant.
- Study and complete inventory and equipment storage space issues
- Study and complete facade improvements as necessary
  - Address failing mortar on structural bricks
  - Address efficiency and effectiveness of existing front windows
- Study and consider work-order/trouble call system for issues and concerns to be addressed



## City Equipment & Bulk Storage Yard

The City Equipment & Bulk Storage Yard is located on East Garfield near the Wastewater Treatment Plant, adjacent to the sewer treatment ponds. It is used to store supplies and items required for City staff to successfully carry out their duties. The Yard is fenced, and the gate is kept locked outside of City business hours.

### Major Functions

- Provides staging areas for bulk materials such as power poles, asphalt millings, road salt, gravel and other city equipment
- One structure is available for the storage of city equipment, including a backhoe & tractor
- Police firing range is located at this site

### Future Facility Needs / Issues to Consider

The City should consider a security fence for the Yard, as currently it is not sufficiently secure. There are valuable items at risk, as well as liability issues associated with this deficiency.

The outdoor storage of materials and equipment exposes these items to the weather and elements which accelerates deterioration. Construction of some appropriate sheltered storage structures should be considered.

To ensure the facility meets the needs and standards of the community throughout the Planning Period, certain items should be addressed:

- Consider security fencing
- Consider site for full/partial covered storage of materials and equipment
- Consider establishing a regular cycle for auctioning off surplus equipment or unnecessary inventory, which would assist with management of materials and equipment as well as improve site aesthetics

## City Compost / Burn Site

The City Compost / Burn Site, located two miles south of Sterling on Broadway (K-96/K-14), is a revenue-supported facility that allows customers the ability to recycle yard waste and then take the recycled material (mulch or compost) back to their homes for use. Access is limited to daylight hours, and the site is patrolled by law enforcement.

The Site accepts only clean composting material, such as grass, leaves, garden waste, brush, and tree limbs. Leaves must be separated from limbs. Plastic bags must be removed before depositing yard waste.

No construction or building materials of any kind, including lumber, shingles, metal, paper products, insulation, wire, etc. are permitted. No tires are allowed.

The compost pile is a teeming microbial farm, where bacteria – which are the most numerous and effective composters – are the first to break down plant tissue. Fungi and protozoans soon join the bacteria, and then later in the cycle, centipedes, millipedes, beetles and earthworms do their part in the process.

For the best results, citizens are encouraged to turn two to three inches of compost into their garden or flowerbed. When this compost is added to gardens, it loosens heavy soils, improves plant root growth, and helps hold water and nutrients where plants can use them. Compost can also be used as mulch around trees and shrubs.

### Major Functions

- Provide yard waste recycling and disposal for residents of Sterling
- Provide compost and mulch for residents of Sterling

### Future Facility Needs / Issues to Consider

The City should consider arranging the compost in windrows, and turning the compost piles as needed to support better composting processes. Windrows would also separate materials in different stages of the composting process, and allow easier access for residents to finished compost.

There are no specific physical needs to be addressed at the City Compost / Burn Site.

## Parks & Recreation

Parks improve a community's quality of life, offer healthy recreational opportunities for people of all ages and economic backgrounds, and are an important factor in attracting new business to a community. Parks protect open space – which preserves wildlife habitat, improves air and water quality, and helps mitigate flooding. A good park and recreation system is an essential element of a livable community.

Public parks and recreation services are delivered to residents of the Sterling Planning Area both by the City of Sterling at its parks, and by the Sterling Recreation Commission at various USD 376 school facilities.

**Regional recreation facilities** include the Sterling Country Club 9-Hole Golf Course (just 2 miles west of the City), Quivira National Wildlife Refuge (a 20 minute drive away), Kanopolis Lake (a 40 minute drive away) and Cheney Lake (a 45 minute drive away).

**Maintenance** City parks are maintained by the City's Public Works department, which mows and maintains over 23.5 acres of park land, the rights-of-way along roads and railroad tracks, landscaped areas in the downtown streetscape, and landscapes at the entryways to the community. Public Works staff also maintains the Sterling Swimming Pool and the Sterling Lake Recreational Vehicle Park.

### Major Functions

- Provide green open space for recreation and nature activities
- Provide outlet for healthy exercise
- Provide safe, interactive opportunities for youth and older generations at the same time

### City Parks

The City of Sterling has five parks in the community, each with different facilities available.

- **Sterling Lake Park** is located between 3rd & 6th Street, south of Van Buren. Its facilities include a Veterans' Memorial, a band gazebo, 2 picnic shelters, a gazebo shelter, 2 tennis courts, playground areas, walking paths, grills, fishing docks, camping facilities, and an RV Park with full utility hookups.
- **Library Park** is located downtown, just south of the Library at Jefferson & Broadway. Its facilities include a playground area with child and infant swing sets.
- **Evergreen Park** is located on the east side of North 7th Street, north of Washington. Its facilities include a restroom building, a basketball court, swing sets, picnic tables, benches, and open recreation space.
- **Dysart Park** is located on the northwest corner of Monroe and Broadway. It is a downtown pocket park with a seating area and shade trees.
- **Peace Park** is located on the southwest corner of 7th Street and Monroe. It has a basketball court and open recreation space, and is the site of the City Water Tower.

### **Future Facility Needs / Issues to Consider**

Traditionally, the community has focused the majority of its parks resources on Sterling Lake Park, but it is time to begin enhancing the viability and usefulness of the other four city parks as well. The first step is to evaluate facilities at those parks – including tennis courts, playground equipment, and basketball courts – to determine whether they need updating or reconstruction.

Improvements to certain facilities within Sterling Lake Park are also needed, including upgrades to signage for tent camping availability. Expansion options for the Sterling RV Park should be evaluated, with an eye toward the possibility of accommodating larger vehicles.

The City should make efforts to work in partnership with the Sterling/Alden School District and with Sterling College on recreation and park improvements when synergy and opportunities exist.

**Trees in Parks** The community should continue to invest in the re-forestation of the park system. As existing trees in the park system near the end of their life spans, new trees should be planted to replace them. Trees adapted to Sterling climate and soils must be selected. Selecting a range of species and varieties helps increase the health and resilience of the urban forest, and provides a variety of sizes, colors, blooms, and textures within the parks. To establish a list of suitable tree species and varieties, parks staff might begin with the list of "Preferred Trees for South Central Kansas", established by the Kansas Forest Service and available at [www.kansasforests.org/documents/community/Pref%20Trees%20SC.pdf](http://www.kansasforests.org/documents/community/Pref%20Trees%20SC.pdf).

**Accessibility** At all parks, the community should make an effort to promote ADA accessibility through the installation of handicap parking stalls and sidewalks. When upgrading furnishings and facilities, such as picnic tables and playground equipment, select a suitable number of accessible options.

**Greenspace in New Developments** When planning new developments, the City Planning Commission should use site plan review and plat review to ensure that proper green space and landscape screening are achieved, and that appropriate trees are planted.

## **Sterling Municipal Pool**

The Sterling Municipal Pool was built in Sterling Lake Park in 1989, born out of a grassroots effort supported by local parents and the city leaders of the time. The pool is regularly open from Memorial Day until after Labor Day weekend.

### **Future Facility Needs / Issues to Consider**

The Sterling Municipal Pool is now over 25 years old, and is showing signs of deterioration and need for repair. The City should complete a study to evaluate the current state of the facility, and analyze its ability to meet the future needs of the community.

In addition to determining the extent of necessary repairs, the study might also consider the feasibility of installing shade structures, and of adding other outdoor water enhancements such as a waterspray element.



## **Sterling Recreation Commission**

Kansas state law allows communities to choose to support recreational programs through a mill levy based on School District boundaries, rather than municipal boundaries, by establishing a Recreation Commission. This system makes particular sense for small cities with large school systems, where many recreational activities take place at school facilities. A Recreation Commission allows the population of an entire School District to support recreational facilities and programs – which, after all, benefit the citizens of the entire School District.

Mill levies for Recreation Commission activities are subject to voter approval by residents of the School District. The tax dedicated to the Recreation Commission is typically collected by the County Clerk, distributed to the School District, and then passed on to the Recreation Commission. State statutes require that funds dedicated to Recreation Commissions may not in any way reduce the dollars provided to the School District for educational purposes. Recreation Commissions can and often do generate additional funding through user fees, rentals, investments, gifts, or grants.

For residents of the Sterling School District, the property tax levy for the Sterling Recreation Commission is approximately 2.7 mills annually.

The Sterling Recreation Commission offers a wide variety of programs, classes, and activities – for youths, adults, and seniors. Program offerings include youth baseball, youth basketball, soccer clinic, summer art, summer cooking, summer drama, youth volleyball, women's volleyball, co-ed volleyball, men's slow pitch, youth striders track, swimming lessons, and sponsoring a Christmas movie with the Library.

There is no anticipated need for changes to the current Recreation Commission or its level of programming.

## Sterling Volunteer Fire Department

The City supports fire response service in the Sterling/Rice County area in tandem with Rice County, through the Sterling Volunteer Fire Department. The service responds to approximately 55 calls in the Sterling area each year, including grass fires.

Currently, the Sterling Volunteer Fire Department has 21 volunteers who respond to calls. Approximately one third of the volunteers are full-time employees for the City of Sterling, which allows them to respond very quickly at need.

The Fire Department facility in Sterling is located in the 100 block of North Broadway. The building is not regularly staffed, and is used primarily to house fire fighting equipment and first response vehicles. Built in 1988, the 6,000 square foot facility has three bays and a through door on the back side of the structure. Firefighter parking is required on street as there is insufficient off street parking during fires.

The building is owned by the City of Sterling, while much of the equipment is owned by Rice County.

Apparatus housed at the Sterling Fire Department Facility			
Unit No.	Year	Description	Capacity
234	2008	Pumper Truck	Crimson 1000-gallon tank
235	1991	Tanker Truck	3500-gallon tank
236	1998	Pumper Truck	500-gallon tank
237	1958	6x6 Brush Unit	1500-gallon tank
238	2010	Brush Unit	300-gallon tank
238B	2011	Brush Unit	300-gallon tank
239	2000	Pumper Truck	Central States 1000 gallon tank (1250 GPM)

### Major Functions

- Respond to emergency fire calls
- Provide fire prevention education



### Future Facility Needs / Issues to Consider

The current facility continues to be well maintained by the service, and no major needs are anticipated. Funds for necessary equipment and replacement of apparatus are raised through an annual mill levy.



## Emergency Medical Services (EMS)

The City of Sterling supports emergency medical services in tandem with Rice County. Sterling EMS responds to approximately 200 calls in the Sterling area each year.

Currently, the service employs 4 full-time paramedics, 2 Emergency Medical Technicians (EMTs), and 3 Advanced EMTs. Part-time staff includes 1 paramedic and 1 Advanced EMT. There are 6 volunteer EMTs and 13 emergency medical responders (EMRs).

The Sterling EMS facility, located in the 300 block of South Broadway, is not regularly staffed, and is used primarily to house equipment and first response vehicles. Built in 1940, the 2400 square foot facility has 3 single vehicle bays that compose approximately 1800 square feet of the total footprint. The three large overhead doors are modernized, with insulation and automatic openers. Each of the bays has back-in only access. Currently there is one vehicle housed in Sterling. Parking is adequate at the Sterling facility for expected staff and volunteer needs.

The Sterling EMS facility is jointly owned by the City and Rice County, through an interlocal agreement.

In addition to the facility in Sterling, the County operates the headquarters for the Rice County EMS in Lyons, KS. Rice County EMS provides service for all of Rice County as well as parts of Ellsworth and Reno counties. The service offered is a Type 1 Service with Advanced Life Support. The facility in Lyons was built in 2001 and shares common space with the Rice County Health Department. This service is bolstered by the addition of Sterling Police Department responders attending each call in Sterling.



### Major Functions

- Respond to Emergency Medical Service calls
- Provide transport from emergency scene to medical facility
- Provide transport between local and regional hospitals
- Provide standby services at events

### Future Facility Needs/Issues to Consider

The Sterling EMS facility is currently deteriorating. A 2007 appraisal of the facility indicated that the windows were in need of replacement. Electrical service at that time was estimated to be adequate. Failing gutters have caused water damage to the structure on the west side and at the corners. The building interior shows signs of water damage on the west wall and ceiling, as well as on several walls in the bays. The roof is estimated to be reaching the end of its life cycle.

The City and County should complete a needs analysis for EMS service in Sterling. Additionally, an updated assessment should be undertaken, of the current Sterling EMS facility and its capacity to meet the future needs of EMS service in Sterling.



## Health Care Facilities

Access to health care for Sterling residents is most immediately available from two facilities: Sterling Medical Center, and Rice County Hospital in Lyons.

### **Sterling Medical Center**

When the local hospital closed, Sterling faced the loss of local healthcare facilities. A private donor stepped up, and in 1977 helped to fund the creation of the Sterling Medical Center. The building is now owned by the City of Sterling and operated by Rice County Hospital District Number 1.

Since then, significant building projects have included a major expansion and renovation in 1994, a roof repair and minor renovation in 2003, and major repairs to the roof and to the heating/ventilation/air conditioning system in 2010. Adequate off-street parking is available.

The community is committed to the sustainability of local healthcare, which continues to be a priority for Sterling and a point of local pride. Staff at the Sterling Medical Center includes 2 medical doctors (MDs), an osteopathic physician (DO), a physician assistant (PA) and 2 advanced practice registered nurses (APRNs), as well as a dentist.

### **Major Functions**

- Provide local access to medical and dental services
- Provide facilities for medical care to take place at a standard acceptable to providers and patients alike

### **Future Facility Needs/Issues to Consider**

The City should continue to work with the local medical and dental care providers to make continuous improvements to the facility as needed. The community and Rice County Hospital District Number 1 need to consider a renovation of the existing structure to support a more efficient patient flow and current best practices in medical care. Efforts should also be undertaken to improve the parking lot at the Medical Center.

## **Rice County Hospital District Number 1**

The major hospital provider for the Sterling Planning Area is Rice County Hospital, a 25 bed facility located in Lyons. Originally constructed in 1959, the hospital has undergone three major renovations; the last was a \$10.5 million community investment. Off-street parking is adequate.

Currently, in 2015, the average daily census at Rice County Hospital is 14.7 patients. Major staff includes 4 medical doctors (MDs) and an osteopathic physician (DO). There are also 3 nurse practitioners (NPs), 2 physician assistants (PAs), 28 registered nurses (RNs), and 9 licensed practical nurses (LPNs).

### **Major Functions**

- Serve patients and families with major medical needs
- OutPatient Clinic
- Dietary
- Family Birth Center
- Laboratory
- Noble Place – A Retirement Community
- Radiology
- Rehabilitation Services
- Respiratory Therapy
- Surgery
- Swing Bed
- Prenatal and Family Education Classes

### **Future Facility Needs/Issues to Consider**

Physician recruitment should remain a high priority and be supported. Actively recruit specialty physicians to conduct procedures here in Rice County. Consider the addition of services to include chemotherapy, dialysis, and the expansion of the current cardiac rehab services and facilities.



## Educational Facilities

Sterling offers educational opportunities for children in pre-school, through college for traditional and nontraditional adult learners. The community's educational institutions include Sterling First United Methodist Church Pre-School, kindergarten through 12th grade schools in the Sterling/Alden Unified School District (USD 376), and Sterling College.

### **Sterling/Alden Unified School District (USD 376)**

The Sterling Planning Area is served by the Sterling/Alden Unified School District (USD 376), which does not cover any students in adjacent counties. Approximately 22% of the students live outside the city limits of Sterling. Of that percentage, 5% are from other adjacent communities.

USD 376 offers a complete curriculum, including the arts and a nationally certified vocational technology program which provides instruction in building construction. There is half-day pre-school available, as well as the traditional K-12 schedule of instruction. Pre-kindergarten through 6th grade classes are housed in the Sterling Grade School, and grades 7 through 12 are housed in the Sterling Junior/Senior High School.

The average class size is 45, with a 20 to 1 student to teacher ratio. The Grade School has a capacity of 480; the 2015 attendance was 295. The Junior/Senior High School has a capacity of 400; the 2015 attendance was 252.

In 2008, the community voted to invest \$20 million in the local school system. The funds will aid in the construction of a new grade school, and support significant improvements to the junior and senior high facilities.

All classrooms are climate controlled.

**Junior/Senior High School Recreation Facilities** Outdoor recreation facilities at the High School include a practice football field, softball fields, and tennis facilities. Indoor recreation facilities include two gymnasiums and the Community Wellness Center.

The **Community Wellness Center** is a 45x125 foot masonry block structure with a brick facade. With a total floor space of over 5,000 square feet, the facility devotes 2,500 square feet to free weights, Olympic lifting, and Hammer Strength equipment, and another 1,000 square feet to cardiovascular and general weight equipment. There is also a plyometric track for walking, running, and aerobics.

**Grade School Recreation Facilities** Outdoor recreation facilities at the Grade School include a basketball court, a play structure, and a turf soccer/playing field. Indoor recreation facilities include a gym and two multipurpose shared activity spaces.

In addition to the recreation facilities noted above, the School District also has a maintenance facility, concession facilities, and a storage facility. During activities, parking at the Grade School and at the High School is inadequate.

The assessed valuation of the school district has increased from \$22,901,303 in 2012 to \$27,295,638 in 2015. The bonded indebtedness of the school district in 2015 was \$20,070,000.



### **Major Functions**

- Provide an educational experience for students that prepares them to be contributors to society

USD 376 has identified four goals to pursue:

- Create partnerships with local businesses to enhance our educational experience.
- Enhance the identity of each building, including marketing/promoting district.
- Maintain and recruit quality staff.
- Maintain Awareness of cultural diversity.

### **Future Facility Needs/Issues to Consider**

The School District should consider ways to improve parking at the Grade School, and at the High School during activities.

The tennis facilities for the school district, originally scheduled for replacement as part of the bond project, continue to decline and deteriorate.

The City should ensure that each school is adequately accessible via sidewalks. The Grade School is in need of sidewalks connecting it with Broadway along Jackson Street.

## **Sterling College**

Founded in 1887 as Cooper Memorial College, Sterling College is a four-year Christian college with a mission to develop creative and thoughtful leaders. Traditionally, the college and the community have had a relationship that has been amicable. In recent years, efforts have been made to increase the participation in partnerships and opportunities to work together.

The capacity of the current facility is 652. Enrollment has increased in recent years and remains stable. As of 2015, there are 718 part-time and full-time students attending classes at the main campus in Sterling. Approximately 87% of the students live on campus. Sterling College has 154 faculty and staff.

The campus is currently developed on 45 acres; the College has an additional 33 acres available for expansion. Off campus facilities include soccer fields, the art education center, a health services center, and the maintenance facility. The College has 704 off street parking spaces available, which are not adequate for current needs. Parking during activities is a challenge for students and visitors alike.

### **Major Functions**

- Provide post high school education and faith building opportunity

### **Future Facility Needs/Issues to Consider**

Issues of concern to the College include the pedestrian crossing at Forrest and Broadway, and the blight associated with an abandoned filling station at the northern entry to the campus. The City should make efforts to improve local collector streets near the college.

The College tennis facilities are no longer in a condition to accommodate an athletic program. Sterling College is considering re-establishing the program for the 2016-2017 school year, and will need to make improvements to the facilities as necessary.

The College lacks capacity for sufficient student housing, and is considering the construction of a new dormitory. The capacity of the academic facilities is also inadequate to meet future needs, and construction of a new academic/science building is under consideration.



## Sterling Free Public Library

The first library in Sterling was a combination firehouse, jail, and library in the 100 block of West Main Street. Annie Walton, the librarian from 1914 to 1951, secured a \$10,000 Andrew Carnegie grant in 1916. The Sterling Free Public Library, as it stands today at the southeast corner of Jefferson and Broadway Avenue, was built in 1917 – one of the last Carnegie libraries built in Kansas. An addition, which doubled the size of the original building, was built in 1982 with a gift from the Anne Dilley estate.

The Library has approximately 6,000 square feet of floor space. All parking is on street, and there are an estimated 8 parking stalls available for patrons.

The Sterling Free Public Library has 2,248 registered borrowers. Its collection includes 24,653 books, 78 different periodicals, 2,912 DVDs, 99 audiobooks, a Lego collection, and a gaming system with associated games.

Library activities include twice-a-week Preschool Storytimes, a daily Summer Reading Program, Teen Movie Nights, Lego Days, and Gaming System Activities.

The **Sterling Free Public Library Board** oversees the operation of the Library. It has seven members who are selected by the City Commission. The City Manager attends Board meetings on a regular basis.

The Sterling Free Public Library is a member of the **South Central Kansas Library System (SCKLS)**, which is a regional system of cooperating libraries. An elected twelve-member Executive Committee establishes policy and provides financial oversight of the SCKLS. Membership is voluntary, and each member library retains its local self-government and independence. Among other services, SCKLS provides a bookmobile service, workshops, and technology and grantsmanship training. More information on the SCKLS is available at [www.sckls.info](http://www.sckls.info).

### Major Functions

- Provide an open, free learning environment for all ages
- Provide physical and digital access to materials

### Future Facility Needs / Issues to Consider

The Library currently has a line item in the City budget to provide for routine maintenance. However, there are several major maintenance issues that need to be addressed which will require additional funding – including facade brick tucking, gutter replacement, window replacement, elevator repair, and renovation of the elevator entryway.

Due to water drainage issues around the building, there have been recurrent problems when water has entered the structure and caused damage in the lower level. Steps should be taken to evaluate the grades around the Library building, to ascertain improvements to prevent these problems, and identify potential sources of financing.





*Sterling Free Public Library*



*Sterling Cemetery*

## Sterling Community Cemetery

Platted on October 4, 1877, Sterling Community Cemetery was established by William Quincy Elliot and originally named Cottonwood Park Cemetery. It still provides burial options for local residents.

The cemetery includes a potter's field, which in the late 19th century provided a place for the burials of strangers, illegitimate babies, criminals and suicides. (At that time, suicides could not be buried in grounds blessed by the church, and ministers were not permitted to participate in any type of service provided.) The cemetery also boasts history related to the "secret societies", including the Woodsmen, the Anti-Horse Thief League, the Freemasons, the Independent Order of Odd Fellows, and others. Eventually, the local chapter of the Independent Order of Odd Fellows took over ownership and management of the cemetery.

In 1907, local community members started a campaign for the City to take ownership and become responsible for maintenance of the property. State law at that time allowed a city and township to jointly own and operate a cemetery. By vote of the electors on November 2, 1926, the property became jointly owned and operated by the City of Sterling and Sterling Township. To this day the cemetery continues to be owned and operated under this arrangement.

The chapel at the cemetery was installed in large part by the Public Works Administration, in combination with many community members. The Sterling High School woodworking class built the pews. Several improvements to the chapel were made in 1996, including the addition of a directory and directory shelter. All cemetery parking is on avenues dedicated for access to plots.

### Major Functions

- Provide burial space for remembrance of loved ones
- Provide aesthetically pleasing and park-like atmosphere

### Future Facility Needs / Issues to Consider

Several stones and markers need to be re-set or aligned. The chapel needs replacement windows and some masonry work. The cemetery has struggled since the early 1900s to combat sandburs, and maintenance staff should continue to explore methods to reduce the infestation. Budget for needed improvements, and pursue efforts to train staff or volunteers to address these issues.



## Public Perceptions of City Facilities

This Table shows the combined results from both people living in the City and from those living outside the City but within the Planning Area. The results are arranged in order of the percentage of responses that were marked "Adequate".

Community Questionnaire – Combined & Sorted Ratings of Community Facilities & Services						
<i>Combined City &amp; Rural Responses</i>	Adequate		Inadequate		Don't know	
Police Protection	124	98%	0	0%	3	2%
Library	120	98%	2	2%	1	1%
Refuse Disposal	121	95%	4	3%	3	2%
Electrical Service	116	95%	3	2%	3	2%
Fire Protection	120	94%	0	0%	7	6%
School Facilities	100	93%	0	0%	7	7%
Parks	119	92%	9	7%	1	1%
Traffic Signs and Signals	113	92%	9	7%	1	1%
Compost / Burn Site	115	91%	4	3%	7	6%
City Hall	109	89%	3	2%	11	9%
Swimming Pool	109	88%	9	7%	6	5%
Street Lighting	108	88%	14	11%	1	1%
Health Services	109	87%	8	6%	9	7%
Ambulance Service	107	84%	9	7%	11	9%
Water Supply System	101	82%	10	8%	12	10%
Sewage Disposal System	95	77%	9	7%	19	15%
Recreation Programs	89	72%	12	10%	22	18%
Sidewalks	79	63%	46	37%	1	1%
Street Maintenance and Cleaning	62	51%	59	48%	1	1%
Housing for Elderly	54	45%	40	33%	27	22%
Economic Development Promotion	47	42%	30	27%	34	31%
Industrial Development Sites	45	38%	28	24%	44	38%
Street Paving	47	36%	83	63%	2	2%
Job Opportunities	44	36%	49	40%	28	23%
Housing for College Students	38	33%	45	39%	33	28%
Storm Drainage System	35	29%	74	61%	13	11%
Housing Availability	32	26%	75	62%	14	12%
Rental Housing	25	21%	74	62%	21	18%

## **Section 4 – Planning the Future**

CHAPTER 11. Land Use Patterns & Population Goal

CHAPTER 12. Policies & Programs

CHAPTER 13. Regulatory Tools

CHAPTER 14. Comprehensive Plan Implementation

## CHAPTER 11. Population Goal & Land Use Patterns

As part of the comprehensive planning process, a community's land use patterns are mapped to show the amount and locations of land in use for residential, commercial, industrial, and public purposes. The ability to plan for changes in future land use patterns requires a solid understanding of existing land use conditions, as well as a realistic expectation of likely changes in population during the Planning Period.

### Future Population Goal

A community's future population is subject to too many unknown factors to be determined with any precision, but a reasonably accurate estimate is an essential foundation for making planning decisions regarding everything from housing requirements to sewage treatment capacity.

The Planning Commission determined that it will plan for an increase in the City's population from 2,328 in 2010 to **2700 people by the year 2035**, for an increase of 372 individuals or 16% over twenty-five years. This is an ambitious population goal, given that Sterling's population grew by only 6% during the twenty years between 1990 and 2010, and that the long-term trend for this region of Kansas is population decrease. It is a reasonable ambition, however, given Sterling's quality of life, the new K-96 interchange, and various national trends working to Sterling's advantage.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked what type of growth they want for Sterling's population in the next twenty years.

Community Questionnaire – Future Population Growth						
	No growth		Modest, continuing growth		Accelerated, higher growth	
<b>In City of Sterling</b>	5	4%	103	89%	8	7%
<b>Outside City / In Planning Area</b>	1	10%	9	90%	0	0%
<b>Total Responses</b>	<b>6</b>	<b>5%</b>	<b>112</b>	<b>89%</b>	<b>8</b>	<b>6%</b>

The population goal of 2700 by 2035 is consistent with the community's expressed desire for modest continuing growth. Achieving this goal would require that Sterling will have to approximately double its recent rate of housing construction, based on historical activity of building permits for residential construction in Sterling.

## Land Use Plan

Analysis of existing land use patterns is a basic and critical component of comprehensive planning, and profoundly influences other major elements of a Comprehensive Plan, such as planning for new community facilities or transportation system improvements. The need to improve existing land use patterns and expand various land use categories also impacts municipal policies and programs.

The use of any given parcel of land may change over time, but it is typically a slow process. Therefore, existing land use patterns are generally recognized and accepted as the basis for the realistic projection and delineation of future land use patterns. The patterns of future land use proposed for the Sterling area must also reflect the estimated future population of the City by the end of the Planning Period.

A Land Use Plan describes future goals for land use within the Planning Area. It must coordinate future land use plans with existing land use patterns, minimize incompatible adjacent land uses, strive for harmony between land uses and existing physical conditions, and maintain a balance among the various types of land use within a community.

This Land Use Plan addresses the distribution and interrelationships of existing land uses in the City of Sterling and its surrounding Planning Area. It evaluates the potential for future development in the area, and will help to guide that development as it occurs. Sterling's Land Use Plan also provides a legal foundation for both the judicial review of zoning cases, and for the adoption of Subdivision Regulations.

Although zoning and land use are interrelated, a Land Use Map is not a Zoning Map. An Existing Land Use Map is a snapshot of what types of uses a parcel or part of a parcel of land were being used for, on the day when the survey was done. A Future Land Use Map is a projection of proposed future land uses, and is used as a basis for zoning decisions.

Included within this chapter are **Existing Land Use Maps** for both the City itself (Figure 11-A) and the Planning Area (Figure 11-B), as well as a **Future Land Use Map** for the urban area (Figure 11-C). The maps can also be seen on the City website at [www.sterling-kansas.com](http://www.sterling-kansas.com), and full-size versions of the maps are available for viewing at Sterling City Hall.

## **Existing Land Use**

A field survey of the Sterling Planning Area was conducted on November 24 and 25, 2014, to compile an inventory of existing land use. The consultants, with the assistance of the City's Director of Public Works, classified each parcel of land by its type of use.

The following land use definitions were used in the survey, to classify existing land uses within the Sterling Planning Area:

**Agricultural and Vacant / Rural** – Land outside the City limits, used for agricultural purposes, such as growing crops or raising livestock. Also, undeveloped land (land not built upon) such as natural open space.

**Agricultural and Vacant / Urban** – Undeveloped land within the City limits (land not built upon) such as vacant lots, natural open space, and land which may be used for agricultural purposes.

**Single-household Residential** – Land devoted to residences occupied by one household. Manufactured/mobile homes, not otherwise located in mobile home parks, were further identified separately from site-built housing units.

**Multiple-household Residential** – Land devoted to multiple occupancy dwellings containing two or more individual residential units, such as duplexes, fourplexes, and apartment buildings.

**Public and Semi-public** – Land devoted to City buildings, schools, parks, cemeteries and other governmental activities, including special uses regulated by government, such as utilities and nursing homes. Also includes institutional or fraternal uses of land for public purposes, such as churches, lodge halls, and service organizations.

**Commercial** – Land and buildings where commercial activities of either a merchandising, service oriented, or professional nature are conducted.

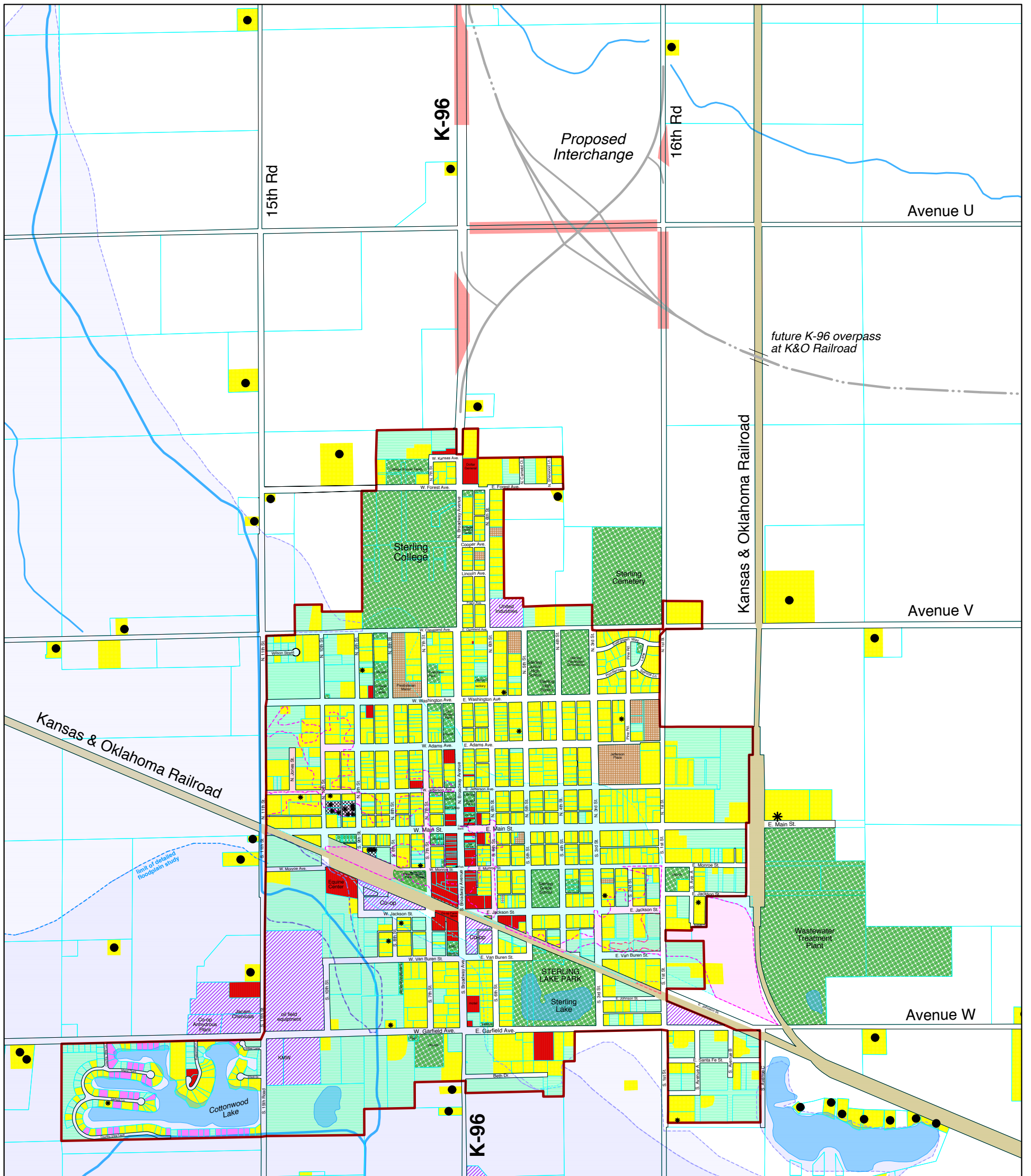
**Industrial** – Land and buildings used for manufacturing, heavy construction and storage purposes, including salvage yards.

**Transportation** – Public or semi-public land used for transportation right-of-way, for example streets, alleys, highways and railroads.

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Information from the field survey is shown on the  
*Existing Land Use Map—Urban Area*, Figure 11-A,  
inserted following this page.  
This map focuses on land within the city limits.

---



**Key**

- City Limits
- Planning Area
- Rural House
- Rural Manufactured Home

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 PLANNING CONSULTANTS  
 WICHITA, KANSAS

**Key**

- Floodplain Zone X (0.2% annual chance flood)
- Floodplain Zone AE (1% annual chance flood; no base flood elevations determined)
- Floodplain Zone AE (1% annual chance flood; base flood elevations determined)
- Floodplain Zone AO-1 (1% annual chance flood; typically sheet flow to 1 foot depth)
- Floodplain Zone AO-2 (1% annual chance flood; typically sheet flow to 2 foot depth)
- Floodway Areas in Zone AE

**Base Map:**

- Base Map information provided by Kimble Mapping, Inc. of Manhattan, Kansas; & Rice County Appraiser's Office.
- Additions and revisions by Rice Foster Associates P.A., October 2014.

**Floodplain information from FEMA Flood Insurance Rate Maps:**

- City of Sterling, Kansas, Rice County - Community Panel Number 200297 0001 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) - Community Panel Number 200290 0005 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) - Community Panel Number 200290 0008 C, revised September 3, 1997.
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- Reno County, Kansas and Unincorporated Areas - Map Number 20155C0075F, map revised January 6, 2010.
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**Existing Land Use**

- Agricultural and Vacant
- Single-household Residential
- Multiple-household Residential
- Manufactured Home Park
- Residential / for fishing & hunting
- Public & Semi-public
- Commercial
- Industrial
- Manufactured / Mobile Home in the City

Land Use Field Survey by Rice Foster Associates and City of Sterling Public Works Director, November 24 & 25, 2014.

FIGURE 11-A  
 EXISTING LAND USE - URBAN AREA

## COMPREHENSIVE DEVELOPMENT PLAN

STERLING AREA  
 RICE COUNTY, KANSAS

0' 400' 800' 1600'

Plotted Scale 1:4800



– Connect Sterling –  
 Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035

Existing Land Use in the City of Sterling			
	Total acres	Percentage of developed area	Percentage of total area
Residential (total)	367.0	45.4%	35.0%
<i>Single-family</i>	339.0	41.9%	32.4%
<i>Multiple-family</i>	18.0	2.2%	1.7%
<i>Manufactured Home Park</i>	2.0	0.2%	0.2%
<i>Intermittent Recreational</i>	8.0	1.0%	0.8%
Public & Semi-public	116.8	14.4%	11.2%
Commercial	26.6	3.3%	2.5%
Industrial	46.6	5.8%	4.5%
Transportation Right-of-way	251.6	31.1%	24.0%
<b>Total Developed Area</b>	<b>808.6</b>	<b>100.0%</b>	<b>77.2%</b>
+ Agricultural & Vacant	238.5		22.8%
<b>= Total Area</b>	<b>1,047.1</b>		<b>100.0%</b>

**Note:** Land use quantities include all land within the Sterling city limits.  
**Source:** Land Use Field Survey by Rice Foster Associates, P.A. and the City of Sterling Public Works Director, November 24 & 25, 2014.  
 Land Use calculations by Rice Foster Associates.

### GENERAL CITY PATTERN

There are 1,047.1 acres within Sterling's city limits, primarily within the square mile between Cleveland Avenue (Avenue V) and Garfield Avenue (Avenue W), and 11th Street (15th Road) and 1st Street (16th Road). Portions of the City extend beyond this square mile as much as a quarter mile farther to the south and to the east, and as much as a half mile to the west and to the north.

Tracks of the Kansas & Oklahoma Railroad split into two lines just southeast of Sterling. One line passes through Sterling roughly from east-southeast to west-northwest, dividing the southwestern third or so of the City from the rest. The branch line runs north to south, bordering the City's east side.

The Arkansas River is about two miles south of Sterling, running downstream approximately west to east. The river's floodplains affect a significant portion of the City, and constrain Sterling's growth to the south and west.

Developed land represents 77.2% of the City's area and totals about 808.6 acres. The balance of land in the City is vacant or still in agricultural use.



Most of the developed land in the Sterling area is within the city limits, and existing land use patterns are generally cohesive. Residential neighborhoods contain only a few scattered vacant lots. Commercial uses are largely downtown along Broadway. Industrial uses are mostly either adjacent to the railroad tracks, or clustered around the intersection of South 11th Street and West Garfield Avenue.

## **RESIDENTIAL**

Residential land uses total 367.0 acres within the city limits – with 339.0 acres in single-family homes, 18.0 acres in multiple-family homes, 2.0 acres in manufactured home parks, and 8.0 acres in intermittent recreational use. Residential land use accounts for 45.4% of the developed area within the City, and takes up 35.0% of the land within the city limits. No other category of land use in Sterling is larger.

**Single-family Housing** There are 339.0 acres of land devoted to single-family homes in Sterling. This is 41.9% of the City's developed area, and 32.4% of all the land in the City. More land in Sterling is devoted to single-family homes than to any other purpose.

**Multiple-family Housing** Sterling's multiple-family housing consists of two duplexes on separate lots on North 6th Street near Cooper Avenue, four duplexes on the southwest corner of Cleveland and 5th Street, a duplex northeast of Jackson and 6th Street, a duplex southeast of Monroe and 3rd Street, and a fourplex on the southwest corner of Main and 5th Street.

There is also an apartment complex southwest of Washington and 1st Street with two duplexes, two fourplexes, and a 6-unit building. There are 20 low income housing duplexes at Jefferson Plaza, on 3rd Street between Adams and Jefferson. The campus of Presbyterian Manor has nine individual cottages and a duplex, all for independent living, as well as assisted living apartments and a nursing home in the main building. Sterling College has five dormitory buildings for students: Campbell Hall, Douglas Hall, Evans Hall, Kilbourn Hall, and McCreery Hall.

**Manufactured/Mobile Homes** There are a total of 25 manufactured or mobile homes within the city limits of Sterling, 14 of them at various individual locations, and 11 within two manufactured home parks. The park between 9th and 10th Streets, south of Jefferson, has 8 manufactured/mobile homes. There are 3 manufactured/mobile homes in a park east of 9th Street and north of the railroad tracks.

**Intermittent Recreational** Unique to Sterling, this category accounts for the lots in the Cottonwood Lake subdivision used to support recreational vehicles or fishing shacks that may be used as intermittent vacation residences, largely during the summer months. There are 8.0 acres of land devoted to this type of land use in Sterling, which is 1.0% of the City's developed area, and 0.8% of all the land in the City.

## **PUBLIC AND SEMI-PUBLIC**

Public and semi-public land use represents 14.4% of the developed area within the city limits, and 11.2% of all the land. This category includes 116.8 acres in total, and is the City's third-largest category of land use.

The Sterling College campus is the single largest use of public land in Sterling, followed by the Sterling public schools, the City parks, and a number of churches. Other public and semi-public land uses include City Hall, the Library, the Post Office, the City Shop, the City Power Plant, the EMS facility, the community gardens, an American Legion Post, and a Sterling Township property.

## **COMMERCIAL**

Sterling has 26.6 acres of land in commercial use within the city limits, which comprise 3.3% of the developed area, and 2.5% of the total land use within the city limits. This is the City's smallest category of land use.

Commercial land uses in Sterling include the offices, banks, stores, and restaurants in the downtown area, as well as a car wash and the Dollar General store on the north end of town along Broadway, the motel on south Broadway, an equine boarding facility south of the tracks by 9th Street, and a funeral home on 7th Street.

The streetscape amenities in downtown Sterling enhance the viability of downtown as a commercial core, as well as improving the community's quality of life.

## **INDUSTRIAL**

Sterling has 46.6 acres of land devoted to industrial use, which is 5.8% of the developed area, and 4.5% of the total land use. This is the second-smallest category of land use in Sterling.

Industrial land uses within Sterling include United Industries, the City Power Plant, and the Co-op. The industrial area to the southwest of Sterling includes the KMW plant and an oil field equipment storage area, which are inside the City, and a Jacam Chemicals facility and the Co-op Anhydrous plant, which are outside the city limits. An Ethanol plant and another Jacam Chemicals facility are about five miles north of Sterling, outside the City but within the Planning Area, adjacent to the railroad tracks at Avenue Q.

## **TRANSPORTATION RIGHTS-OF-WAY**

Within the city limits, 251.6 acres are incorporated in platted rights-of-way for streets, alleys and railroads. This land use comprises 31.1% of developed area, and 24.0% of the City's total area. Transportation is Sterling's second-largest category of land use.

## **AGRICULTURAL AND VACANT / UNDEVELOPED LAND**

When all of the previous land use categories are added together, they equal 808.6 acres of *developed* land within the city limits, or 77.2% of Sterling's total land area. Everything else, including vacant lots and agricultural land within the city limits, is considered to be *undeveloped* land.

Sterling has 238.5 acres of land use in this category, which is 22.8% of the total land area within the city limits. There are some vacant lots scattered about the City, and a few vacant buildings and lots in the downtown area, but the bulk of Sterling's vacant land is on the City's periphery.

Infill development of vacant urban lots is generally desirable. Some of the vacant land on Sterling's edges is currently used for agricultural production, and may be potentially suitable for eventual development. However, a large portion of the vacant land in west and southwest Sterling is in floodplain, and may be better utilized for agriculture or for parkland than for development.

**EXISTING LAND USE OUTSIDE THE CITY LIMITS**

Sterling's Planning Area encompasses 30,670.9 acres, or 47.9 square miles in total. Excluding the 1,047.1 acres inside the city limits, the balance of the Planning Area comprises 29,623.8 acres or 46.3 square miles. In the following discussion, land use quantities refer to the Planning Area *outside* the city limits.

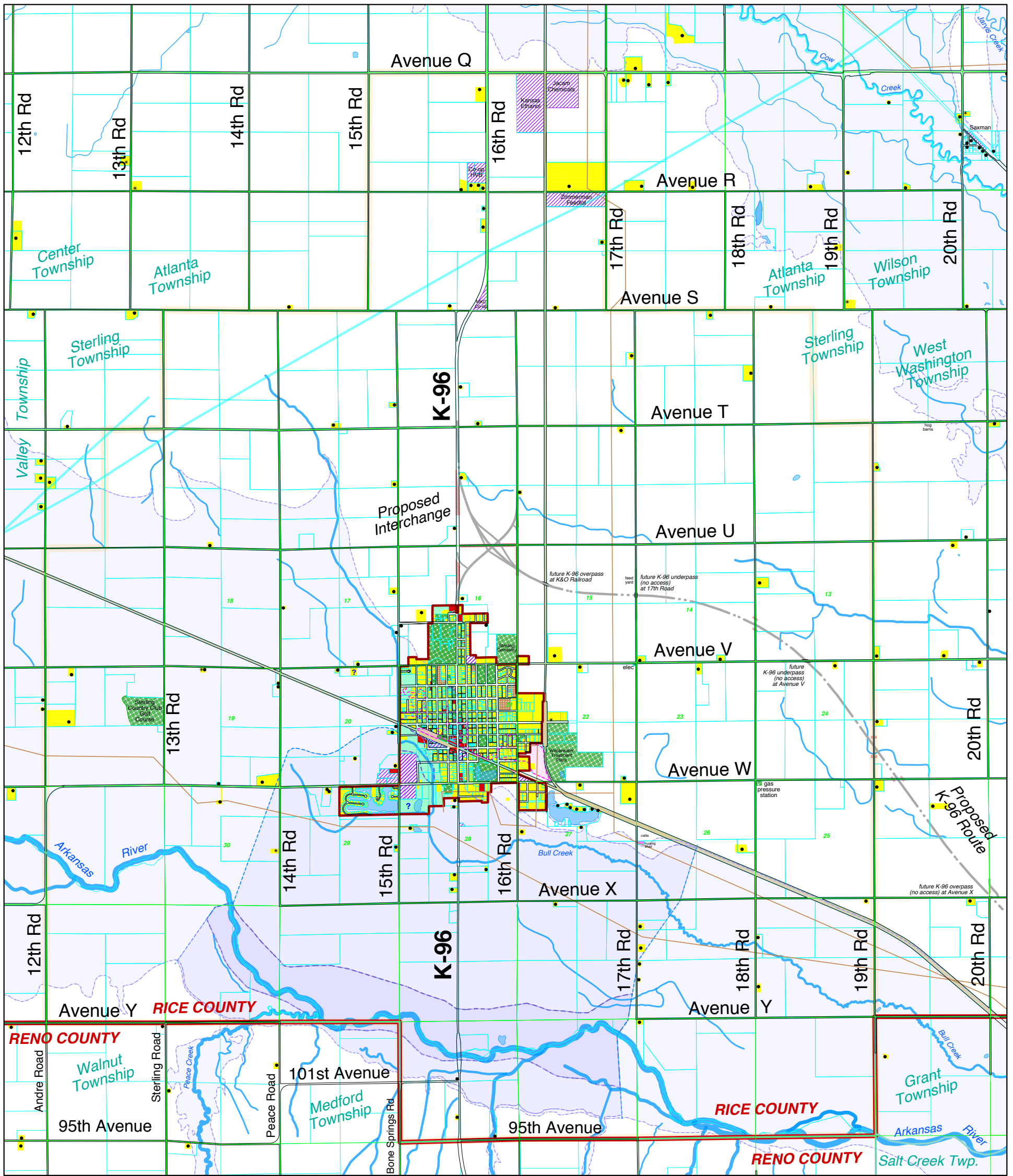
Existing Land Use in the Sterling Planning Area			
	Total acres	Percentage of Planning Area	Percentage of Developed Area
Single-family Residential	292.3	0.99%	17.38%
Intermittent Recreational	1.0	0.003%	0.06%
Public & Semi-public	160.2	0.54%	9.53%
Commercial	2.0	0.01%	0.12%
Industrial	200.7	0.68%	11.93%
Transportation Right-of-way	1,025.5	3.46%	60.98%
Agricultural & Vacant	27,942.1	94.32%	–
<b>Total Planning Area</b>	<b>30,670.9</b>		
minus area within city limits	1,047.1		
<b>= Planning Area outside of city limits</b>	<b>29,623.8</b>	<b>100.0%</b>	

**Note:** Land use quantities include all land within the Sterling Planning Area, but outside the city limits. Developed area includes all land uses except agricultural and vacant.

**Source:** Land Use Field Survey by Rice Foster Associates, P.A. and the City of Sterling Public Works Director, November 24 & 25, 2014. Land Use calculations by Rice Foster Associates.

In the Sterling Planning Area, **agriculture** is the predominant land use by a wide margin, utilizing over 94% of the land. **Transportation** is the second-largest category, utilizing 1,025.5 acres (3.5% of the land). There are 200.7 acres in **industrial** use, including facilities for Jacam Chemical, Kansas Ethanol, Zimmerman Feedlot, and two Co-op properties, all in the north end of the Planning Area, as well as the Co-op's Anhydrous Plant and a Jacam Chemical facility just outside the city limits in the southwest. The 160.2 acres in use for **public or semi-public** purposes includes the Sterling Country Club Golf Course, Sterling Cemetery, and the City Wastewater Treatment Plant.

The 292.3 acres in use for **single-family housing** consist of scattered individual properties; there are no rural subdivisions in the Planning Area. There are no multiple-family housing units or manufactured home parks in the Planning Area, and only one hunting lodge in the Intermittent Recreational land use category.



**Key**

- City Limits
- Planning Area

**Flood Zone Key**

- Floodplain Zone X (0.2% annual chance flood)
- Floodplain Zone AE (1% annual chance flood; no base flood elevations determined)
- Floodplain Zone AE (1% annual chance flood; base flood elevations determined)
- Floodplain Zone AO-1 (1% annual chance flood; typically sheet flow to 1 foot depth)
- Floodplain Zone AO-2 (1% annual chance flood; typically sheet flow to 2 foot depth)
- Floodway Areas in Zone AE

**Base Map:**

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**Floodplain information from FEMA Flood Insurance Rate Maps:**

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**Existing Land Use**

- Agricultural and Vacant – Rural
- Agricultural and Vacant – Urban
- Single-household Residential
- Multiple-household Residential
- Manufactured Home Park
- Public & Semi-public
- Commercial
- Industrial
- Dwelling
- Manufactured / Mobile Home

FIGURE 11-B  
 EXISTING LAND USE — PLANNING AREA

## COMPREHENSIVE DEVELOPMENT PLAN

STERLING AREA  
 RICE COUNTY, KANSAS

0' 1600' 3200' 4800'

Plotted Scale 1:16000

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 1415 East 2nd Street — Wichita, KS 67214-4119

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 WICHITA, KANSAS

## Future Land Use

A future land use plan is intended to maintain and enhance the arrangement of land uses in the Sterling Planning Area, so that land will be developed in patterns that support efficient, balanced, and compatible land uses. The Future Land Use Map in this document exhibits a desired land use pattern for the City and its immediate area, to guide land use planning decisions during the Planning Period. However, some flexibility is also essential in a future land use plan, and it is expected that the Planning Commission may need to make minor adjustments from time to time.

When the time comes to plan the development of a particular area, policy decisions should remain in keeping with the overall future land use concepts expressed in the Future Land Use Map, but must also respond to current data. **When an area is designated for a particular future land use, that designation should be considered as an indication of preferred land use character and predominant type, rather than an absolute requirement that the area be developed exclusively for the noted land use.** For example, a church or school could be considered compatible in an area designated for future residential land use.

A number of factors must be considered when projecting future land use, including community attitudes and goals, existing physical features and their respective development influences, existing land use patterns, potential utility service areas, future population goals and housing needs, and proposed development projects.

## GENERAL CITY PATTERN / FUTURE

Compact and contiguous development patterns maximize the efficiency and minimize the cost of providing public services, from utilities to police patrols. They also reduce negative environmental effects of sprawl, such as traffic, noise, light pollution, air pollution, and hazardous pedestrian conditions. All of these factors affect property values and reduce the quality of life, particularly in residential areas.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked whether, as a concept of growth, they favor policies that would encourage development in and adjacent to the City.

Community Questionnaire – Development In & Near City				
	Yes		No	
In City of Sterling	102	96%	4	4%
Outside City / In Planning Area	9	100%	0	0%
<b>Total Responses</b>	<b>111</b>	<b>97%</b>	<b>4</b>	<b>3%</b>

The results indicate strong public support for continuing to keep additional development in the Sterling area within the City, or close to existing development.

In general, it is considered desirable for **residential** land use patterns within a city to be separated from commercial or industrial uses. The exception to this guideline is downtown, where multi-story buildings can support a mix of uses – such as commercial uses on the street level, and residential uses on upper floors. Some new developments may also be designed for mixed use, to create walkable neighborhoods.

Some **public** land uses are compatible with residential areas (such as neighborhood parks, or small churches), some are appropriate to commercial areas (City Hall or a Post Office, for example), and some should be treated as if they were industrial sites (sewage treatment plants). When schools were smaller and most children regularly walked to school, these public facilities were often built in the heart of residential areas, but today's large schools generate a lot of traffic, and are typically sited on major roads, near but not within residential neighborhoods.

**Commercial** land uses are typically located near transportation nodes, and clustered together to create economic synergy. Ideally, both retail destinations and workplaces should be within walking distance of residential neighborhoods.

**Industrial** land uses often require heavy-duty utility services, generate considerable truck traffic, and may produce dust and other air pollutants, as well as considerable noise. Therefore they are often consolidated in a few areas with appropriate utility service, typically near railroads or highways, and away from residential neighborhoods. Ideally, industrial land uses are sited on the opposite side of the urban area from a community's prevailing wind direction.

Figure 11-C depicts Sterling's proposed urban land use patterns through 2035, which follow the precedent already established. Major future land use goals for the City involve creating a variety of additional housing options, and expanding the City toward the new K-96 interchange.

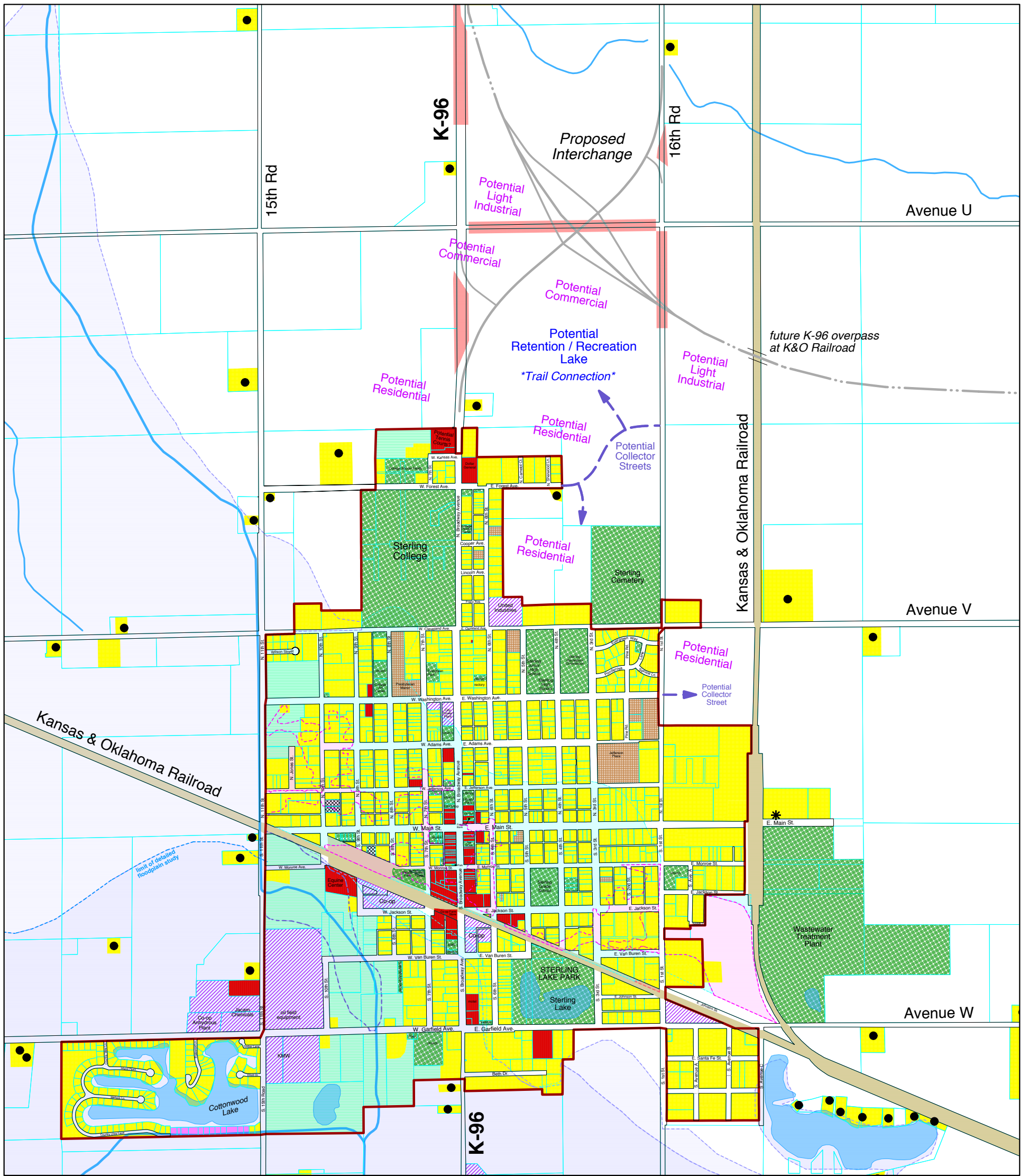
Maintaining and enhancing Sterling's outstanding quality of life should be the primary intent of future land use decisions.

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The *Future Land Use* map, Figure 11-C, is inserted following this page.  
This map focuses on land within and near the current city limits.

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**Key**

- City Limits
- Planning Area
- Rural House
- Rural Manufactured Home

**Key**

- Floodplain Zone X (0.2% annual chance flood)
- Floodplain Zone AE (1% annual chance flood; no base flood elevations determined)
- Floodplain Zone AE (1% annual chance flood; base flood elevations determined)
- Floodplain Zone AO-1 (1% annual chance flood; typically sheet flow to 1 foot depth)
- Floodplain Zone AO-2 (1% annual chance flood; typically sheet flow to 2 foot depth)
- Floodway Areas in Zone AE

**Base Map:**

- Base Map information provided by Kimble Mapping, Inc. of Manhattan, Kansas, & Rice County Appraiser's Office.
- Additions and revisions by Rice Foster Associates P.A., October 2014.

**Floodplain information from FEMA Flood Insurance Rate Maps:**

- City of Sterling, Kansas, Rice County — Community Panel Number 200297 0001 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) — Community Panel Number 200290 0005 C, revised September 3, 1997.
- Rice County, Kansas (Unincorporated Areas) — Community Panel Number 200290 0008 C, revised September 3, 1997.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0050F, map revised January 6, 2010.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0075F, map revised January 6, 2010.
- Reno County, Kansas and Unincorporated Areas — Map Number 20155C0090F, map revised January 6, 2010.

**ADOPTED BY PLANNING COMMISSION: July 9, 2015**  
**APPROVED BY CITY COMMISSION: September 8, 2015**  
**EFFECTIVE DATE / PUBLICATION OF ORDINANCE: 2465: September 10, 2015**

**Future Land Use**

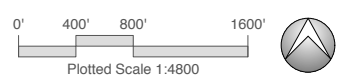
- Agricultural and Vacant
- Single-household Residential
- Multiple-household Residential
- Manufactured Home Park
- Residential / for fishing & hunting
- Public & Semi-public
- Commercial
- Industrial
- Manufactured / Mobile Home in the City

Land Use Field Survey by Rice Foster Associates and City of Sterling Public Works Director, November 24 & 25, 2014.

FIGURE 11-C  
FUTURE LAND USE — URBAN AREA

**COMPREHENSIVE DEVELOPMENT PLAN**

STERLING AREA  
RICE COUNTY, KANSAS



**rice foster**  
LANDSCAPE ARCHITECTURE & PLANNING ASSOCIATES  
1415 East 2nd Street — Wichita, KS 67214-4119

**FOSTER & ASSOCIATES**  
PLANNING CONSULTANTS  
WICHITA, KANSAS

## RESIDENTIAL / FUTURE

For a community to keep young and old family members nearby and to have an opportunity to attract new residents, housing needs for all social and economic levels must be met. It is important to maintain a diverse housing inventory, and to consider the development of housing types other than single-family homes.

Sterling's population in the 2010 Census was 2,328, and the population goal by the end of the Planning Period in 2035 is 2700 – an increase of 372 people. Taking the additional population, and dividing that number by the 2010 Census figure of 2.33 persons per household, Sterling may expect **about 160 additional households** by 2035, or an average increase of about **six to seven housing units per year** for the twenty-five years between 2010 and 2035. This number does not take replacement housing units into account, which are needed to compensate for houses lost to, for instance, fire or demolition.

To estimate the *maximum* amount of land needed to accommodate 160 housing units, assume a typical suburban lot size of 10,000 square feet for a single-family detached dwelling, and 25% of the land per acre dedicated to street right-of-way; this would result in about 3.27 dwelling units per acre. If every single one of the estimated 160 new households in Sterling chose to live in such a suburban house, Sterling could expect to need **up to 49 acres of residential development** to support such a population increase. In fact, Sterling will require a variety of housing types, often using less land per household, but this figure does provide some insight into the largest extent of residential land acreage likely to be needed.

New large scale residential developments should be encouraged to the north and northeast of Sterling, outside of floodplains, and where it would expand the City toward the K-96 interchange. Ideally, such developments would be adjacent to existing neighborhoods, to allow efficient connections to streets and utilities.

Also encourage the development of infill housing on vacant lots in established neighborhoods, creating some new houses with modern amenities, that still retain historical character. Consider developing at least a few downtown loft apartments in upper levels of commercial buildings along Broadway, to appeal to that specialized niche market.

**Public Housing** provides decent and safe housing at affordable rents, for eligible low-income families and individuals, the elderly, and persons with disabilities. The U.S. Department of Housing and Urban Development (HUD) administers federal aid to local housing agencies that manage these facilities, and furnishes technical and professional assistance in planning, developing and managing public housing developments.

Though the City does not have a public housing agency, it has successfully sought housing grants. The community also benefits from the efforts of the Sterling Housing Authority (SHA), a local nonprofit corporation that owns and manages Jefferson Plaza, a 45-unit low-rent public housing complex. Funded and regulated by the U.S. Department of Housing and Urban Development, SHA provides income-based housing assistance to residents. The City Commission appoints SHA board members.

**Multiple-family housing** should ideally be located near community facilities, and near business areas, both for residents' shopping convenience and to strengthen business activity. Residential neighborhoods can accommodate smaller multiple-family housing, such as duplexes, triplexes and fourplexes, so long as parking requirements are handled sensitively. Larger multiple-family developments can act as a buffer between single-family and nonresidential uses, and are often developed along arterial and collector streets which can support the higher density traffic they generate.

With adequate lot size, a duplex may be split by a common lot line into two individual lots for sale; this configuration is sometimes known as **twin homes**. This reduces construction cost and still provides for individual land ownership by way of a "lot split" procedure in subdivision regulations. It is important that such homes have individual connections for all utilities.

**Existing large houses may be converted to duplex use**, so long as adequate parking, screening, and other standards are met.

**Manufactured Housing** With the high cost of housing in general, manufactured housing (manufactured, mobile and modular homes) is a solution for some people today. For an explanation of the differences between manufactured, residential-design manufactured, mobile, and modular homes, see Chapter 6 on Housing.

It is generally more desirable to locate **single-wide** manufactured/mobile homes in mobile home parks designed for their size and shape. **Multiple-wide** manufactured housing and modular homes, however, do fit on conventional lots. As mandated by state statutes, multiple-wide residential-design manufactured homes on permanent foundations are provided for in all single-family residential zones.

## **PUBLIC & SEMI-PUBLIC / FUTURE**

The City currently owns enough land to allow for necessary expansion of municipal support facilities. As new residential development occurs, additional **park land** will be needed, and will be provided for in any new approved plats.

The largest potential addition to public land may occur as part of the City's efforts to coordinate development of a new detention or retention lake with construction of the new interchange.

## **COMMERCIAL / FUTURE**

In the downtown core, commercial infill is proposed, along with support of existing commercial land uses. Some additional commercial use at the north end of town, on the other side of Broadway from the Dollar General store is also suggested.

However, most of the City's efforts on commercial development over the course of this Plan should be focused on the area between the City and the new K-96 interchange. **Development in the first few years after the interchange is completed will establish a pattern that Sterling will have to live with indefinitely.** It is worth every effort to set the direction of that development right from the beginning, encouraging businesses which together establish a welcoming first impression for the City, and that complement downtown businesses rather than compete with them.

## **INDUSTRIAL / FUTURE**

Sterling's residents are concerned with preserving the community's valued small-town ambience. However, results of the Community Questionnaire indicate an interest in the development of light industry. The new K-96 interchange offers an opportunity to support some light industrial development which could provide good local jobs, enhance Sterling's tax base – and if appropriately sited and screened, would not compromise the community's small-town character.

## **TRANSPORTATION RIGHTS-OF-WAY / FUTURE**

Additional roads will likely be needed, to support new development between existing City neighborhoods and the new interchange, and to make travel more convenient for those using roads which have been dead-ended by the new K-96 Bypass and interchange. Planning new streets will likely be part of the plans for new development, but the City should work to make sure that the street pattern as a whole will end up being efficient in the long-term, even if the future road network is developed a piece at a time.

## **LAND USE OUTSIDE THE CITY / FUTURE**

With the exception of the area about the new interchange, the Planning Area outside the City should continue to be used mainly for farming and ranching, which should be viewed as the highest and best use for such rich soils. Agriculture will continue to be an essential component of the long-range economic viability of the Planning Area.

## CHAPTER 12. Resources & Context

In order to implement the goals of this Comprehensive Plan, Sterling's Planning Commission members and City Commissioners over the next twenty years will need to be aware of available resources of information and funding. Though resources change over time – existing programs may be ended or defunded, or new programs may begin – this chapter will provide an overview of some of the state, regional, and national programs that are often useful in helping Kansas communities achieve their planning goals.

With modern communication and transportation networks, many worldwide trends have a more immediate local impact than in the past. A few of the overarching global trends likely to affect Sterling's Plan implementation are discussed in this Chapter, though new issues will undoubtedly arise over the course of the Planning Period. Community leaders should always stay aware of the national and international context which shapes good local decision-making. Results from the 2015 Community Questionnaire which reflect residents' attitudes towards these issues are also included in this chapter.

Background on existing programs, information resources, and potential funding options, as well as notes on some worldwide trends germane to Sterling's planning activities, and local survey results are organized within this chapter under the following general headings:

- Housing
- Economic Development
- Transportation
- Quality of Life

### **Seeking Grants**

Funding, often in the form of matching grants, is still available from both governmental and non-profit foundation sources for some projects, but competition for funding is fierce. The advantages of procuring outside funding should always be weighed against the sometimes substantial costs of grant research, selection, preparation, submittal, and administration.

To successfully compete for grant funding, carefully select projects that are well matched to specific grant program criteria. Be prepared to budget funds for either staff time for grant proposal preparation, or to employ a professional grant writer. Funds for the City's portion of matching grants should also be pre-approved by the governing body, to be readily available when needed. If a City is willing to raise their percentage of matching funds even a little beyond a grant's required minimum, the likelihood of winning the grant increases substantially.

## Housing

As discussed in Chapter 11, Sterling will need a total of approximately 160 additional housing units by 2035, in order to meet its expressed goal for population growth. Meeting this housing goal would require, on average, construction of about six to seven housing units per year for the twenty-five years between 2010 and 2035. In reality, housing development often occurs in intermittent bursts, rather than at a steady pace.

During this planning process, additional housing was identified as an essential economic development requirement for Sterling. According to the 2010 Census, about 706 people regularly commute into Sterling to work. If Sterling had more housing available, it is likely that some of those commuters might choose to live in Sterling.

Not only does the community need more housing, it needs a variety of housing types. For a small Kansas town, Sterling already has an unusually high proportion of rental and multi-family housing, reasonable given the presence of Sterling College. However, this diversity should be reinforced, with development of additional rental homes, starter homes, family homes with modern amenities such as open floor plans and attached garages, and accessible homes that allow aging in place.

Given the life cycle of people and families, housing needs change over time. In the single year between 2012 and 2013, according to the U.S. Census, about 11.7% of all Americans moved. If suitable housing options are not available when housing needs change, it can cause residents to leave a community, or potential residents to choose another city.

In recent decades, the Census shows fewer and fewer persons living in the average American household. Many factors contribute to this trend, including the increasing number of young people who delay marriage or having children, high divorce rates, and a population in which more people choose to live alone. As household sizes get smaller, there is more demand nationwide for smaller houses, duplexes, apartments, condominiums, and modular and manufactured housing.

For a more detailed analysis of Sterling's housing needs, see the *Housing Market Study and Needs Assessment, Sterling, Kansas*, which was done by Virden Associates in 2011.

### Local Housing Preferences

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked which housing types they think should be particularly encouraged in Sterling.

Community Questionnaire – Housing Types						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
Single family homes for middle income buyers	75	19%	8	17%	83	18%
Starter homes for first time buyers	52	13%	6	13%	58	13%
Accessory dwellings (for use by aging parents, college student rental, etc.)	50	12%	6	13%	56	12%
Rental apartments	47	12%	5	10%	52	12%
Downtown multi-use (apartments above or behind retail or office buildings)	43	11%	4	8%	47	10%
Accessible / retirement housing	40	10%	6	13%	46	10%
Duplexes or Twin Homes	30	7%	5	10%	35	8%
Assisted Living	30	7%	5	10%	35	8%
Single family homes for upper income buyers	25	6%	1	2%	26	6%
Publicly supported low-income housing	11	3%	2	4%	13	3%
Multi-family housing	3	1%	0	0%	3	1%
<i>Total Responses</i>	<b>403</b>	<b>100%</b>	<b>48</b>	<b>100%</b>	<b>451</b>	<b>100%</b>

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they think the City should encourage housing development by subsidizing infrastructure (such as streets, water lines, sewer lines, or electric lines) to new subdivisions.

Community Questionnaire – Subsidize Infrastructure for New Housing?				
	Yes		No	
In City of Sterling	77	73%	29	27%
Outside City / In Planning Area	7	88%	1	13%
<i>Total Responses</i>	<b>84</b>	<b>74%</b>	<b>30</b>	<b>26%</b>



## **Housing Programs**

When private financial institutions in an area are unable to provide mortgages for low and moderate income persons on affordable terms and conditions, various federal housing assistance programs may be considered. These programs are typically administered by the Federal Housing Administration (FHA) of the **U.S. Department of Housing and Urban Development (HUD)**, or the **Rural Development Office** of the U.S. Department of Agriculture. The latter agency includes grant programs for cities under 10,000 in population, for which Sterling is eligible. More information is available at [www.rurdev.usda.gov/ProgramsAndOpportunities.html](http://www.rurdev.usda.gov/ProgramsAndOpportunities.html).

The federal **Home Investment Partnership Program (HOME)** is administered by the Kansas Housing Resources Corporation in Topeka. This grant program is designed to assist with rehabilitation, rental housing, new construction, and home ownership targeted to low and moderate income families. More information is available at [www.kshousingcorp.org](http://www.kshousingcorp.org).

## Economic Development

A community has many reasons for promoting economic development, including an overriding interest in improving local job opportunities and broadening its tax base. Although economic development is not typically a responsibility of the Planning Commission, many planning decisions have a profound impact on the local economy. From housing options, to infrastructure upgrades, to downtown streetscaping – planning decisions affect quality of life, and a community's quality of life is fundamental to successful economic development.

Currently Sterling's economic development efforts are primarily the responsibility of the City Commission, with the help and coordination of the Sterling Area Chamber of Commerce and the Sterling Main Street organization. Coordination among these entities is essential, in order to utilize resources efficiently and promote the best interests of Sterling.

The **Sterling Area Chamber of Commerce** helps promote the growth of local business, working in partnership with the City and the corporate community to advocate for and expand business in the Sterling area. More information is available on their website at [www.sterlingkschamber.com](http://www.sterlingkschamber.com).

**Main Street Sterling** is a business-driven, culturally-minded, community-supportive, and action-oriented local nonprofit organization. More information on Main Street Sterling is available on their website at [www.sterlingks.org](http://www.sterlingks.org).

The National Trust for Historic Preservation established the National Main Street Center in 1980, and since then has successfully helped more than 2000 cities and towns across the country, including Sterling, to revitalize their downtowns. More information on the national program is available at [www.preservationnation.org/main-street/](http://www.preservationnation.org/main-street/).

In 2012, the Kansas Department of Commerce ended the Kansas Main Street program at the state level, and allowed it to transition to local control. Some of the 25 existing local Main Street organizations in Kansas are pursuing the possibility of creating a state Main Street organization, since a certified state organization is required in order for individual local groups to be qualified to join the national organization, which continues to thrive.

Main Street programs utilize a four-point approach, which recognizes that a community's ability to organize its people, market its assets, improve its downtown, and restructure its economy are all interrelated. Although the Main Street Program is no longer funded at the state level in Kansas, its strategies are still extremely effective. The continuing efforts of Main Street Sterling are vital to the community's ongoing economic success.

**Resource:** Information on economic development tools for Kansas communities is available from the League of Kansas Municipalities, in a 2013 publication called *Economic Development Tools for Kansas Municipalities*. See [www.lkm.org/publications/](http://www.lkm.org/publications/)

## Global Economic Trends & Sterling

Identifying economic opportunities for the future begins with an analysis of general trends that will affect Sterling and other Kansas communities. For example, world population growth is expected to increase more than 4 million people over the next 40 years. All these people must eat, and the Sterling area is blessed with abundant land and an extraordinary agricultural base.

There is a huge and increasing middle class in China and India. As the purchasing power of these groups grow, the result will be more product demand. Increased world demand will provide opportunity for local businesses to export their goods to the world marketplace.

With increased focus on exports, the logistics of getting goods to the market will become more important. Fortunately, Sterling is on the edge of the **Mid-Continent Corridor**. This corridor serves as a major freight thoroughfare from Mexico through Chicago and on to Canada. In addition, maritime shipping is available from the **Port of Catoosa, Oklahoma**, only 260 miles away. The Port is connected to Sterling through the local short line and main line rail service, thus facilitating exports from this area.

Energy demand is steadily increasing, and Kansas is known for its oil and gas capability. In addition, Kansas ranks third among states for wind energy potential. This is another future market that offers opportunity to Kansas communities.

Beyond national and international trends, the City must take care of its existing businesses. Economic developers commonly state that 80% of future jobs will come from the businesses that are already in place, so supporting existing local businesses should always be the primary economic development concern.

## Local Economic Development Preferences

When Sterling area residents were asked which types of economic development they felt would most benefit the Sterling area, respondents to the 2015 Community Questionnaire were most interested in light industry, retail, and service businesses.

Community Questionnaire – Economic Development						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
Heavy Industry	15	6%	1	4%	16	6%
Light Industry	73	32%	6	24%	79	31%
Retail	65	28%	7	28%	72	28%
Offices	20	9%	3	12%	23	9%
Service Businesses	44	19%	5	20%	49	19%
Tourism	14	6%	3	12%	17	7%
<b>Total Responses</b>	<b>231</b>	<b>100%</b>	<b>25</b>	<b>100%</b>	<b>256</b>	<b>100%</b>

## Tourism

Although tourism won minimal interest as an economic development option by survey respondents, that assumption may be worth reconsidering. Sterling is definitely not too small to attract tourists, and tourism dollars.

There is a segment of the traveling public that prefers **small town explorations** over traditional tourist destinations. They find their ports of call on the internet, on sites like <http://RealSmallTowns.com/>, and [www.LoveSmallTownAmerica.com](http://www.LoveSmallTownAmerica.com), or through magazine articles like Budget Travel Magazine's annual "Coolest Small Towns" competition, or Smithsonian magazine's annual "America's 20 Best Small Towns to Visit" articles.



Sterling also has the potential to develop a tourism segment based on the attraction of the **Quivira National Wildlife Refuge**, for birders and other wildlife watchers, hunters, and fisherfolk. Efforts to attract such visitors should be taken seriously, because the economic impact of these groups is extraordinary. According to a December 2013 report by the U.S. Fish & Wildlife Service, there were 47 million birders over the age of 15 in the nation in 2011, and 18 million of them traveled to engage in birding. Kansas had 476,000 birders. Nationally, in 2011, birders spent over \$14.8 billion on trip-related expenditures, as well as \$26 billion on equipment. (Yes, billions, not millions. Annually.)

- <https://griffingroups.com/file/view/50635/birding-in-the-united-states-a-demographic-and-economic-analysis>

According to the Kansas portion of the U.S. Fish & Wildlife Service's *2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 400,000 anglers from both inside and outside the state fished in Kansas in 2011, spending over \$98 billion in trip related expenditures, and over \$112 billion for equipment. There were also 283,000 hunters from both inside and outside the state who hunted in Kansas in 2011, spending almost \$150 billion in trip related expenditures, and over \$251 billion for equipment.

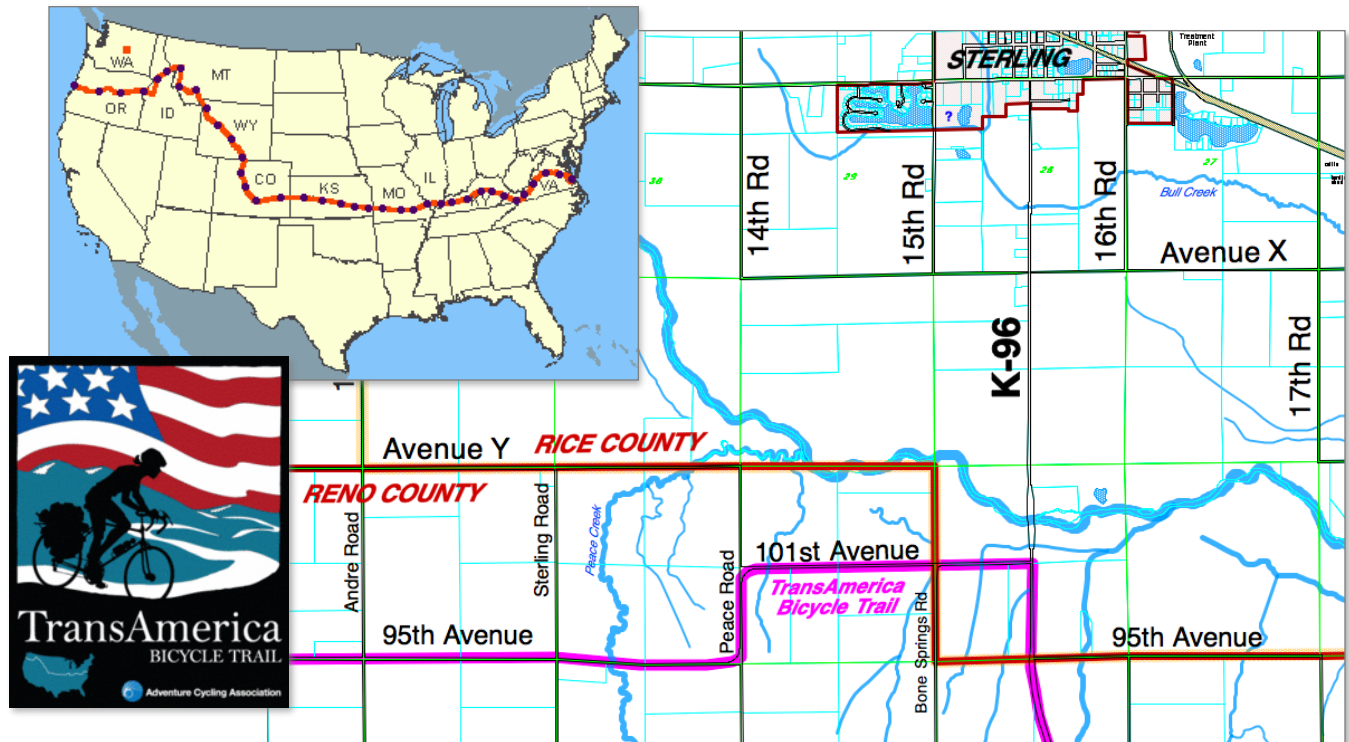
- [www.census.gov/prod/2013pubs/fhw11-ks.pdf](http://www.census.gov/prod/2013pubs/fhw11-ks.pdf)



Make a point to emphasize Sterling's nearby recreational assets on the City website. Provide website links to the local motel, to bed-and-breakfast inns, to the campground at Sterling Lake Park, and to other local attractions. Offer driving directions from Sterling to Quivira NWR, with maps of parking areas, visitor roads, fishing locations, and hiking and biking trails. Provide timely announcements of items of interest, from fishing and hunting seasons, to bird migration dates.

– Connect Sterling –  
Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035

Downtown Sterling is only 2½ miles from the cross-continent TransAmerica Bicycle Trail. This 4,250 mile bike route traverses ten states and 112 counties, from Yorktown, Virginia to Reedsport, Oregon. Originally developed as part of the American Bicentennial celebrations, the route was designed to include many historic sites, but to avoid major highways and big cities.



Information on various research examining the economic impact of bicycle tourism is available from [www.adventurecycling.org/routes-and-maps/us-bicycle-route-system/implement-a-us-bicycle-route/benefits-and-building-support/economic-impact/](http://www.adventurecycling.org/routes-and-maps/us-bicycle-route-system/implement-a-us-bicycle-route/benefits-and-building-support/economic-impact/). References include a 2012 graduate study out of Kansas State University, entitled *Bicycle Tourism and Rural Community Development: An Asset Based Approach*, which demonstrates how rural communities can build bicycle tourism by using existing assets to meet the needs of bicycle travelers. See [www.adventurecycling.org/default/assets/File/USBR/Research/SallyBroadaway2012.pdf](http://www.adventurecycling.org/default/assets/File/USBR/Research/SallyBroadaway2012.pdf).

**Biking Across Kansas** is an annual eight-day bicycle tour across the state, so popular that it has had to limit participation to just 800 bicyclists each year. Since 1975, this event has brought tourists from all over the country to small towns in rural Kansas. The route changes each year, in order to explore more of the state, but when it comes by Sterling, as it will in June 2015, the City should gear up to welcome participants. Information is available at [www.bak.org](http://www.bak.org).

Sterling has quintessential small town ambience, local celebrations, a revitalized downtown, Sterling Lake Park, Sterling College, proximity to Quivira National Wildlife Refuge, proximity to the TransAmerica Bicycle Trail, and easy highway access. These assets give the community the potential to develop a small but significant tourism segment in its local economy. For some local businesses, tourist dollars could make the difference between "barely making it" and "doing well".

### Property Tax Exemptions

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they think the City should encourage economic growth by providing property tax exemptions to new or expanding businesses.

Community Questionnaire – Tax Exemptions to New or Expanding Businesses?				
	Yes		No	
In City of Sterling	78	73%	29	27%
Outside City / In Planning Area	7	88%	1	13%
<b>Total Responses</b>	<b>85</b>	<b>74%</b>	<b>30</b>	<b>26%</b>

**Property Tax Funding for Recruiting Industry & Manufacturing** Under K.S.A. 12-1617(h), cities are authorized to annually levy a property tax "...for the purpose of creating a fund to be used in securing industries or manufacturing institutions for such city or near its environs...". The proposed levy must be initially approved by the voters at a referendum, may not exceed one mill, and is not subject to the property tax lid. Monies may also be expended from the general fund; however, they would be subject to the tax lid. Because of the highly competitive nature of economic development programs, such funding may be necessary for a successful effort. The City of Sterling does not currently utilize this method of funding.

**Industrial Revenue Bonds (IRBs)** These bonds are a potentially useful tool to encourage economic development and job creation. IRBs are issued by a government, but at the request of and on behalf of a private business, in order to support a specific project, such as the construction or expansion of a new manufacturing plant. Since the bonds are issued by a government entity, they are tax exempt, and therefore the private business receives a lower interest rate on funds for startup. The business is responsible for repaying the IRB; the sponsoring government holds title to the collateral until the bonds are paid in full.

There are federal limits on the amount of IRBs that can be issued, and the uses to which the funds can be put.

- Small Issue IRBs are restricted to the construction, expansion, or renovation of manufacturing facilities. They are generally limited to \$1 million, but under certain circumstances that amount can go up to \$10 million.
- Exempt Facility IRBs have no size limits, but they can be used only for specific types of projects, such as water and sewer facilities, electricity and natural gas facilities, and certain types of rental housing.

Sterling has only issued industrial revenue bonds (IRBs) once before, in 2002.

Consider adopting a policy statement on the use of tax exemption and IRBs in Sterling, to provide guidelines for potential developers.



## **State & County Economic Development Programs**

In Kansas, economic development initiatives supported by statutory language may create state programs, or simply provide local enabling legislation. In recent years, many such state programs have been unfunded, or have endured significant funding cuts. Information on state economic development programs, including PRIDE, SCIP and CDBG, is available on the website of the Kansas Department of Commerce, under the Communities tab. [www.kansascommerce.com](http://www.kansascommerce.com)

**Kansas PRIDE Program:** This program is a partnership of Kansas State University Research and Extension, the Kansas Department of Commerce (KDOC), and Kansas PRIDE, Inc. The program provides technical assistance and training opportunities, and addresses such areas as planning, community services, and community enrichment. PRIDE is a community-initiated effort that helps local leaders prepare for and manage change through a hands-on approach to community self-improvement. [www.kansasprideprogram.ksu.edu](http://www.kansasprideprogram.ksu.edu)

**Small Communities Improvement Program (SCIP):** The Kansas Department of Commerce offers grants of up to \$125,000 to small communities that are willing to put sweat equity into local improvement projects. The community provides local labor and equipment, and SCIP provides technical assistance and financial support. Eligible projects include city-sponsored farmers markets, parks and playgrounds, public restrooms, and walking trails, among others. Funding for this program is currently in question, but may be supported again during the course of the Planning Period. [www.kansascommerce.com/index.aspx?NID=125](http://www.kansascommerce.com/index.aspx?NID=125)

**Community Development Block Grant Program (CDBG):** This program distributes federal funds to Kansas cities and counties via the Kansas Department of Commerce. CDBG funding is available for projects in six categories, including commercial rehabilitation, economic development, and neighborhood stabilization. To receive funds, a project must meet at least one of three federally mandated criteria:

- Benefit low- and moderate-income individuals
- Remove or prevent slum or blight conditions
- Eliminate an urgent need created by a disaster, when local funds are unavailable

More information on the CDBG Program in Kansas is available at [www.kansascommerce.com/index.aspx?NID=126](http://www.kansascommerce.com/index.aspx?NID=126)

One of the categories in the CDBG Program is the **Kansas Small Towns Environment Program (KAN STEP)**. This program helps communities address water, sewer and public building needs. KAN STEP offers annual competitive grants (maximum amount \$300,000), and requires the use of volunteers to match CDBG funds. To achieve funding under this program, communities must demonstrate that they are ready to take action, have the volunteer resources to solve the problem, and can document a potential 40 percent cost savings from the proposed project. More information on the KAN STEP Program is available at [www.kansascommerce.com/index.aspx?NID=130](http://www.kansascommerce.com/index.aspx?NID=130)



**Kansas Development Finance Authority (KDFA):** The KDFA implements various low-interest tax exempt bond programs for municipalities through state revolving loan funds. KDFA works in partnership with the Kansas Department of Health and Environment (KDHE) and the Kansas Department of Transportation (KDOT) to offer loans through four programs.

- *Kansas Clean Water Supply Revolving Loan Fund Program* for municipal and rural waste water systems (with KDHE)
- *Public Water Supply Revolving Loan Fund Program* which targets public drinking water systems (with KDHE)
- *Transportation Revolving Loan Fund* to provide financing for local road and bridge infrastructure improvements (with KDOT)
- *Communication's Revolving Loan Fund Program* to upgrade communications equipment. (with KDOT)

KDFA also works in conjunction with the Kansas Department of Commerce to issue bonds which provides funds for job training, and for major project investments for companies which are locating or expanding their business in Kansas.

- *Investments in Major Projects and Comprehensive Training Program (IMPACT)*

**Rural Development Kansas Programs:** The United States Department of Agriculture (USDA) offers a number of programs through its Rural Development offices in each state, offering loans, grants and loan guarantees to support essential services such as housing, economic development, health care, first responder services and equipment, and water, electric and communications infrastructure. They also promote economic development by supporting loans to businesses through banks, credit unions, and community-managed lending pools. More information on Rural Development Programs in Kansas is available at [www.rd.usda.gov/ks](http://www.rd.usda.gov/ks).

**Rice County Neighborhood Revitalization Program (NRP):** This NRP is an incentive program which allows a graduated property tax rebate for 10 years, in order to encourage improvements such as new construction, additions, and major rehabilitations within Rice County. All properties in the Sterling Planning Area are eligible, except for those which are already receiving NRP benefits under the City of Sterling's Neighborhood Revitalization Program. Maintenance activities do not generally qualify, unless they increase the appraised value of a building by at least 10%. For more information, see: <http://ricecounty.us/features/neighborhood-revitalization-program/>.

## **Regional Cooperation**

By their nature, some factors impacting a community's economic development extend beyond planning area boundaries into a regional context. In particular, communication systems and transportation systems must be considered from a larger perspective. Many environmental factors are also regional issues – including air quality, water quantity and quality (both surface and underground), and drainage and flooding.

Economic development opportunities on a regional level are best achieved through cooperation, with other governmental entities, with regional agencies, or with private organizations. Such joint undertakings can reduce the cost of providing a facility or service singly, improve its quality, and often make a project or program possible that is not economically feasible by a single city. Regional cooperation is also sometimes required by various state and federal grant programs in order to be eligible, or to qualify for added financial incentives.

In order to effectively manage regional issues, smaller governmental units often cooperate across political boundaries by utilizing **intergovernmental agreements**. In addition to many such agreements between groups of cities and counties, numerous state and federal agencies operate by regional divisions.

The **Interlocal Cooperation Act**, K.S.A. 12-901 et seq., is the principal statute which authorizes cooperation between public agencies and private groups for specific public improvements and services. Such interlocal agreements require the approval of the State Attorney General, and must be filed with the Secretary of State and recorded with the County Register of Deeds.

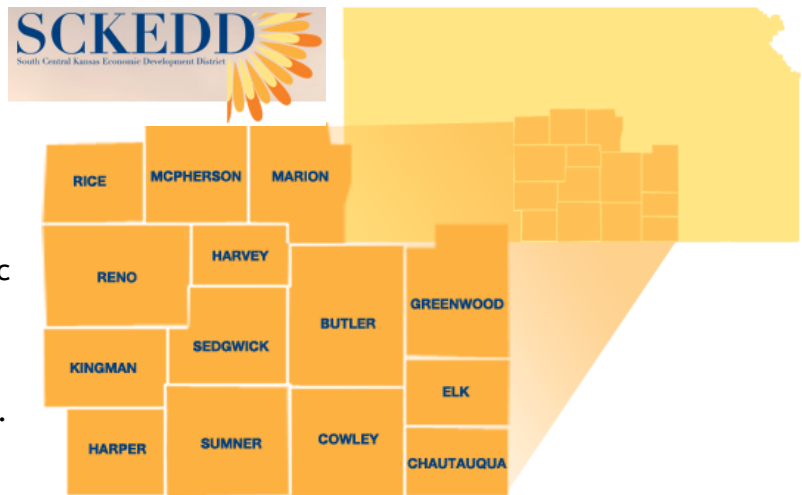
Many regional organizations which are created by local governments are financed and appointed by, or served on by members of the County Board of Commissioners. Sterling is represented in many regional organizations indirectly through the Rice County Board of Commissioners.

## Regional Organizations

**Cooperative Extension Service:** The Hutchinson regional office of the Kansas State University Cooperative Extension Service, in cooperation with their local Rice County office in Lyons, serves to provide a wide variety of information on development, but does not write applications or provide grant monies. Many training programs have been conducted on the "how to" of community development and on leadership for officials and civic leaders. The Extension Service is active statewide in implementing the PRIDE Program for cities. More information is available on the Extension website at [www.rice.k-state.edu](http://www.rice.k-state.edu).

### South Central Kansas Economic Development District (SCKEDD):

This is one of the more successful groups in this period of budget constraints, and could potentially be of assistance to Sterling. SCKEDD carries out a wide variety of economic development efforts, and evaluates local projects for their potential success. They also conduct a multi-county weatherization program. More information is available on the SCKEDD website at [www.sckedd.org](http://www.sckedd.org).



**K-96 Corridor Development Association, Inc.** This nonprofit membership-based organization, which promotes economic development along Highway K-96, includes both government partners and the private sector. Although the organization was founded by members in Sedgwick and Reno Counties, and is currently focused on the area from Maize to South Hutchinson, it may be open to expanding its reach into Rice County. The mission of the *K96 Corridor Development Association* is to assist its member communities with orderly and efficient development, and to market the K-96 corridor as a premier location for both business and residential development. Information is available at [www.k96corridor.com](http://www.k96corridor.com).

## Transportation

Planning decisions in Sterling will be profoundly affected by transportation issues during the course of this Planning Period, primarily due to the impending construction of the new K-96 bypass and interchange. Improvements to local roads and alleys, improvements and expansion of the sidewalk system, and the development of a bicycle network throughout the Sterling area have also been identified as important community goals during this planning process.

### **Streets & Alleys**

Maintenance of roads and streets in the Sterling Planning Area is the responsibility of various governmental entities, including the City of Sterling, the state of Kansas through its Department of Transportation (KDOT), Rice County, and Sterling Township. Typically, though not always, the government responsible for each road or segment of road maintains those rights-of-way which are under its jurisdiction.

In recent years, financial constraints forced the City to focus resources on maintaining those city streets which carry the most traffic. However, maintenance on many side streets and alleys has been deferred as long as possible, and they are now in need of attention. Additional funding will also have to be allocated for maintenance of Broadway, since once the K-96 realignment is completed, Broadway will no longer be part of a State highway, and responsibility for its maintenance will revert from KDOT to the City.

Studies have shown that adequately paved roads cost less to maintain than properly maintained unpaved roads. There are currently almost 7-1/2 miles of unpaved residential streets in Sterling. Paving these streets is desirable, however it will be a major undertaking, and will require a long-term plan for both logistics and financing.

### **Street Financing Policy**

The City should develop a street financing policy for renovation of existing streets, which would address how expenses will be shared between the City and property owners. For new subdivisions, a policy could also define construction standards for new streets, and address how expenses will be shared between the City and the developer.

Street right-of-way and layout standards for new development are addressed in the City's Subdivision Regulations. Development of new streets requires guarantees and/or a Developer's Agreement to ensure construction of subdivision improvements.

### Sidewalk System

Sterling is a very walkable community, but maintaining that desirable status requires a well-maintained sidewalk system that connects neighborhoods with destinations, including schools, parks, and retail areas.

New sidewalks are often installed in conjunction with street paving or construction projects, but this method alone is not sufficient to sustain a sidewalk system in good repair. Damaged sidewalks can be a trip hazard, and therefore a liability risk for the City, so while it is important to expand the system, it is even more important to properly maintain existing sidewalks.

It is much easier to budget for a predictable annual sidewalk maintenance fund than for major sidewalk infrastructure replacement. Sterling has an ongoing **Sidewalk Maintenance Program** to maintain or replace deteriorated sidewalks which present a danger to the public. The adjacent property owner pays for the concrete for sidewalk replacement, and the City crews will complete the demolition of the old sidewalk, and install new sidewalk at no cost for labor to the resident.

### Local Pedestrian & Bicycling Practices

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if anyone in their family walks or bikes to school.

Community Questionnaire – Walk or Bike to School?						
	Regularly (≥4 times/week)		Occasionally		Never	
<b>In City of Sterling</b>	11	15%	20	27%	44	59%
<b>Outside City / In Planning Area</b>	0	0%	0	0%	7	100%
<b>Total Responses</b>	<b>11</b>	<b>13%</b>	<b>20</b>	<b>24%</b>	<b>51</b>	<b>62%</b>

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if anyone in their family walks or bikes to work.

Community Questionnaire – Walk or Bike to Work?						
	Regularly (≥4 times/week)		Occasionally		Never	
<b>In City of Sterling</b>	15	18%	23	28%	44	54%
<b>Outside City / In Planning Area</b>	0	0%	3	33%	6	67%
<b>Total Responses</b>	<b>15</b>	<b>16%</b>	<b>26</b>	<b>29%</b>	<b>50</b>	<b>55%</b>

The 15% of people in the City who regularly walk or bike to school, and the 18% who regularly walk or bike to work, constitute high percentages by modern American car-dependent standards. However, with Sterling's high baseline walkability, and with proposed improvements to its bikeability, these percentages could easily reach new heights.

### Bicycle / Pedestrian Pathways – Design Issues

Pathways for pedestrians and bicyclists are constructed on public land, usually in street rights-of-way, sometimes along drainage routes. Pathways can be designed as *bike paths* (built within a right-of-way, but separated from the road itself), or as dedicated *bike lanes* on a road or its shoulder (defined with pavement markings), or they may simply be *bike routes* (designated with signs on existing roads).



Bike Path



Combined Bicycle/Pedestrian Path



Bike Lane



Bike Route Sign



Share the Road Bike Route Sign

**Bicycle Racks** Be sure to select a rack design that meets functional requirements for proper bicycle support and lockability, is ADA compliant, and is built for low maintenance. The simplest bicycle rack design which meets these criteria is the inverted "U" type, with a crossbar for ADA vertical-element compliance, but there are endless variations on the theme. Place racks so they are convenient to destination entrances, clear of pedestrian traffic patterns, and highly visible for security.



Visit the website [www.bicyclinginfo.org](http://www.bicyclinginfo.org) to find more about criteria for bicycle facilities, as well as educational programs for both drivers and bicyclists.

## Transportation Programs

**Safe Routes to School (SRTS)** is a federal program intended to make it safer for more children to walk and bike to school, thereby reducing childhood obesity, as well as the traffic accidents, wasted fuel, and air pollution that result from traffic congestion near schools. More information on Safe Routes to School is available at [www.saferoutesinfo.org](http://www.saferoutesinfo.org), and on the KDOT website at [www.ksdot.org/burTrafficEng/sztoolbox/default.asp](http://www.ksdot.org/burTrafficEng/sztoolbox/default.asp).

A city or a nonprofit organization can apply for SRTS 100% funding to plan, design, and build projects that improve the ability of students to walk and bike to school. Eligible projects include sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bike parking, and traffic diversion improvements within about two miles of schools. SRTS also funds activities that encourage walking and bicycling to school, including public awareness and outreach campaigns, traffic education and enforcement near schools, and student training programs on bicycle and pedestrian safety.

**Walking School Bus** If there are children in Sterling who are not walking to school, consider implementing a Walking School Bus program. Parents often cite safety issues as one of the main reasons they prefer not to let their children walk to school, so a walking school bus arranges for children to walk in groups, with adults along to supervise. Think of it as a carpool, highly flexible in size, only without the car. The program can be as informal as a couple of families taking turns walking their kids to school – or as structured as a defined route with meeting points, a timetable, and a schedule of trained volunteers. It is this flexibility that makes a Walking School Bus program so adaptable to the needs of communities of all sizes. For more information, go to the website at [www.walkingschoolbus.org](http://www.walkingschoolbus.org).

**School Zone Program** The Kansas Department of Transportation (KDOT) funds a School Zone Program that can help towns with a population of fewer than 20,000 people improve their school zones with pavement striping, school zone signs, and reduced speed assemblies. For more information, see [www.ksdot.org/burTrafficEng/sztoolbox/School\\_Zone\\_Program.asp](http://www.ksdot.org/burTrafficEng/sztoolbox/School_Zone_Program.asp).

**Transportation Alternatives Program (TAP)** This program is the successor to previous Transportation Enhancements, Safe Routes to School, and Recreational Trails programs. It is the most common source of funding for the development of bicycle and pedestrian paths. TAP in Kansas is administered by the Kansas Department of Transportation. Proposed projects have to be submitted by a governing entity willing to fund a local match of at least 20% of the eligible project cost, and usually 100% of the project design cost.

For more information on TAP, see

[http://trade.railstotrails.org/ta\\_basics](http://trade.railstotrails.org/ta_basics)  
[www.fhwa.dot.gov/map21/guidance/guidetap.cfm](http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm)  
[www.ksdot.org/burtransplan/TransEnhance.asp](http://www.ksdot.org/burtransplan/TransEnhance.asp)

Sterling has participated in both the Safe Routes to School and the Walking School Bus programs.



## Quality of Life

The Community Questionnaire included several questions which addressed issues related to quality of life, including questions on contributions to quality of life, protecting the College neighborhood, child care availability, programs for seniors, and downtown improvement. Those community perceptions are included here.

### Contributions to Quality of Life

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked which of the following contributes to their quality of life.

<b>Community Questionnaire – Contributions to Quality of Life</b>						
	<b>In City of Sterling</b>		<b>Outside City / In Planning Area</b>		<b>Total Responses</b>	
<b>Community celebrations</b>	87	17%	5	19%	<b>92</b>	<b>17%</b>
<b>Farmers Markets / Flea Markets</b>	49	10%	2	7%	<b>51</b>	<b>10%</b>
<b>Walkable neighborhoods</b>	97	19%	4	15%	<b>101</b>	<b>19%</b>
<b>Vital &amp; attractive Downtown</b>	69	14%	4	15%	<b>73</b>	<b>14%</b>
<b>Opportunities to pursue a healthy &amp; fit lifestyle</b>	67	13%	3	11%	<b>70</b>	<b>13%</b>
<b>Participation in local groups / activities (church, Rotary, Seniors Group, etc.)</b>	67	13%	6	22%	<b>73</b>	<b>14%</b>
<b>Educational / cultural opportunities</b>	63	13%	3	11%	<b>66</b>	<b>13%</b>
<b>Total Responses</b>	<b>499</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>526</b>	<b>100%</b>

### Sterling College Neighborhood

Sterling College was established in 1887, and since its founding has made significant contributions to both the cultural and economic vitality of the City of Sterling. The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if the City should take steps to plan the area around the College to protect it from types of development which might compromise the quality of the campus neighborhood.

<b>Community Questionnaire – Protect Sterling College Neighborhood?</b>				
	<b>Yes</b>		<b>No</b>	
<b>In City of Sterling</b>	85	79%	22	21%
<b>Outside City / In Planning Area</b>	9	90%	1	10%
<b>Total Responses</b>	<b>94</b>	<b>80%</b>	<b>23</b>	<b>20%</b>

### Child Care

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they think there is sufficient quality child care available in Sterling to meet local needs, including care for infants and toddlers.

Community Questionnaire – Sufficient Child Care?				
	Yes		No	
In City of Sterling	9	10%	79	90%
Outside City / In Planning Area	1	13%	7	88%
<i>Total Responses</i>	<i>10</i>	<i>10%</i>	<i>86</i>	<i>90%</i>

### Senior Programs

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they think there are sufficient programs for senior citizens in Sterling.

Community Questionnaire – Sufficient Programs for Seniors?				
	Yes		No	
In City of Sterling	55	62%	34	38%
Outside City / In Planning Area	3	33%	6	67%
<i>Total Responses</i>	<i>58</i>	<i>59%</i>	<i>40</i>	<i>41%</i>

### Downtown

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked about their general experience in finding a parking space in the Downtown Business District of Sterling.

Community Questionnaire – Parking Downtown						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
Generally easy to find	66	55%	3	30%	<b>69</b>	<b>53%</b>
Occasionally a problem	44	37%	6	60%	<b>50</b>	<b>39%</b>
Difficult to find a space	9	8%	1	10%	<b>10</b>	<b>8%</b>
<i>Total Responses</i>	<i>119</i>	<i>100%</i>	<i>10</i>	<i>100%</i>	<i>129</i>	<i>100%</i>

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked to indicate improvements to the physical environment needed in the Downtown Business District of Sterling.

<b>Community Questionnaire – Improvements Needed Downtown</b>						
	<b>In City of Sterling</b>		<b>Outside City / In Planning Area</b>		<b>Total Responses</b>	
<b>Area behind stores</b>	45	30%	4	22%	<b>49</b>	<b>29%</b>
<b>Restrooms</b>	31	20%	3	17%	<b>34</b>	<b>20%</b>
<b>Business signs</b>	16	11%	2	11%	<b>18</b>	<b>11%</b>
<b>General appearance of businesses</b>	12	8%	2	11%	<b>14</b>	<b>8%</b>
<b>Ease of access</b>	12	8%	2	11%	<b>14</b>	<b>8%</b>
<b>Handicap access</b>	12	8%	1	6%	<b>13</b>	<b>8%</b>
<b>Cleanliness</b>	5	3%	4	22%	<b>9</b>	<b>5%</b>
<b>Lighting</b>	8	5%	0	0%	<b>8</b>	<b>5%</b>
<b>Area in front of stores</b>	6	4%	0	0%	<b>6</b>	<b>4%</b>
<b>General attractiveness of area</b>	5	3%	0	0%	<b>5</b>	<b>3%</b>
<b>Total Responses</b>	<b>152</b>	<b>100%</b>	<b>18</b>	<b>100%</b>	<b>170</b>	<b>100%</b>

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they think the footprint of the downtown area should be expanded to accommodate growth in the City.

<b>Community Questionnaire – Expand Downtown's Area?</b>				
	<b>Yes</b>		<b>No</b>	
<b>In City of Sterling</b>	68	68%	32	32%
<b>Outside City / In Planning Area</b>	4	50%	4	50%
<b>Total Responses</b>	<b>72</b>	<b>67%</b>	<b>36</b>	<b>33%</b>

These Questionnaire results on community attitudes towards quality of life issues provide context on which planning and funding decisions for Sterling's future may be based.

## CHAPTER 13. Regulatory Tools

A number of regulatory tools can be utilized to implement a community's planning goals. The Planning Commission can be directly involved with the development and administration of Zoning and Subdivision Regulations, recommending other local codes, and making recommendations on annexation decisions.

**Zoning Regulations** protect property values, and regulate the intensity of development to avoid congestion and to relate it to the availability of necessary public and private facilities and utilities. Zoning seeks to locate land uses in compatible arrangements of residential, commercial and industrial uses so that they avoid conflicts with each other. Standards are established for the setbacks in yards, and for the maximum height and the extent of lot coverage for structures which affects their degree of open space.

**Site Plan Approval** State statutes allow for Site Plan Approval as part of a community's Zoning Regulations. A Site Plan is a detailed drawing that shows how a parcel of land will be developed. Site Plan Review is the process of reviewing site plans to ensure that the proposed land use meets the design standards provided in the regulations. Site Plan Approval is typically required for all new developments, except for single-family dwellings and duplexes which are not in a courtyard setting.

**Subdivision Regulations** specify the standards and conditions under which a tract of land can be subdivided. They ensure that a new development will have lots and streets designed to meet local standards, and will provide adequately for necessary utilities and public improvements. Subdivision Regulations may also stipulate the requirements for street lighting, signs, sidewalks, sewage disposal, and water supply systems, and may encourage the dedication or acquisition of land for schools, parks, and other community facilities within the new subdivision.

**Extraterritorial Jurisdiction** Kansas statutes allow a city to exercise authority for a defined distance beyond its boundaries, through zoning and subdivision regulations, unless a county assumes the responsibility. The city's extraterritorial jurisdiction is the area of land beyond the city limits, in which such authority is exercised.

**Construction & Environmental Codes** Various codes provide standards for the quality of construction, and can be used to remedy substandard housing as well as sanitary and nuisance conditions. Codes are generally administered and enforced by trained staff specifically assigned those duties.

**Annexation** is the process by which a city expands its boundaries, in order to manage its physical growth in a sensible, predictable, and fiscally responsible manner. Annexation may be used to provide utilities and services to existing or new development, and to provide room for the city's future growth and development. To ensure tax support from areas to which the City provides municipal services outside its boundaries, it is very important to initially require a waiver of annexation as a condition of providing utility services; this makes the property subject to annexation anytime deemed desirable by the City.

## Zoning Regulations

City, county, or joint city-county zoning regulations are the primary methods for regulating the use of land and structures in Kansas. Such regulations provide the legal method to divide an area into various types of zoning districts containing compatible residential, commercial and industrial land uses. Regulations establish residential densities, and also specify the maximum height and minimum building setback lines for structures, which affect the degree of open space on the zoning lot. Provisions are included to ensure an adequate number of off-street parking spaces, to control the size and location of signs, and to regulate accessory uses and home occupations.

Zoning regulations guide the overall pattern of land use development for the future, and help to prevent undue overcrowding and depreciation of property values. Zoning can help maintain development at a pace which can be sustained by the community's infrastructure of public and private facilities and utilities. Zoning seeks to *prevent* conflicts between adjacent land uses, and is the major tool for resolving conflicts which do occur. The goal of zoning should be to ensure high standards for development without unduly restricting private initiative or causing excessive development cost.

Zoning regulations in Kansas are **not retroactive** and, therefore, they are not effective in clearing up past mistakes – except over very long periods of time, by the gradual demise of lawful, nonconforming uses, i.e., "grandfathered-in" land uses. This is why it is so important to adopt and enforce zoning *before* problems occur.

**Legislative Capacity and Quasi-judicial Actions:** When a city adopts new zoning regulations or makes revisions to existing regulations, it is acting in a "**legislative capacity**". Since a court case in 1978, cities in Kansas have been required to act in a "**quasi-judicial**" manner when holding a hearing and deliberating on a zoning request for a specific parcel of land.

Because it must act in a quasi-judicial manner, the **Planning Commission is required to make its recommendations based on findings of evidence and an issue oriented analysis, in order to prevent arbitrary and capricious zoning decisions. The Governing Body is held to the same standards.** If the Governing Body chooses to differ with or amend the recommendation of the Planning Commission, it must support its decision by determining its own analysis and findings, and either override the Planning Commission's recommendation by a two-thirds majority vote, or by a simple majority vote return the decision to the Planning Commission to be reconsidered.

**Reasonableness:** The Governing Body must establish the factors on which zoning decisions are determined. According to K.S.A. 12-757(a), the governing body “...shall establish in its zoning regulations the matters to be considered when approving or disapproving a zoning request...”. The Kansas Supreme Court has also determined that an analysis of such factors is appropriate in the review of **special uses** which, if approved within a zoning district, may be subject to “reasonable” conditions.

Court tests of zoning cases are based upon the “reasonableness” of the decision. The importance of the comprehensive plan to zoning is noted in the state statutes by the fact that any amendment (for instance, to change a zoning district classification or boundary), “...if in accordance with the land use plan or the land use element of a comprehensive plan, shall be presumed to be **reasonable**.”

Zoning Regulations may be extended extraterritorially.

### **Board of Zoning Appeals**

**Any city which enacts zoning regulations must create a board of zoning appeals.** Under K.S.A. 12-759, cities may establish boards of three to seven members who serve staggered three or four-year terms. When the city exercises zoning in the city only, all members must reside in the city limits. For extraterritorial zoning, at least one board member must reside outside the city.

The recodified Kansas statutes, effective January 1, 1992, also permit a planning commission to concurrently be designated as a board of zoning appeals, and Sterling has chosen to do so. Any appeal from a decision of the board itself is made directly to District Court, and must be made within 30 days.

Such boards decide appeals from determinations of the zoning administrator, based on evidence at a public hearing. They may also grant variances and exceptions to the zoning regulations. If approved, **variances** permit modifications in such standards as the maximum height of structures, building setback lines and minimum lot sizes. **Exceptions** allow uses in zoning districts which are not otherwise permitted outright, provided that such uses are specifically listed in the regulations. Exceptions in the new City Zoning Regulations are referred to as **conditional uses**, because conditions are usually attached to their being granted.

## Site Plan Approval

K.S.A. 12-755(a)(4) provides zoning authority to allow Site Plan Approval provisions to be included in Zoning Regulations. The latter may "(4) control the aesthetics of redevelopment or new development." In Sterling's new Zoning Regulations, it is proposed that Site Plan Approval be applicable to all new development except single-family dwellings / duplexes which are not contained in a courtyard setting, and to intensive alterations of existing sites and structures.

Site Plan Approval can help establish a minimum level of aesthetic quality for development in Sterling, to meet planning goals, express the community's identity, preserve a sense of place, enhance the attractiveness of businesses and other land uses, and beautify the streetscape. Plans for a proposed project are reviewed from the perspective of how the exterior of the building and the design of its site visually impact the community, as well as how it accommodates vehicle and pedestrian traffic, parking, utilities, drainage, trash services, emergency vehicle access, and other features.

Aesthetic standards utilized during the Site Plan Review process may be adopted in the form of written **Design Criteria**. They can include both streetscape criteria which address improvements in the public right of way, and other criteria which address design elements that may be used on private property.

Design Criteria are **not** intended to impose inflexible rules of style, size, material, or color on private and public spaces. Rather, design choices must be based on sound fundamental principles of successful planning, and then adapted to the specific needs of Sterling. Application of Design Criteria, on both existing architectural elements and on new construction, acts over time to create a collective visual impression that expresses the character of the community.

It is anticipated that the Sterling Planning Commission will review and decide on all site plans submitted for approval under the new City Zoning Regulations.



## Subdivision Regulations

Subdivision Regulations are another important method of controlling the development of land. They are utilized to set standards for the arrangement and design of streets, utility easements, lots, block sizes, open space, installation of public improvements, and proper drainage. Such regulations also provide a framework to establish a working arrangement between the City and developers – to accept dedications of land within the development for future public facilities, to guarantee to the City the installation of necessary public improvements, and to allow for the use of impact fees to mitigate the City's costs of providing public utilities and services for the new development and other nearby areas benefited.

By allowing cities to have control over their fringe development areas, this arrangement recognizes that cities are the main providers of urban utilities, and logically should be able to administer their initial design and construction. It also increases a city's ability to ensure that new streets tie properly into the existing street system.

Often interim standards on water supply, sewage disposal, and future easements can be applied in a rural area until such time as urbanization is a reality. All developers in and outside a city can then be accorded the same competitive advantage.

As required by K.S.A. 12-749(a), cities must first adopt a comprehensive plan before proceeding to adopt subdivision regulations within or outside their city limits. Subdivision Regulations may be extended extraterritorially.

Complying with the requirements of subdivision regulations can be a complex procedure. A developer must not only meet the City standards, but also the most restrictive standards of other applicable regulations and codes, both in the City and when extraterritorially outside it, which may override a lesser standard in the Subdivision Regulations. The County Sanitary Code is very important in developing outside the City.

Adopted in 1980, Sterling's existing Subdivision Regulations are seriously outdated, and need to be replaced. Despite the fact that they include a three-mile extraterritorial jurisdiction, very few of the standards and procedures in the current Subdivision Regulations apply to the rural area.

## Extraterritorial Jurisdiction

Within certain specific conditions, Kansas statutes make it possible for a city to extend zoning, subdivision, and/or floodplain regulatory control beyond its boundaries, unless a county assumes the responsibility. In general, a city's extraterritorial jurisdiction may extend for a maximum of three miles outside the city limits, but not more than one-half the distance to another city, nor into another county.

**Agricultural Exemption:** As an exemption for agricultural uses and related agricultural structures, cities are not authorized to adopt regulations outside the city which apply to or affect *"...any land in excess of three acres under one ownership which is used only for agricultural purposes"*. This exception does *not* apply to floodplain regulations in areas designated as floodplain.

**Extraterritorial Zoning Regulations** According to K.S.A. 12-715b, a city considering adoption of extraterritorial zoning must have a planning commission with two members who reside outside the city but within the proposed extraterritorial zoning area, or the city must have established a joint, metropolitan or regional planning commission in cooperation with the county. The land proposed for extraterritorial zoning has to have been included in a comprehensive plan which was recommended by one of those two planning commissions, and which was then approved by either the city governing body or the board of county commissioners.

In addition, the county must not have zoning regulations in effect for the land proposed for city extraterritorial zoning, or the land must be specifically excluded from county zoning regulations.

The city must notify the board of county commissioners of its intention to adopt extraterritorial zoning regulations, in writing, 60 days before initiating such regulations by ordinance.

The possibility of extending extraterritorial zoning to the area around the proposed K-96 interchange is one reason why this current planning process was initiated, and why approval of this Comprehensive Plan is so important.

**Extraterritorial Subdivision Regulations** According to K.S.A. 12-749, a city planning commission may apply subdivision regulations to land outside of but within three miles of the city limits, provided such land is in the same county, and does not extend more than half the distance toward another city which has adopted subdivision regulations. A county planning commission may establish subdivision regulations for all or for parts of the unincorporated areas of the county.

If both a city and county want jurisdiction in the same area, a joint city-county subdivision committee composed of planning commission members from both entities must be formed according to K.S.A. 12-750(a), to adopt and administer such regulations as may be mutually agreed upon. This is considered to be an extremely cumbersome method of subdivision regulation, and is rarely used in Kansas.

## **History of Extraterritorial Jurisdiction in Sterling**

The City Planning Commission was established in 1972. Some time afterward Zoning Regulations were adopted by the City; information is not available to ascertain whether they included an extraterritorial jurisdiction.

On September 20, 1982, updated **Zoning Regulations** were adopted by the City of Sterling. Despite the fact that the 1980 Comprehensive Plan for the City recommended a one mile extraterritorial zoning jurisdiction, and the fact that the 2002 Comprehensive Plan for the County stated that Sterling had extraterritorial zoning and subdivision jurisdiction, the 1982 Zoning Regulations did not contain such a jurisdiction.

The first Sterling **Subdivision Regulations** did include a three mile extraterritorial jurisdiction. Those regulations were adopted in July 1980, and were still in effect as of May 2015. However, that extraterritorial jurisdiction was overlaid in about 2002 when Rice County adopted county-wide subdivision regulations. It was probably assumed at the time that the subdivision jurisdiction automatically reverted to the County, as did the zoning jurisdiction. However, no amendment has been made to delete the City's extraterritorial subdivision jurisdiction from the current 1980 Subdivision Regulations. Therefore it would appear that overlapping city and county jurisdictions still remain in effect in the area.

**Joint Subdivision Regulations:** The problem of overlapping jurisdictions could in theory be resolved by the procedure described in K.S.A. 12-750(a), which allows creation of a joint committee composed of three members of the county planning commission and three members of the city planning commission, each appointed by their commission chairperson, plus a seventh member who is selected by the other six members. This committee could then prepare and adopt a set of joint subdivision regulations for an agreed-upon jurisdiction. However, this procedure is very cumbersome for both parties, and is rarely implemented.

**Recommendation:** To implement this Comprehensive Plan, it is recommended that new Zoning and Subdivision Regulations be adopted at this time for the City only. They should include the format and proposed wording for an extraterritorial jurisdiction, to be adopted when and if the opportunity arises. Resolution of this situation is especially important in view of the pending construction of the new K-96 interchange to the north of the City.

To provide an input from cities for the maximum extraterritorial area allowed by statutes, the current County Zoning Regulations include provision for notification and a 30 day time period for an official review and recommendation. The latter would be made in the so-called "area of influence" for amendments, i.e., rezoning cases, and Conditional Use Permit requests. Such recommendations in the case of Sterling would be made by their Planning Commission and considered later at the County Planning Board hearing. If the recommendation is for a denial of the proposed zoning request, it cannot be passed except by a three-quarter majority vote of the Board of County Commissioners.

## Construction & Environmental Codes

Although zoning and subdivision regulations are very important implementation tools, they do not provide standards for the quality of construction, nor do they remedy substandard housing and sanitary conditions. These objectives can be accomplished through the adoption of various construction and environmental codes. Codes also establish the process for permit approval, licenses, cases, and create enforcement procedures for inspections and appeals.

The City's construction, health, and planning codes should be regularly evaluated, and updated as necessary to meet changing needs, to maintain the quality of Sterling's housing stock, and to improve environmental conditions in the community.

**County Codes** A county can adopt construction and environmental codes for all its unincorporated area, or for a defined area around a city. Counties may also adopt a city's codes by reference for an area around a city, or cities may adopt by reference codes adopted by counties. Either the city or county may perform the administrative functions needed, as may be jointly agreed. K.S.A. 12-751(b) of the 1992 recodification of State Planning and Zoning Statutes authorized cities to "...adopt and enforce building codes outside the city limits" in conjunction with the jurisdiction of extraterritorial subdivision or zoning regulations. In 1998 a petition procedure was added, which permitted 20% of the electors to cause an election to be held to decide whether such building codes should be retained if they were adopted. Once removed, they cannot be reestablished for four years.

**Model Codes** National and international model codes may be adopted which provide minimum standards for building construction and plumbing, mechanical, electrical and gas installations. Housing codes prevent overcrowding, and maintain a minimum level of health and safety features in dwellings. Fire codes set safety standards and attempt to prevent fires from starting and/or spreading; they are a factor in fire insurance ratings. Local environmental codes can be used in the regulation of refuse disposal, certain kinds of animals, the height of mowed grass, abandoned and inoperable vehicles, and the removal of dilapidated structures. All of these codes are important to upgrade and maintain the quality of the housing inventory, which in turn affects the quality of life and the tax revenue base.

## Type of Codes

No single code covers all the features of construction, health, and planning. To efficiently protect the health, safety and welfare of the public and their property, a number of codes play a role. A list of the most useful of these codes, and a brief description of each, follows:

**Building Codes** govern the construction requirements for all types of buildings by regulating their design, methods of construction, quality of materials, types of use, degree of occupancy, site location factors, and certain equipment required for their construction and operation. **Energy-efficiency requirements and historic preservation standards** are recent additions to building codes.



*example: Building Code violation*

**Plumbing Codes** are responsible for regulating both sanitary sewer and potable water carrying systems.

**Electrical Codes** safeguard persons, buildings, and their contents from hazards arising from the use of electricity in new and remodeled structures.



*example:  
Electrical Code violation*

**Mechanical Codes** serve to protect individuals and property by controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilating, cooling, and refrigeration systems, as well as incinerators and other heat-producing equipment.

**Fire Prevention Codes** prescribe regulations for safeguarding life and property from the hazards of fire and explosion.

**Sanitation Codes** regulate a wide range of health concerns including sewage disposal, water supply, abandoned and inoperable vehicles, pest and animal control, and environmental features in and around buildings, such as outside storage, that often lead to health hazards and blighting conditions.



*example: Sanitation Code violation*

**Housing Codes** are concerned with the quality of the residential environment, and affect the upkeep and maintenance of existing dwellings. They can be enforced on a house-to-house inspection basis, complaint system, or triggered by a change in ownership or renter.

**Dangerous Structures Ordinances** cause the repair or removal of dangerous and unsafe structures by the owner or the City.

**"City Beautiful" Ordinances** are a method of removing or causing the repair of unsightly and blighted structures to promote beautification. Such ordinances are often combined with the minimum standards found in housing codes. They can be used for both principal and accessory structures.

**Weed Mowing Ordinances** establish a maximum standard for the height of vegetation outside of planting beds. If the owner does not keep vegetation within the required limit, the City will mow and then assess the cost to the owner.

**Manufactured Home Park Codes** cover such items as water supply, sewage disposal, drainage, and street and parking facilities in manufactured home parks, density, open spaces and recreational areas, refuse disposal methods, and utility connections. Manufactured Home Park Codes may also be written to include recreational vehicle campgrounds.

Manufactured Home Park Codes cannot control the actual location of manufactured home parks, or the locations of individual homes scattered in a community, since this can only be accomplished by zoning regulations. However, since Manufactured Home Park Codes are adopted as health and safety codes, they are not limited by the grandfather clause inherent in the administration of zoning regulations and so can be used to upgrade existing parks.

### **Manufactured, Modular, & Prefab Housing**

Manufactured, modular, and prefab homes are all forms of housing constructed in factories. A manufactured home may cost about one-half the per square foot cost of a site-built dwelling. Provided they meet local construction codes, modular and prefabricated units are usually permitted by zoning regulations anywhere that site-built housing can be constructed.

Because of the similarity of lot sizes needed, multiple-wide manufactured homes are sometime accommodated in neighborhoods of site-built homes. Their shorter length permits them to be oriented parallel to the street. However, the longer 70' to 90' single-wide manufactured homes pose a problem in such neighborhoods. If placed parallel to the street, they create a wide frontage which significantly increases the cost of utilities and streets. If placed perpendicular to the street and intermixed with site-built houses, the extension of the manufactured home into the rear yard tends to reduce the open space and privacy of adjacent neighbors. In practice, single-wide homes are usually angled on the lot in order to permit more windows on one side to have some view of the street. The effect is to further cause some disorientation in the relationship of two dissimilar types of structures. In general, the intermixing of single-wide manufactured homes with site-built houses tends to depreciate the value of the site-built houses.



*example:  
Dangerous / Unsightly Structure*

In 1974, the U.S. Congress changed the name "mobile home" to "manufactured housing". A **nationwide certification process was initiated in 1976** by the U.S. Department of Housing and Urban Development, which set standards for all such housing under the federal Manufactured Housing Construction and Safety Standards Act, otherwise known as the HUD Code. Homes which do not meet the HUD national standards, almost all of which were built prior to June 15, 1976, are still referred to as "mobile homes". **Manufactured homes which are certified under the HUD Code override any local construction codes, except for the manner in which they are installed**— that is, hooked up to utilities, skirted, placed on a permanent foundation, and/or anchored.

The Kansas Legislature passed an extensive Kansas Manufactured Housing Act in 1991 as K.S.A. 59-4201, *et seq.* Kansas also has statutes requiring the state architect to establish tie-down design standards under K.S.A. 75-1226, *et seq.* The state does not enforce tie-down standards locally, but regulates the design where they are manufactured.

Effective January 1, 1992, the Kansas Legislature adopted in the recodified planning and zoning statutes mandatory provisions for a "**residential-design manufactured home**" in K.S.A., 12-742 and 763. **Zoning regulations which exclude such homes from single-family residential districts solely because they are manufactured homes cannot be adopted or enforced in Kansas.** Such homes must at least meet the minimum standards of the HUD Code, be 22 feet in width, have a pitched roof, siding and roofing materials customarily used on site-built houses, and be placed on a permanent foundation. Additional architectural and aesthetic standards may be adopted in local zoning regulations to ensure their compatibility with site-built housing. Such statutes do not preempt or supersede valid restrictive covenants running with the land.

### **Existing Codes for Sterling**

As of 2015, Sterling has adopted the following codes:

- International Building Code (2006 edition)
- International Plumbing Code (2006 edition)
- National Electrical Code of 2011
- International Mechanical Code (2006 edition)
- International Fuel Gas Code (2006 edition)
- International Fire Code (2006 edition)
- Uniform Solar Energy Code (1991 edition)
- Uniform Swimming Pool, Spa, and Hot Tub Code (1991 edition)
- International Residential Code (2006 edition)
- Uniform Housing Code (1991 edition)

In addition, the City of Sterling has adopted codes addressing:

- Dangerous and Unfit Structures
- Burn Site
- Junked Motor Vehicles on Private Property
- Environmental Code
- Sanitation and Nuisances
- Moving Buildings
- Animal Control
- Fireworks
- Weeds



The *Sanitation Code of Rice County, Kansas*, was approved and adopted by the Board of County Commissioners in 1991. Its provisions are applicable to all unincorporated areas within Rice County, including all of the Sterling Planning Area outside of the City's boundaries.

### Environmental Conditions in Sterling

Overall, the current housing stock in Sterling is in good condition, but the City should remain vigilant. In order to sustain property values, it is important to maintain high standards of enforcement on environmental issues, which in turn support the community's high quality of life.

Deteriorating houses create a blighting effect which can spread like cancer through a neighborhood, decreasing the value of nearby properties, eroding the tax base, and eventually compromising a city's economic development efforts. A house in poor condition may simply be the result of a single homeowner's inability or unwillingness to properly maintain it, but the problem is sometimes exacerbated by environmental conditions which discourage homeowners from investing in their property.

Residents were asked to comment on their perception of a variety of potential environmental problems in Sterling, including poorly maintained housing, dilapidated outbuildings, unkempt vacant lots, unsightly outdoor storage, poor drainage, inoperable vehicles, and nuisance dogs. Most of the answers were quite positive, but some of them reflect concerns which merit a response.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents living in the City were asked to what degree they felt the listed issues are problems in the City of Sterling.

Community Questionnaire – Environmental Conditions								
City Resident Responses	Serious		Minor		No problem		Combined Serious & Minor	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Poor Drainage	52	50%	42	40%	10	10%	94	90%
Poorly Maintained Housing	35	33%	59	56%	11	10%	94	90%
Dilapidated Outbuildings	23	21%	71	66%	14	13%	94	87%
Unkempt Vacant Lots	25	25%	63	62%	14	14%	88	86%
Unsightly Outdoor Storage	28	30%	51	54%	15	16%	79	84%
Unkempt Weeds / Yards	21	21%	56	57%	21	21%	77	79%
Inoperable Vehicles	16	16%	55	56%	27	28%	71	72%
Animals Running Loose	9	9%	56	57%	34	34%	65	66%

## **Annexation**

A good annexation policy is an important tool for assuring the orderly installation of streets and utilities as new development occurs, as well as maintaining the vitality of the City's future tax base. Extraterritorial zoning and subdivision regulations can also help to guide growth which will enhance the quality of future annexable land.

The most fundamental policy to support a city's reasonable growth by annexation is to refrain from extending utilities or other services outside the city limits unless annexation takes place, or a written waiver agreement is signed between a city and the property owner agreeing not to oppose annexation in the future. Without such an agreement, annexing land after development takes place can be very difficult and costly.

### **Petition or Consent Annexation**

The preferred method of annexation is a petition or consent arrangement with a cooperating property owner. This method is far less time consuming and complex than a unilateral annexation by a city. Revisions to the state statutes on annexation procedures were adopted by the 2010 Legislature as amendments to K.S.A. 12-519 *et seq.* These revisions include K.S.A. 12-520(h), prohibiting annexations of narrow corridors of land, which makes it much more difficult to annex land in unusual situations.

## **Unilateral Annexation**

In planning for an orderly, unilateral annexation approach so that in time the appropriate public facilities and services will be available when needed, a city is required to have a "plan" as to the extent, financing and time-table for such improvements (K.S.A. 12-520b). The plan shall be in "sufficient detail to provide a reasonable person with a full and complete understanding of the intentions of the city for each major municipal service". A procedure for the **deannexation** of land is established in K.S.A. 12-531 and 532, whereby the county commissioners are required to hold a hearing three years after an annexation to determine if services have been provided as promised. The land may be ordered to be deannexed by the county if services have not been provided within two and one-half years following the hearing.

There are six conditions under which a city can unilaterally annex land, many of them related to the degree to which the annexable property adjoins the city. Adjoining platted areas of unlimited size are the most eligible. Limitations exist on unplatted land over 21 acres in size, and unplatted agricultural land of 21 acres or more must have the consent of the owner. If the land does not meet one or more of the six conditions, the City may petition the board of county commissioners under K.S.A. 12-521 to consider the matter at a quasi-judicial hearing, and make findings from a list of 14 factors. The board must find by a preponderance of evidence that manifest injury would result to property owners before an annexation request may be denied.

Island annexations not involving city owned property must still be approved by the county commissioners, even if the landowner consents. Island annexations of city owned property may be annexed by a city without a formal hearing by a county. Additional annexations to an island annexation by a city are not allowed.

For such unilateral annexations, extensive notification is now required to public agencies in the area including city, county or regional planning commissions having "jurisdiction" (K.S.A. 12-520a). Presumably the latter means "planning jurisdiction" and in the case of Sterling would involve both the City and the County Planning Commissions. The designated planning commissions are required to review the proposed annexation and make a finding of its compatibility or incompatibility with any adopted land use or comprehensive plan.

## **Future Annexation in Sterling**

In contrast to many cities, Sterling has been fortunate in containing most of its adjacent urban development within the city limits. Some urban uses, however, have occurred in the Planning Area. The Sterling Cemetery, the Wastewater Treatment Plant, and land between the existing City and the new interchange should be studied and considered for annexation. Generally, it is desirable for annexation to occur at the time of development.

**Resource:** *Annexation in Kansas: A Manual Concerning the Annexation Powers and Duties of Cities* (2014 Edition) is published by the League of Kansas Municipalities (LKM). Among other things, it provides samples of plans for extensions of municipal services, and various procedural forms. It is available through the LKM website at [LKM.org](http://LKM.org).

## CHAPTER 14. Comprehensive Plan Implementation

A comprehensive plan is a leadership tool, but it is only effective if it is implemented, and implemented well. When properly executed, a comprehensive development plan guides policy making decisions in the public sector. Proposals in the plan provide ideas to accomplish planning goals.

After a public hearing on the Comprehensive Plan document, and adoption of the Plan by the Sterling City Planning Commission, the City Commission then approves the Comprehensive Development Plan by ordinance. Once adopted and approved, Planning Commission members, City Commission members, and City staff are responsible for understanding this Comprehensive Development Plan in detail, and for determining the best methods to implement policies and procedures to achieve Plan goals.

Previous chapters provided resources for information and funding, and addressed regulatory tools available for implementing planning decisions. This chapter provides an overview of Planning Commissioners' statutory responsibilities, and reviews methods for implementing this Comprehensive Development Plan by governmental and administrative policies, including community involvement, project review, neighborhood and project plans, action programs, and capital improvement programming.

The dictionary definition of "govern" is *to control and direct the making and administration of policy*. To govern then means to make policy, not just to make decisions. **Policies** are established principles and guidelines, intended to ensure that every important decision is made with long-term goals in mind.

**Policy Resource:** The League of Kansas Municipalities provides sample policy statements on a variety of subjects, available on their website at [www.lkm.org/publications/#list](http://www.lkm.org/publications/#list).

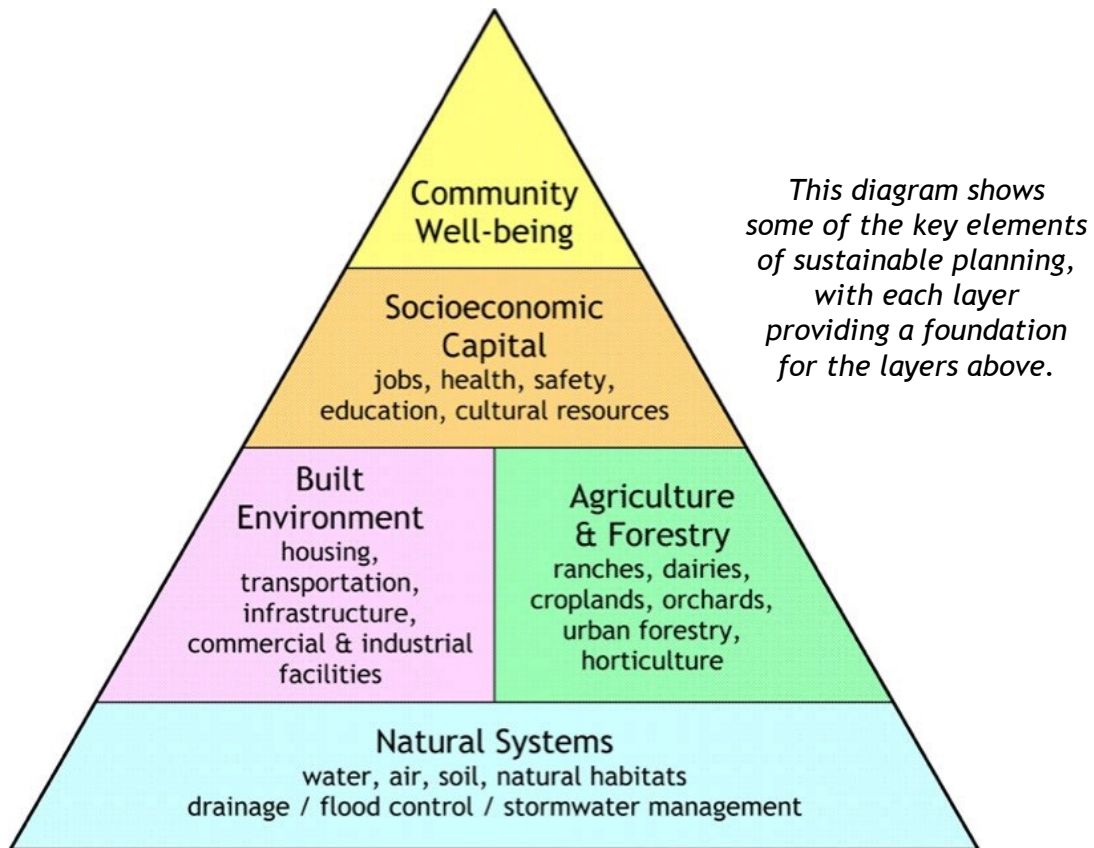
A good working relationship between governmental agencies, private organizations, potential developers and citizens is essential, in order to achieve a coordinated community effort. Assigning specific responsibility for specific proposals is also crucially important – because in community-wide endeavors, "everybody's business" can easily become "nobody's business", and proposals can be forgotten. **Leadership and organization are the keys to successful implementation of this Comprehensive Development Plan.**

In order for those leaders to achieve a well planned community, two ideas are fundamental – development must be *sustainable*, and those who make planning decisions must understand *why* people choose to live in Sterling.

## A Sustainable Community

Since its founding in 1872, Sterling has sustained itself as a community, through tough economic times, grasshopper plagues, fires, flooding, and every other challenge its people have faced. It is Sterling's people, and their connections with each other, that give the community its strength and resilience. Willingness to help others, a long-standing commitment to local schools, and stewardship of the land have all helped Sterling to prosper when many other small Kansas towns have failed.

If Sterling wishes to continue to grow and thrive, it needs to employ a strategy of sustainable development, a concept now at the forefront of community planning. It is defined as development that meets a community's present needs – environmental, social, and economic – without compromising the ability of future generations to meet their own needs. Development that is *not* sustainable forecloses a community's future.



Many Sterling families have lived in the area for generations, but it is a community that also welcomes newcomers. People in Sterling appreciate and nurture the small-town quality of life that makes existing residents want to stay, and also attracts new residents. **Sustaining this small town quality of life into the future should be the overarching goal of every decision made during the implementation of this Plan.**

## Choosing to Live in Sterling

Ultimately, the way this Plan is implemented will influence the choices people make as they decide whether to move here or not, to stay in Sterling or leave, to establish a business here or somewhere else. **Understanding why people choose Sterling is the first essential step in leading the community to a comfortable and sustainable rate of growth.**

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents who had moved to the City within the previous ten years were asked what their major reasons were for moving to the Sterling area.

Community Questionnaire – Reasons for Moving to Sterling						
	In City of Sterling		Outside City / In Planning Area		Total Responses	
Not Applicable	40	30%	6	60%	<b>46</b>	<b>32%</b>
Near to relatives and friends	24	18%	1	10%	<b>25</b>	<b>17%</b>
To be close to work	20	15%	1	10%	<b>21</b>	<b>15%</b>
To live in a smaller town	14	11%	0	0%	<b>14</b>	<b>10%</b>
To retire	9	7%	1	10%	<b>10</b>	<b>7%</b>
Good schools	9	7%	0	0%	<b>9</b>	<b>6%</b>
Affordability	7	5%	0	0%	<b>7</b>	<b>5%</b>
To live in a larger town	4	3%	0	0%	<b>4</b>	<b>3%</b>
Good housing	3	2%	1	10%	<b>4</b>	<b>3%</b>
To attend Sterling College	3	2%	0	0%	<b>3</b>	<b>2%</b>
<b>Total Responses</b>	<b>133</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>143</b>	<b>100%</b>

Nearly a third of respondents had lived in Sterling for more than 10 years. Of those who had moved here within the last decade, **the most important reason why people chose to move to Sterling was to live near family and friends (17%), closely followed by the wish to live closer to work (15%), and the desire to live in a smaller town (10%).**

– *Connect Sterling* –  
*Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035*

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The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked how long they have lived in or near Sterling.

<b>Community Questionnaire – Length of Residence</b>						
	<b>&lt;5 years</b>		<b>5 to 10 years</b>		<b>&gt;10 years</b>	
<b>In City of Sterling</b>	15	13%	19	16%	84	71%
<b>Outside City / In Planning Area</b>	2	20%	0	0%	8	80%
<b>Total Responses</b>	<b>17</b>	<b>13%</b>	<b>19</b>	<b>15%</b>	<b>92</b>	<b>72%</b>

Newcomers are about 13% of the population, 15% have lived here between 5 and 10 years, and 72% have lived in the community for more than 10 years. This indicates a good balance in the community between newcomers and long-time residents.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents who had moved to the City within the previous ten years were asked where they had lived previously.

<b>Community Questionnaire – Previous Residence</b>						
	<b>In City of Sterling</b>		<b>Outside City / In Planning Area</b>		<b>Total Responses</b>	
<b>Elsewhere in Rice County</b>	10	12%	1	11%	<b>11</b>	<b>12%</b>
<b>Elsewhere in Kansas</b>	24	29%	2	22%	<b>26</b>	<b>28%</b>
<b>Outside Kansas</b>	13	15%	0	0%	<b>13</b>	<b>14%</b>
<b>Not Applicable</b>	37	44%	6	67%	<b>43</b>	<b>46%</b>
<b>Total Responses</b>	<b>84</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>93</b>	<b>100%</b>

It appears that about 46% of respondents have lived in Sterling all their lives, while 28% of respondents had moved to Sterling from elsewhere in Kansas, 14% moved from out of state, and 12% moved from somewhere else in Rice County.



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The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents who were planning to leave the Sterling area were asked what their reasons were for leaving.

<b>Community Questionnaire – Reasons for Leaving Sterling</b>						
	<b>In City of Sterling</b>		<b>Outside City / In Planning Area</b>		<b>Total Responses</b>	
<b>Retirement</b>	9	30%	0	0%	<b>9</b>	<b>28%</b>
<b>To reduce expenses</b>	7	23%	0	0%	<b>7</b>	<b>22%</b>
<b>Personal</b>	6	20%	1	50%	<b>7</b>	<b>22%</b>
<b>Job change</b>	3	10%	0	0%	<b>3</b>	<b>9%</b>
<b>Health</b>	3	10%	0	0%	<b>3</b>	<b>9%</b>
<b>Quality of homes</b>	2	7%	0	0%	<b>2</b>	<b>6%</b>
<b>Graduating</b>	0	0%	1	50%	<b>1</b>	<b>3%</b>
<b>Total Responses</b>	<b>30</b>	<b>100%</b>	<b>2</b>	<b>100%</b>	<b>32</b>	<b>100%</b>

Overall, the most important reasons why people chose to leave Sterling were retirement (28%), to reduce expenses (22%), or for personal reasons (22%). Additional support services, including housing that allows people the option to age in place, might reduce the percentage of residents moving away at retirement.

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 Comprehensive Development Plan for the Sterling Area, Kansas: 2015–2035

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The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they planned to stay in the Sterling area only until their children graduate from high school.

Community Questionnaire – Staying Until Children Graduate?						
	Yes		No		Undecided	
In City of Sterling	17	26%	42	65%	6	9%
Outside City / In Planning Area	3	60%	2	40%	0	0%
<b>Total Responses</b>	<b>20</b>	<b>29%</b>	<b>44</b>	<b>63%</b>	<b>6</b>	<b>9%</b>

The response indicates that 29% of respondents live in Sterling primarily because of the school system, or because they perceive Sterling as a good place to raise children, but may leave once their children graduate.

The table below shows the responses received on the 2015 Community Questionnaire, when Sterling area residents were asked if they planned to stay in the Sterling area after they retire.

Community Questionnaire – Staying after Retirement?								
	Yes		No		Undecided		Already Retired	
In City of Sterling	35	29%	10	8%	34	28%	41	34%
Outside City / In Planning Area	2	20%	0	0%	4	40%	4	40%
<b>Total Responses</b>	<b>37</b>	<b>28%</b>	<b>10</b>	<b>8%</b>	<b>38</b>	<b>29%</b>	<b>45</b>	<b>35%</b>

Note that over one third (35%) of the respondents to this survey were already retired – and still living in the Sterling area. Of those not retired, 28% intended to stay. Yet 8% of the respondents intend to move away when they retire, and another 29% may do so.

From a planning perspective, these Community Questionnaire responses emphasize the need to maintain and enhance Sterling's **small town ambience and quality of life**, and to provide places and events for family and friends to gather and enjoy. Maintaining **good jobs** and a **good school system** are also important factors in the City's future success.

It is important for Sterling to **both retain existing residents and attract new residents**—without becoming too focused on one strategy or the other. Sterling is likely to lose many residents when they retire, or when their children graduate from school. Developing strategies to help retain these two populations would help the City grow.

## The Planning Commission

The Sterling City Planning Commission was initially created by Ordinance No. 2-165, adopted in 1972. The Planning Commission was reestablished by Ordinance No. 2459, effective November 6, 2014, to reflect the recodification of state statutes under K.S.A. 12-741, *et seq.* A new set of bylaws has recently been adopted by the Planning Commission as required by the new statutes, and approved by the City Commission.

The City Commission appoints the nine Planning Commission members including (as required by state statutes) two persons from outside the City, but within three miles of the city limits. The City limits the latter members to people living within Sterling's designated Planning Area. Members serve three-year staggered terms and meetings are held on a monthly basis if needed.

The Planning Commission's major responsibility as the authorized agency under state statutes is to prepare, adopt and maintain the Comprehensive Plan. It should also be available to undertake various responsibilities in implementing the Plan, some of which are described below:

- Reviewing the Plan annually as required by state statutes and reporting its status to the City Commission. Such annual reviews may result in minor changes in the Plan, with a major review conducted every five years.
- Preparing, adopting and maintaining Zoning Regulations for the City by way of holding public hearings and making recommendations to the City Commission.
- Preparing, adopting, administering and maintaining Subdivision Regulations, to assist the City Commission and developers in the design and improvements necessary for proper land development in the City.
- Holding hearings on vacations of rights-of-way and easements for recommendations to the City Commission.
- Reviewing improvement projects as proposed by the City Commission and other organizations and making determinations as to their conformance to the Plan.
- Reviewing potential properties for annexation and making recommendations thereon to the City Commission.
- Undertaking neighborhood or project plans to provide more detailed data for new areas or rehabilitating older areas or for special projects in the Planning Area.
- Assisting the City Commission on special planning projects including economic development efforts, capital improvement programming and grant applications.
- Maintaining a working relationship to implement plans with public and private organizations at the city, township, county, regional, state and federal levels of government.
- Establishing a convenient reference library of plans, information, maps and policy statements readily accessible to officials, citizens and potential developers.

## Community Involvement

An essential ingredient of the planning process is the involvement of not only officials, but of individuals and groups of citizens, civic organizations and potential developers. Their participation should go beyond simply informing the public of planning activities. Avenues should be provided which encourage feedback from the public so as to communicate their desires as to the kind of community in which they want to live. Since plans and their implementation affect people and their property, it is extremely important that the planning process be conducted within an open democratic framework.

The involvement of both urban and rural residents to achieve an input and understanding of the planning proposals can be accomplished by the Planning Commission in many ways. Some examples are:

- Conducting business and hearings in open meetings for which notice has been adequately given, agendas provided, minutes taken and an opportunity made available for the public to voice their opinions and contribute their ideas.
- Involving the residents of an area when preparing plans and considering regulatory decisions which affect them.
- As needed, appointing ad hoc committees of both urban and rural residents to study and make recommendations on specific plans or proposed regulations.
- Arranging for liaison representation or periodic communications to and from organizations related to the implementation of Plan proposals, especially the City Commission, Sterling Unified School District 376, township trustees, and the Planning and Zoning Department of Rice County.
- Scheduling an annual meeting of public officials and leaders of community organizations to receive comments on the City's planning activities and to report back to their members.
- Taking a responsibility as members of the City Commission and Planning Commission to keep the public informed on planning matters through personal contacts and group activities.
- Making local officials as well as outside resource technicians available to community organizations on planning matters.
- Distributing information regularly to the news media and encouraging them to attend and report on meetings.
- Making plans, reports, maps and regulations available on the City website so that they can be adequately circulated for review, and are later available to the public in final format. Providing printed documents in sufficient quantity to meet the needs of people without internet access.

By utilizing various techniques of community involvement as part of the planning process, community leaders can effectively implement the Comprehensive Development Plan.

## Project Review

When this Comprehensive Development Plan and any of its amendments have been approved by the City Commission, and the effectuating ordinance published, a procedure is established under K.S.A. 12-748 to review projects proposed by the City and other public entities which are embraced within the Plan. According to state statutes, after Plan adoption:

*"...no public improvement, public facility or public utility of a type embraced within the recommendations of the comprehensive plan or portion thereof shall be constructed without first being submitted to and being approved by the planning commission as being in conformity with the plan. If the planning commission does not make a report within 60 days, the project shall be deemed to have been approved by the planning commission..."*

The City Commission may proceed with the project only after this procedure is completed. In the event the Planning Commission finds that the proposed project does not conform to the plan, the Planning Commission is required to submit their findings in writing to the City Commission. The City Commission may override the findings of the Planning Commission by a majority vote and proceed with the project. In this event, the Plan "...for the area concerned shall be deemed to have been amended". The Planning Commission should then proceed to make the necessary changes in the Plan, utilizing the formal adoption procedures described in Chapter 1.

Projects can also be reviewed in such a manner as to satisfy this legal procedure during consideration of zoning cases or the processing of plats, both of which should bear a relationship to the Comprehensive Plan.

Other projects could be processed for "project review" by having the Planning Commission review an annual capital improvement program. K.S.A. 12-748(b) provides that if a project in a capital improvement program is reviewed and found to be in conformance to the Plan, then no further review process is necessary by the Planning Commission, except as may be required by zoning and subdivision regulations. The concept of project review enables the City Commission to make current decisions in relationship to long-range planning and retain their final decision-making authority.

## Neighborhood and Project Plans

Due to their large-scale perspective and long range view, comprehensive plans tend to generalize rather than specify detailed proposals. As development takes place, more detailed decisions must be based on more specific and current information. The preparation of specific neighborhood and project plans, developed as needs are foreseen, should be a regular part of the continuing planning process.

**Neighborhood plans** typically analyze in detail the land use, circulation and public facility needs of part of the Planning Area which poses unusual, difficult or new conditions. A neighborhood plan might deal with an area as small as a block or as large as a major segment of the Planning Area. Such plans are particularly useful to properly connect streets and utilities in newly developing areas, and in addressing older areas in need of rehabilitation. The plans provide assistance in making current and future decisions on land use proposals, applications for zoning, subdivision plats, annexations, and capital improvement programming. They also facilitate a good working relationship between developers and area residents.

**Project plans** are different from neighborhood plans in that they involve a study to develop a site for a particular purpose, such as a park, recreation area, public building, or industrial tract. They are often prepared as a part of grant applications or bond issues, or as a result of funding becoming available from these sources.

Neighborhood and project plans often focus on a community's historic downtown, on specific business districts, or on potentially annexable areas. In their simplest form, they may consist of simply a drawing and an explanatory report. More complex issues or areas, however, may require more complex plans, which are then sometimes adopted as elements of the comprehensive plan.

Neighborhood and project plans may be prepared by the Planning Commission to assist the City Commission or area residents. They may serve simply as policy guidelines for future decisions, or they may be formally approved as an element of the Comprehensive Plan. It is very important that property owners and potential developers who may be affected by such plans be participants in their preparation.

## Action Program

During the process of developing this Comprehensive Plan, the community established a number of planning goals for Sterling, which are listed in Chapter 2. While relative priorities were estimated at the time this Plan was written, community leaders should regularly review goals, tasks, and priorities, and revise them as necessary, based on their urgency and the availability of resources during the course of the Planning Period. This process is often incorporated into the Planning Commission's required annual review of the Comprehensive Plan, and the City Commission's annual budgeting process.

As each goal or task is addressed, an action program will need to be developed for its implementation. An action program is a way to make sure that goals turn into reality, by describing specific tasks that must be achieved in order to reach each goal. To be effective, an action program must include clear-cut implementation information for each goal:

- Define the tasks necessary to achieve the goal
- Determine who is responsible for making sure tasks are achieved
- Set a schedule and a deadline
- Assign resources (funding, staff, etc.) sufficient to achieve each task
- Establish communication hierarchies (Who needs to know what?)

Be willing to spend time and effort on the early stages of the planning process for significant public projects – it will pay off later in community satisfaction with the overall success of the final project. Making good decisions throughout a logical process of design helps prevent costly revisions later, during construction. Engaging the services of a design professional to help throughout the planning process, as opposed to waiting until you are ready for construction drawings, is recommended.



## Capital Improvements Program (CIP)

With the growing complexity of financing and constructing public improvement projects, it is important that a city establish procedures for making such determinations in an efficient manner. Such a process is referred to as capital improvements programming. The resulting program or "CIP" is a long-range financial plan covering a period of perhaps three to five years including the current year. This establishes the priority, timing, cost estimates and sources of funding for public physical improvements. It does not deal with annually recurring operating expenses except to note the effect which a new facility or improvement may have on future operating budgets. The first year of the CIP is the most clearly defined, financially estimated and timed and is often adopted as the city's capital improvements budget along with the annual operating budget.

A significant function of the CIP is to coordinate the sequence of financing and construction of a project that might involve joint funding between various agencies plus private organizations. The anticipated use of county, state or federal funds may necessitate scheduling ahead for several years. The use of a CIP is an effective way of guiding the direction and timing of subdivision development and is especially useful in relation to the legal requirements for unilateral annexations referred to previously in this chapter. Some of the advantages of CIPs are:

- To help focus attention on community goals
- To encourage citizen and group participation
- To improve intergovernmental cooperation
- To increase capability of utilizing various matching funds programs
- To improve project implementation
- To stabilize financial programs

The planning commission must evaluate each project as to its conformance to the comprehensive plan. This procedure serves as the planning commission's "project review" for such items, as provided for in K.S.A. 12-748(b).

While there are a number of exceptions, it is sufficient for general financial planning purposes to say that under Kansas law the general obligation of the city-at-large (G.O. debt) and special assessment debt combined may not exceed 30% of the total equalized assessed tangible valuations plus motor vehicle valuations, to calculate the bonded debt limitation. Bonds issued for general sewer and water work and revenue bonds are outside the debt limitations.

Various financing methods used for CIP projects include:

- General fund
- General obligation bonds
- Utility revenue bonds
- Special assessments
- Trust funds
- Federal and state grant programs
- Private contributions

Sample Capital Improvement Program Concept						
Project Description	Project Year				Project Cost	Method of Financing
	2016	2017	2018	2019		
Park Restrooms	X				\$100,000	G.O. / Gift
Stormwater Mitigation Project			X		\$250,000	G.O. / FEMA Grant
Police Car				X	\$32,000	G.O.

*An example of the contents which might be included in a CIP.*

### **Sterling's Statutory Debt Limitation**

As of December 31, 2014, the City had \$2,429,284 in outstanding debt. Of this amount, \$2,344,612 was exempt, in the form of water, sewer, storm sewer, and electrical improvements, under the state debt limitation statutes governed by K.S.A. 10-308. Using the City's 2014 estimated total tangible assessed valuation including that for motor vehicles of \$8,919,214, the City is currently using 3% of its 30% debt limitation. This leaves \$2,591,092 for future bonded indebtedness under the statutory limitation to carry out the growth policies of Sterling.

Good municipal management maintains a continuing effort to keep public facilities up-to-date, while not allowing the mill levy for indebtedness to fluctuate too greatly. The ability of the City to reach the population goal established in this Plan should be greatly enhanced by the continued prudent planning of its finances.

*What should this Comprehensive Plan do?*

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"Capitalize on Sterling's current momentum,  
and provide a guide for City leaders to follow."

*Bob Booth – Sterling City Commissioner*



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Where the Quality of Life Shines!