



Chapter 1 Introduction

Introduction

The comprehensive plan is Harvey County's "road map" for future development over the next 20 years. The plan presents a "vision for the future" of the county based on the profile of past conditions and extensive public participation. The plan then presents proposed policies and actions to achieve Harvey County's vision for tomorrow, ready for implementation.

The comprehensive plan is both a process and a product. The plan is based on Harvey County

residents' stated needs and values, as demonstrated in public engagement—town halls, surveys, interviews, and extensive discussions with the Planning Commission. The plan is also based in the context of the local and regional economy, demand for development, conservation of natural resources, and the legal protection of private property rights.

This plan is a policy document providing information on which to base decisions. It outlines goals and actions as a toolbox of implementation items. The comprehensive plan also provides

Vision Statement

Harvey County will continue to offer a quality of life attracting new residents and businesses to its cities. The sustained economic growth and success of the county's small towns and cities has not come at the expense of lost farmland, natural resources, and visual and cultural resources. Harvey County is recognized as a leader in coordinated city/county land use, planning, water resource management, protection of rural/agricultural land, and adherence to the principles of sustainable growth. Residents, visitors, and businesses are drawn to Harvey County because of the small town values, historical character, rural landscape of farms, open space, and natural beauty of an area not harmed by urban sprawl.



guidelines for the location of future development within the county's planning jurisdiction based on the community's preferred land uses, development patterns, and needs for redevelopment. The plan is intended to encourage a solid economic base while protecting what people hold most dear about their part of Kansas. The first step is typically to review and update zoning regulations and maps in conformance with the goals and policies of the plan.

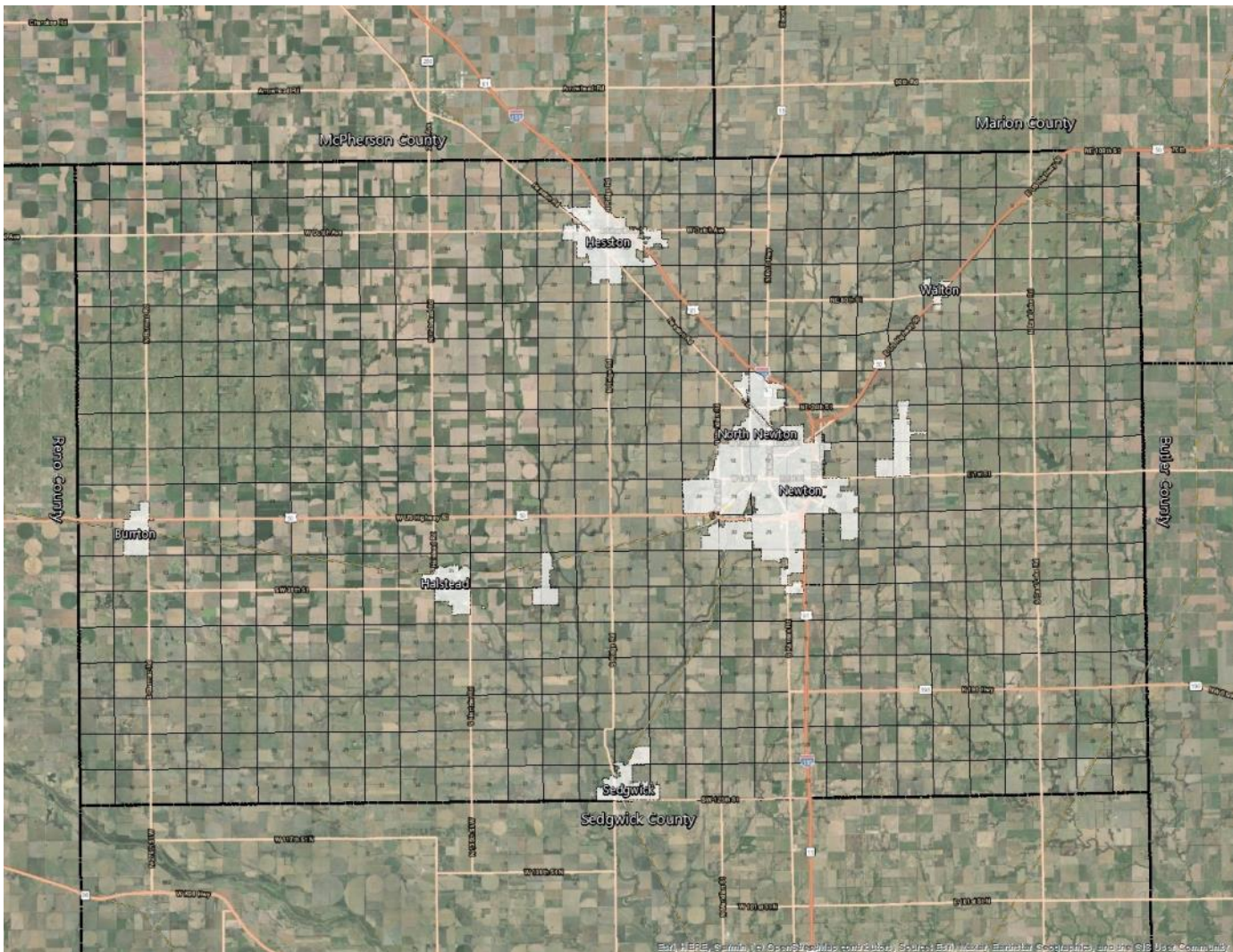
The comprehensive plan is not a static document and adoption is the first step in putting the plan to work. The plan will evolve with changes in local land use, population, and the economy over decades to come. The long-range success of the plan will be measured by how useful it becomes for elected officials, staff, property owners, and residents throughout Harvey County.

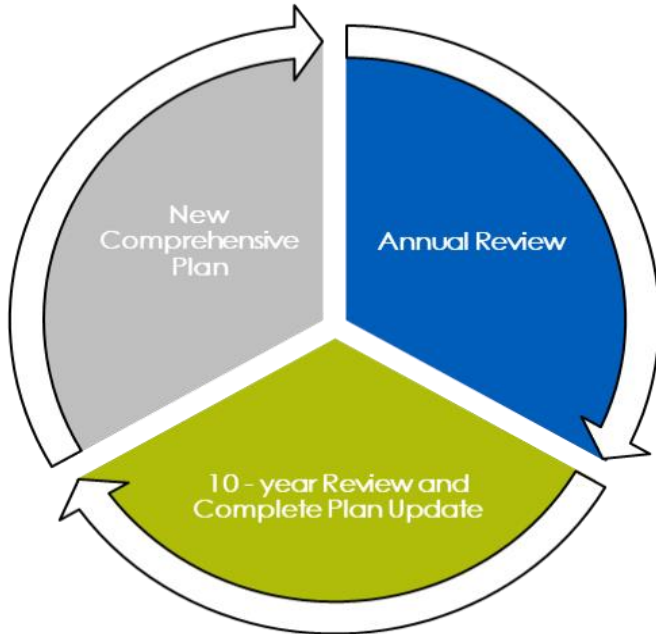
Location

Harvey County, an agricultural based county located in South Central Kansas, is bisected by Interstate 135 north to south and Kansas Highway 50 east to west. The county is bounded on the north by McPherson and Marion Counties, on the east by Butler County, on the south by Sedgwick County, and on the west by Reno County. The communities of Burnton, Halstead, Hesston, Newton (the county seat), North Newton, Sedgwick, and Walton call Harvey County home.

Planning Process

The comprehensive plan begins with the development of general goals and policies, based upon current and future issues faced by the county and its residents. These are intended to be practical guidelines for addressing existing conditions and guiding future growth.





and the citizens of Harvey County. The time period for achieving the goals, programs, and developments identified in the Harvey County Comprehensive Plan is 20 years. However, the county should review the plan annually and update the document every 10 years (2032/2033), or when major, unanticipated opportunities arise.

Planned growth will make Harvey County more effective in serving residents, more efficient in using resources, and able to meet the standard of living and quality of life every individual desires.

Data is collected to provide a snapshot of the past and present conditions within the county. Analysis of data provides the basis for developing forecasts for future land use demands, as well as future needs regarding housing and facilities.

Completing updates every ten years or so will allow the county to incorporate ideas and developments not known at the time of developing this comprehensive plan.

The comprehensive plan is a vision presented in text, graphics, and tables representing the desires of the county and its residents for the future.

Preservation of Property Rights

The comprehensive plan is also a blueprint for Harvey County designed to identify, assess, and develop actions and policies in the areas of population, land use, transportation, housing, economic development, county facilities, and utilities.

Comprehensive plans should not be written in a manner as to infringe on property rights. Preserving the integrity of property rights is of the utmost importance to the people of Harvey County as well as those who aided in the preparation of this plan.

During the planning process, the controversial topic of federal regulations placing an undue burden on property owners regarding the use of their land and zoning was raised. These citizens voiced their concerns of the possible threats these topics present to property rights. While unclear at this time, both could potentially present threats to property rights *should* they be approached in the wrong manner. This plan was developed with the protection and preservation of property rights and values in mind.

The comprehensive plan identifies the tools, programs, and methods necessary to carry out the recommendations. Nevertheless, the implementation of the development policies contained within the plan are dependent upon the adoption of the plan by the governing body, and the leadership exercised by the present and future elected and appointed officials of Harvey County.

Plan Components

Plan Preparation

Kansas State Statutes provide that certain elements may be included in a comprehensive plan. A "Comprehensive Plan," is defined in K.S.A. 19-2958.

The plan was prepared under the direction of the Harvey County Board of Commissioners, along with the assistance and participation of county staff, Planning Commission and Board of Zoning Appeals,

The Harvey County Comprehensive Plan is comprised of the following chapters and sections:

- Introduction
- Community Engagement
- Population
- Housing
- Economics and Economic Development
- County Facilities
- Educational Facilities

- Parks, Recreation, and Attractions
- Public Safety
- Public Health
- Communications, Utilities, and Energy
- Hazards
- Natural Resources and the Environment
- Land Use
- Transportation
- Implementation

The comprehensive plan is an information and management tool for county leaders to use in their decision-making process when considering future developments. This information is the basis for Harvey County's evolution as it achieves its physical, social and economic goals.

County Jurisdiction

The Harvey County Board of Commissioners, which is a board of elected officials, govern and are supported by county staff. Each incorporated community in Harvey County also has elected officials and officers overseeing how their community is governed.

The planning and zoning jurisdiction of Harvey County, pursuant to K.S.A. Statutes 19-2960, includes all of the unincorporated portions of the county.

The 2000 Plan

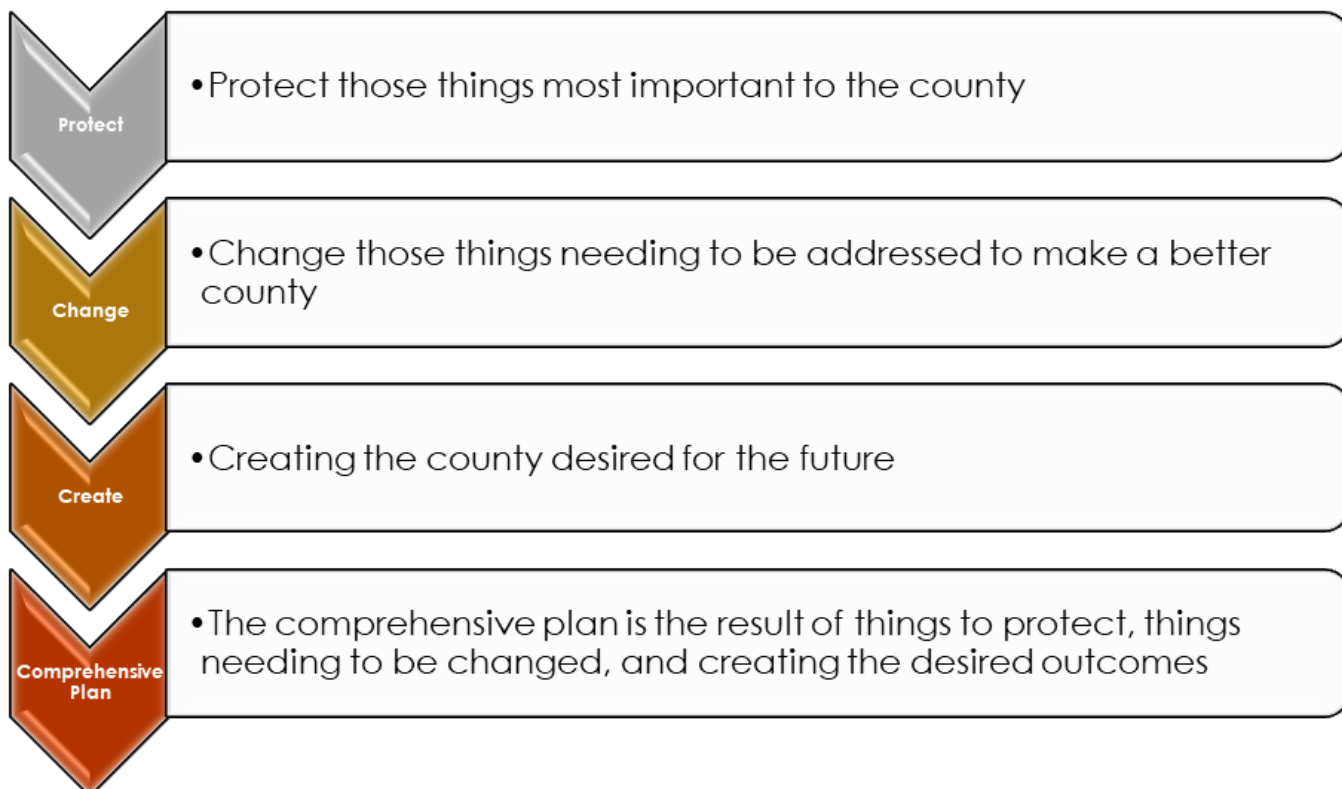
The county's comprehensive plan, adopted in 2000, was based upon an overarching vision statement and a list of actionable goals. Both the vision and the goals were identified by the people of Harvey County during visioning sessions. These extensive visioning exercises occurred during publicly attended work sessions.

Participants at the first of two work sessions identified what they believed was worth protecting, what needs to be changed, and what needs to be created. These three topics were taken into consideration when forming the vision statement. The topics were also formed into goals, which are still relevant today and will continue to be so into the future. Listed below are the topics used to create the goals and vision statement in the 2000 Comprehensive Plan.

Protect

The county has worked to protect the following items and policies during the 2000 Comprehensive Plan.

- Water resources
- Agricultural community
- Natural resources – land, water, air
- Infrastructure supports population



- Current zoning laws
- Maintain Agriculture areas
- Development on country roads
- Equus Beds – Water
- Air and soil pollution
- Erosion and flooding (Too much covered surface – parking lots, etc.)
- Water and land
- Open spaces and rec. land
- Airspace – one mile buffer at least for approaches
- Protect against industry in I-35 corridor
- Developments keep rural atmosphere
- Manage growth
- Agriculture ground
- Industrial sites with infrastructure to sites and developed
- Land use regulations for cities to control with county approval
- Create industrial growth in planned areas
- Create zoning influence areas around incorporated areas
- Guidelines for development around airport
- To support planned population growth in the urban fringe
- Urban & rural live together to protect our environment
- Allow shared lagoons with smaller lots
- Identify areas for specified development
- Buffer zone controlled or joint control
- Keep urban growth near the city (within 2 miles)
- Economic opportunity (diversified)
- Consider county unit system
- Diverse housing opportunities
- Controlled rural subdivisions close proximity to cities (2-3 miles –urban fringe)

The 2024 Plan

The use of “To Protect”, “To Create” and “To Change” during the past two decades has been critical to the development of Harvey County and the development of their zoning regulations. These concepts will be carried forward into the next planning period but with specific modifications determined during this process.

Change

The following items listed were identified as issues to change during the planning period from the 2000 Comprehensive Plan.

- County take over road system
- 40 acre requirement
- Cities have ability to support controlled growth
- Extra-territorial zoning
- Widen I-135 corridor, ½ mile either side of Spencer
- More local control
- One house per 80 acres
- Metro licensing – contractors, developers
- Encourage youth to remain by creating the proper environment through jobs, etc.
- Limit large lots
- Denser clusters
- Preserve farmland
- Keep commercial-industrial in cities

Create

The following items listed were identified as issues to create during the planning period from the 2000 Comprehensive Plan.

- Suburban housing comply with acceptable housing codes
- Review suburban acreage requirements
- Review standards for manufactured housing
- Water district west of interstate
- Guidelines for development I-135 corridor area

Page Intentionally Left Blank



Chapter 2 Community Engagement

Engagement

During the planning process, the importance of community engagement is knowing, recording, and acknowledging what residents think of their county in order for the comprehensive plan to truly become a plan for the county.

Participation Methods

Public participation was designed as a major component of this plan. Opportunities for the community to participate included: Focus groups, town hall meetings, project website, and a county wide survey.

Focus Groups

Focus group meetings were held with key Harvey County leaders and organizations. The focus groups were chosen for their involvement and impact on the Harvey County residents. The planning team met with 11 different focus groups from Harvey County.

- Harvey County Health Department
- Harvey County Board of Commissioners
- Harvey County Administrator
- Harvey County Real Estate Professionals
- Harvey County Emergency Management Professionals
- Harvey County Road and Bridge Department
- Harvey County School Administration and

representatives

- Ground Water Management District 2 representatives
- Harvey County Department of Aging
- NMC Health Administration
- Representatives of Harvey County Farm Bureau
- Harvey County Council of Governments

The input received reflected the field in which these organizations focused their efforts.

Board of County Commissioners

The Board of Commissioners believe Harvey County is an excellent place to live due to:

- The work ethic of its people
- Low cost of land
- Fiscal responsibility
- Low cost of utilities
- Geographic location
- Proximity to highways

The Board of Commissioners had concerns regarding Harvey County, including:

- High property taxes
- Aging facilities
- Suitable housing
- Transportation to services
- Broadband access
- Water quality and scarcity
- Growth pressure from Wichita

The commissioners believe Harvey County being a bedroom community for surrounding communities is both a positive and negative. Many residents work in Wichita, Hutchinson, McPherson, and Salina but live in Harvey County. This can be a boon for the Harvey County economy, but can also take money out of Harvey County as it is easy access for residents to shop in other communities.

The commissioners would like to see an increase in housing options, more amenities to draw and keep people in the county, more jobs, and fiscal planning to keep the county competitive with surrounding communities and counties.

Council of Governments

The Council of Governments is an organizational group of Harvey County community leaders. This focus group commented on what they believe was the assets and weaknesses in Harvey County. The council believe the assets revolved around the people of Harvey County. The following were what the Council of Government believe draws people to Harvey County:

- Small-town feel
- Transportation routes make county highly accessible
- Good retirement options

The Council of Governments believe the location of the county was both a negative and positive; the county is an attractive location near many amenities of the bigger cities, but, the location also means people may find shopping, schools, and other services easier outside of Harvey County. The Councils other concerns were:

- Water scarcity;
- Lack of housing, and;
- EMS service in rural areas

County Administrator

The Administrator is hands on with efforts to maintain and grow the county. In doing so, the Administrator expressed preserving the balance between responsible development and agriculture. In order to thrive, agriculture must be supported and protected. Balancing between development and agriculture also means working within development pressure from Wichita; the county cannot survive without Wichita. In his opinion, "...a rising tide raises all ships; regional growth is a good thing."

The Administrator believes growth in the county should be done so to retain and attract youth to the county. Students attending Hesston or Bethel College often leave the county after graduating. Retention efforts should be focused on housing and recreation.

The concerns identified by the County Administrator were related to financing:

- Funding facilities
- Funding infrastructure
- Staffing
- Tax allocations

Real Estate Professionals

Rural homes in Harvey County are in high demand; realtors believe the demand is larger than the supply of available homes. The lack of housing is evident in both the amount of rentals as well as the low number of houses on the MLS. According to this focus group, a 3 bedroom, 2 bath home priced at \$175,000 or less, on 2-5 acre lots were the most requested by potential buyers. Per Harvey County records, from 2017 to 2021, there was an average of 16 new homes built per year in rural Harvey County. An average of 32 home sales were reported per year to the zoning office in the rural area.

Other issues identified by the realtors include the following:

- Perception from developers on Harvey County being hard to build in. Issues include strict zoning regulations, or septic installation issues due to soil types
- Not enough inspectors
- Not enough contractors
- Not enough appraisers

Moving into the future, realtors would like to see the middle income housing freed up.

Farm Bureau

Agriculture is the backbone of Harvey County. Preservation of farm land has always been one of the top priorities for Harvey County. The representatives of Harvey County farmers expressed what they want to protect:

- Agriculture is of paramount interest
- Private property rights
- Encroachment from Sedgwick County and the Wichita Metro Area

The farmer representatives did have a desire for balanced growth. They believe growth must occur to keep young people in the county and attract workforce. In their opinion, a long view of the county is the most important.

Town Hall Meetings

The town hall meetings were a large part of the county-wide engagement process undertaken during the project timeline. At these meetings, attendees were asked to rate the strengths, weaknesses, opportunities, and threats of twelve topics relating to Harvey County as a whole. These twelve topics were Economic Development, Education, Energy, Hazards, Housing, Land Use, Natural Resources, Parks and Recreation, Public Health, Public Safety, and Transportation. The public meetings were held:

- January 12, 2022 at 7:30 pm at the West Park Community Building
- January 13, 2022 at 7:30 pm at the Meridian Center
- January 14, 2022 at 7:30 pm at the Camp Hawk Shelter

The strengths, weaknesses, opportunities, and threats of each topic are listed in Figure 2.1.

Project Website

A project website was established for the Harvey County Comprehensive Plan. The project website served as a means to notify people about the survey, provide updates on the status of the project, and as a medium for people to ask questions. In addition, the project website provided a location to upload links to parts of the comprehensive vision plan as they were completed and reviewed. The site was turned off at the end of the survey.

Countywide Survey

SurveyMonkey, a web based survey tool, was utilized for gathering specific input on Harvey County. The survey process allows individuals to provide input while remaining totally anonymous. The survey was advertised using specially designed cards, announcements on the project website, and on posters hung up throughout the county.

A total of 495 persons completed the countywide survey. The survey data helped to identify what people want protected, what needs to be changed, and what makes Harvey County a

special place to live. The results are listed in order of importance.

Complete results of the survey can be found in the appendix. Answers that were inappropriate were not included in the results. Records of such answers can be requested by the county.

What needs to be protected in Harvey County?

- Rural and small town life
- Agriculture
- History
- Outdoor recreation; people's values (tied)
- Downtowns/Main Streets
- Community pride and quality of life
- Jobs
- Schools; water (tied)
- Safety; Services (tied)
- Infrastructure
- Opportunity to grow
- Housing; affordability (tied)
- Diversity
- Grocery stores

What needs to be changed for Harvey County to succeed into the future?

- Lower taxes
- More jobs
- More amenities (restaurants, shopping, entertainment)
- Support for businesses; housing options (tied)
- Infrastructure
- Economic development strategy
- Revitalizing towns for aesthetic improvement
- Transportation options; fear of change (tied)
- Water and utilities costs
- Schools
- Building up community pride
- Support for agriculture; hours of services; support for low income persons (tied)
- Recreation opportunities
- More support for renewable energy
- Housing acreage minimum; diversity; support for services (tied)
- Support for housing; food access (tied)
- Youth retention; broadband access (tied)
- Increasing the workforce
- Facilities; collaboration (tied)

What makes Harvey County a special place to live?

- Rural and small town living
- People

Figure 2.1: Responses from Town Hall Meetings

	Strengths	Weakness	Opportunity	Threat
Economic Development	<ul style="list-style-type: none"> • Agricultural land • Open lots for development • Central location between major communities • Regional road networks • Logistics park 	<ul style="list-style-type: none"> • Lack of building space for new business • Support for existing business • Lack of Main Street business • High taxes • Internet access 	<ul style="list-style-type: none"> • Provide space for business growth • Market as a place to retire • Support more local businesses • Revitalize downtowns 	<ul style="list-style-type: none"> • Lack of workforce • Pull from Wichita
Education	<ul style="list-style-type: none"> • Leadership • Small class sizes • Vocational schools 	<ul style="list-style-type: none"> • Facilities • Parent involvement 	<ul style="list-style-type: none"> • More preschool and childcare • Opportunities for graduates to stay • FFA programs • Vo-Tech programs 	<ul style="list-style-type: none"> • Falling behind other districts • Funding
Energy	<ul style="list-style-type: none"> • Oil/ Gas Production • Renewable Energy 	<ul style="list-style-type: none"> • Land Available for Renewable Energy 	<ul style="list-style-type: none"> • Renewable Energy Production 	<ul style="list-style-type: none"> • Renewable Energy Production
Hazards	<ul style="list-style-type: none"> • Response time by Emergency Management 	<ul style="list-style-type: none"> • Water Pollution & Recharge • Access for Fire Departments 		<ul style="list-style-type: none"> • Floodplain Increasing • Silting of Lakes
Housing	<ul style="list-style-type: none"> • Landlord Friendly • Rental Market 	<ul style="list-style-type: none"> • Housing Stock options for all incomes • Funding availability to rehabilitate homes 	<ul style="list-style-type: none"> • Housing for all incomes • Rural Housing Development • Funding for housing Rehabilitation • High Density Housing 	<ul style="list-style-type: none"> • Aesthetic of low income housing communities • People leaving county because of lack of options
Land Use	<ul style="list-style-type: none"> • Agricultural Land • Open Lots in Communities for Development 	<ul style="list-style-type: none"> • Resistance to change • 40 acre rule • Sewage Lagoons 	<ul style="list-style-type: none"> • Smaller lots outside city limits • Hemp Regulations • Protection of farm ground • Local production of goods 	<ul style="list-style-type: none"> • Township road not able to handle development • Development on Agricultural Land
Natural Resources	<ul style="list-style-type: none"> • Water 	<ul style="list-style-type: none"> • Regulations on Land Use 	<ul style="list-style-type: none"> • Clean Water Ways • Recycling 	<ul style="list-style-type: none"> • Quality of water • Water access • Wichita using water • Runoff
Parks & Recreation	<ul style="list-style-type: none"> • Parks & Recreation 	<ul style="list-style-type: none"> • Pedestrian Safety • Limited recreation opportunities • Awareness of facilities 	<ul style="list-style-type: none"> • Increase hunting opportunities • Get youth involved with outdoors • Trail connectivity 	<ul style="list-style-type: none"> • Funding • More options in other communities
Public Health	<ul style="list-style-type: none"> • County Health Dept. • Hospital & Facilities • Nursing 	<ul style="list-style-type: none"> • Lack of workforce • Access to healthy food • EMS Service in rural areas 	<ul style="list-style-type: none"> • Medicaid expansion • Funding community gardens & farmers markets 	
Public Safety	<ul style="list-style-type: none"> • Emergency services • Communication amongst departments 	<ul style="list-style-type: none"> • Lack of street lights • Finding volunteers 	<ul style="list-style-type: none"> • Education of what emergency services provides 	<ul style="list-style-type: none"> • Crime • Safety on rural roads / increased traffic
Transportation	<ul style="list-style-type: none"> • Regional and national road network • Airport • Road & Bridge Dept. responsive to needs 	<ul style="list-style-type: none"> • Safety for non-drivers • Maintenance of roads • Bridge conditions • Railroad stop times • Shortage of senior transportation 	<ul style="list-style-type: none"> • Road Maintenance • Transportation for non-drivers • Amtrak expansion • Amazon distribution 	<ul style="list-style-type: none"> • Condition of bridges • Funding maintenance

- Proximity to big cities
- Safety
- Services
- Cost of living
- Amenities
- Quality of life
- Traffic is not congested
- Schools
- Natural resources
- History; agriculture (tied)
- Jobs; diversity; stability (tied)

Major Insights from Engagement Process

All of the community engagement points to a handful of critical issues needing to be addressed in the future. These issues are:

- Protect the rural and small town character in Harvey County
- Protect the local jobs and economy and add jobs where possible
- Protect agriculture
- Create more opportunities through and addition of more service and retail industries such as restaurants, shopping, and entertainment
- Protect the natural resources of Harvey County - specifically the sandhills and the equus beds
- Protect the community pride found in the county
- Bolster the local school district and protect them from falling behind surrounding districts
- Protect the oil and gas industry in the county
- Create opportunities to lower taxes while protecting the existing services found in the county
- Protect hunting habitat
- Protect the local accessibility to water from the Equus Beds
- Protect the viewsheds of Harvey County
- Protect agricultural lands from residential encroachment
- Create opportunities for new housing within and adjacent to the communities of Harvey County
- Create opportunities for development to be located near the communities or along paved or highly maintained county roads.
- Create opportunities for commercial and industrial growth in planned areas
- Protect the public by enhancing local fire and EMS services
- Protect the aging facilities within and owned by Harvey County from becoming obsolete and dilapidated

- Create opportunities for enhanced broadband service within Harvey County
- Create policies to assist in protecting the existing water supply and quality

Protect

To preserve or guarantee by means of formal or legal measures.

With Harvey County, the issues under protect represent issues the county residents see as having value and being critical to their way of life.

Change

To make (someone or something) different; alter or modify.

Within Harvey County these issues are viewed as policies and activities not being undertaken currently and need to be added or enforced if in place.

Create

Bring into existence or to cause (something) to happen as a result of one's actions.

Protect, Change, and Create - 2023

This comprehensive plan will continue the concept started in 2000 of "Protect", "Change" and "Create" that was used to create the goals and vision statement for the 2000 Plan. The 2023 version will contain those issues from 2000 which are still relevant in 2023; plus, any new issues.

Protect 2023

The county has worked to protect a number of assets since 2000 and those items should continue to be protected. The following items and policies are still important to the citizens of the county, and should be protected.

- Water resources
- Rural character
- Agricultural community
- Protect the Sandhills region of Harvey County
- Infrastructure supporting the population
- Current zoning laws
- Maintain agriculture areas
- Minimize development on rural roads
- Equus Beds – Water

- Air and soil from pollution
- Areas from erosion and flooding (Too much covered surface – parking lots, etc.)
- Water and land
- Open space and recreation land
- Airspace – one mile buffer at least for approaches
- Protect against industry in I-35 corridor
- Agriculture ground
- Industrial sites with infrastructure to sites and developed
- The local jobs and economy
- The community pride found in the county
- The oil and gas industry in the county
- Hunting habitat
- The viewsheds of Harvey County
- The public by enhancing local fire and EMS services

Change 2023

The following list is what is a focus for change of the County for the 2024 Comprehensive Plan.

- Cities have ability to support controlled growth
- Widen I-135 corridor, ½ mile either side of Spencer
- More local control
- Minimum acreage requirement for residential sites
- Metro licensing – contractors, developers
- Encourage youth to remain by creating the proper environment through jobs, etc.
- Denser clusters
- Preserve farmland
- Keep commercial-industrial in cities
- County take over road system

Create

The county should focus on these items to create. Some items are carried over from the 2000 Comprehensive plan. The following list is the focus of the current plan.

- Managed growth
- Developments keeping a rural atmosphere
- Suburban housing complying with acceptable housing codes
- Review suburban acreage requirements
- Review standards for manufactured housing
- Guidelines for development – I-135 corridor area
- Guidelines for development around airport
- Supporting planned population growth in the urban fringe
- Urban & rural living together to protect our

- environment
- Industrial growth should be limited to urban or planned areas and not agricultural preservation areas.
- Zoning influence areas around incorporated areas
- Require shared lagoons or sewer districts for smaller lots
- Rural water districts for additional areas of the county
- Areas for specified development
- Buffer zone controlled or joint control (Airport)
- Diverse housing opportunities
- Rural subdivisions in close proximity to cities (1 to 2 miles – urban fringe)
- Opportunities for enhanced broadband service within Harvey County
- Policies to assist in protecting the existing water supply and quality
- Opportunities for new urban scale housing within and adjacent to the communities of Harvey County
- Opportunities for development to be located near the communities or along paved or highly maintained county roads.
- Opportunities to lower taxes while protecting the existing services found in the county
- More opportunities through and addition of more service and retail industries such as restaurants, shopping, and entertainment

Goals and Action Items

Planning focuses upon ways of solving existing problems within the county, and providing a management tool enabling Harvey County citizens to achieve their vision for the future. Change is continuous, therefore Harvey County must decide specific criteria to be used to judge and manage change. Instead of reacting to development pressures after the fact, the county, along with their strategic vision, can better reinforce the desired changes, and discourage negative impacts undermining the vision. A shared vision allows Harvey County to focus its diverse energies and minimize conflicts in the present, and in the future.

A key component of a comprehensive plan is the goals and policies. Harvey County's goals and policies attempt to address various issues regarding the questions of "how" to plan for the future.

Goals are desires, necessities and issues to be attained in the future. A goal should be established in a manner that allows it to be accomplished.

Goals are the end-state of a desired outcome. Goals also play a factor in the establishment of policies within a county. In order to attain certain goals and/or policies within county government, they may need to be modified or changed from time to time.

Action Items are measurable, definable steps that lead to the eventual completion of the goal. They are specific statements of principle or actions that imply a direction needing to be undertaken.

These policies will synthesize the information from the goals, as well as the responses from the participants of the various input processes. Policies play an important role in the comprehensive plan because they direct the different actions that will need to be taken to meet the goals.

It is important for counties to establish their goals and policies in a manner allowing for both long-term and short-term accomplishments. The short-term goals and policies serve several functions:

- Allow for immediate feedback and success, which fuels the desire to achieve additional goals and better policies
- Allow for the distribution of resources over time thus assuring a balanced use of public investment
- Establish certain policies that need to be followed before the long-term goals can be accomplished

Harvey County Comprehensive Plan Goals and Action Items

The goals and policies for the Harvey County Comprehensive Plan will be contained throughout the following Chapters. Each Chapter shall contain the pertinent goals and policies for the Chapter.

Goals are intended as a long-range desire; however, as the Plan is implemented and different things in the world around Harvey County changes, then the goals need to be modified to address the new direction and factors. Therefore, goals need to be flexible to ensure success and positive outcomes.

Overall Goals of the Comprehensive Plan

Goal 1

Promote an economic development strategy that enhances the economic vitality of the county, encourages reinvestment in downtown's, and balances economic growth by protecting the rural economic and natural resources of the county.

Goal 2

Promote compact urban development in new areas adjacent to existing cities and discourage the spread of scattered new urban uses in the urban fringe.

Goal 3

Direct new development to designated growth areas to protect and conserve agricultural and environmental resource areas, preserve open space, and provide public facilities and services efficiently and cost effectively.

Goal 4

Preserve agricultural land for the production of agricultural products and promotion of related agribusiness.

Goal 5

Protect, maintain, and restore the environmental resources [soil, Equus beds aquifer, surface water, and air] and natural ecosystems, by promoting land use practices that are in balance with, and minimize adverse effects on, the natural environment.

Goal 6

Preserve the historic, cultural, scenic, and architectural heritage of the county.

Goal 7

Advocate the use of site plans and conservation subdivision design principles to ensure that new development preserves and protects the natural environment and rural character of the county.

Goal 8

Promote inter-jurisdictional cooperation in planning and land use decisions, along with coordination with other agencies involved in planning, resource management, economic development, and community development.

Page Intentionally Left Blank



Chapter 3 Population

Population

Population drives all aspects of a county including: housing, employment, and fiscal stability. Harvey County needs to understand where the county has been, where it is currently, and where it appears to be going.

Data Sources

The United States Census Bureau's American Community Survey (ACS) is the primary data source for this chapter. While the US Census Bureau's decennial census, which has taken place every 10 years since 1790, is well-known, difficulties with Census collection in 2020 have delayed the release of more detailed information. Therefore, analysis herein must rely on ACS data which are estimates based on the US Census Bureau's five-year running survey of all Americans. The primary data sets are the 2006-2010 data series for 2010, and the 2016-2020 data series for 2020.

Historic population trends aid in identifying where the populations may grow in the future as well as determining potential impacts on demands for goods, services, public safety, education, and other needs within the county. In addition they provide a basis for future land use and development decisions. However, population projections are estimations and unforeseen factors can affect projections significantly.

Trends and Analysis

The US Census Bureau's official decennial population counts for 1980 through the 2020 for

Harvey County and its municipalities estimates can be found in Figures 3.1 and 3.2 on the following page. Figure 3.1 looks at the largest community of Newton, the unincorporated area, and the county as a whole. Figure 3.2 contains the population data for every other community in the county for the same period. This data provides a look at where the county has been and is the basis for the projections of future population levels later in the chapter.

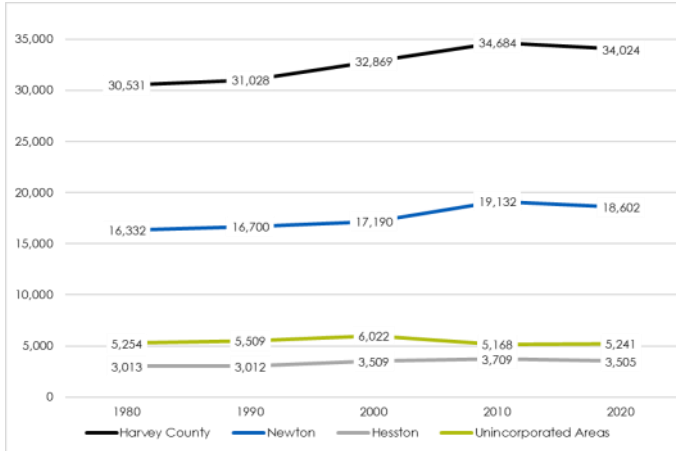
Figure 3.1 indicates:

- Harvey County grew by 11.4% (3,493 persons) from 1980 to 2020
- The unincorporated portions of Harvey County lost population -0.25% (-13 persons)
- Newton increased in population by 13.9% (2,270)
- The peak population for the county was in 2010 at 34,684 persons.

Figure 3.2 shows:

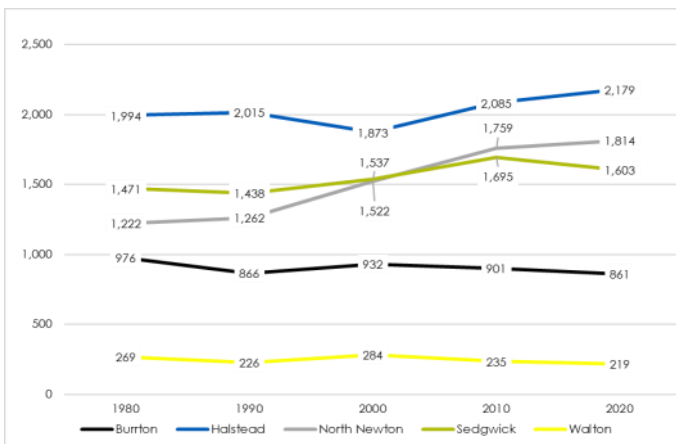
- A mix of growth and decline amongst the smaller communities in the county
- Burrton had the greatest decline at 11.8% (115 persons)
- The greatest increase was North Newton at 48.5% (592 persons)

Figure 3.1: Population Trends 1980-2020 for Harvey County, Unincorporated Areas, Newton and Hesston



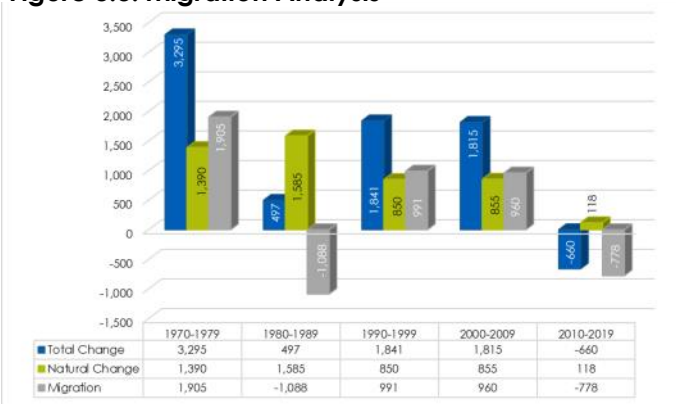
Source: U.S. Census Bureau 1980 - 2020

Figure 3.2: Population Trends 1980-2020 for Harvey County's Smaller Communities



Source: U.S. Census Bureau 1980 - 2020

Figure 3.3: Migration Analysis



Source: Kansas Vital Statistics, US Census Bureau, American Community Survey

Components of Change

Population change includes both natural increase or decline (the difference between births and deaths) and migration (the difference between people moving in and out of a community). For example, many communities experience natural increase (more births than deaths) yet face a declining population due to out-migration.

Migration Analysis

Migration analysis considers the dynamics of population shifts in the two key components of population change: migration and natural change (the difference between births and deaths).

Figure 3.3, on the facing page, indicates the overall population change, countywide, as well as the two key components of population change, migration and natural change.

Overall from 1970 to 2019:

- Harvey County increased in population
- The overall increase was associated with in-migration, which saw 1,990 people move into Harvey County
- During the 49 year period births exceeded deaths in every decade
- During the time period, there were 4,798 more births in Harvey County than deaths

Age Structure Analysis

Age structure is an important component of population analysis. By examining age structure, one can determine a key dynamic affecting the population change. Each age group affects the population in a number of different ways. For example, the existence of large younger age groups (20-44 years) means there is a greater ability to sustain future population growth compared to large older age groups, since this age group tends to have children as well as participating in the workforce.

Figure 3.4 contains the age group structure for Harvey County in 2011 and 2021. Age structure provides an understanding of where some of the population shifts are occurring. Reviewing population in this manner permits a more detailed analysis of which specific groups are moving in and out of the county. Negative changes in a group indicate out-migration or a combination of out-migration and deaths.

Figure 3.4: Age and Sex Characteristics 2011-2021

Male and Female Populations					
Age in 2011	2011 population	Age in 2021	2021 population	Cohort Change	% Change
		0-4	1,946	1,946	N/A
		5-9	2,282	2,282	N/A
0-4	2,292	10-14	2,599	307	13.4%
5-9	2,252	15-19	2,607	355	15.8%
10-14	2,606	20-24	1,999	-607	-23.3%
15-19	2,648	25-29	1,854	-794	-30.0%
20-24	2,125	30-34	2,136	11	0.5%
25-29	1,858	35-39	1,882	24	1.3%
30-34	1,875	40-44	1,849	-26	-1.4%
35-44	3,817	45-54	3,803	-14	-0.4%
45-54	4,986	55-64	4,448	-538	-10.8%
55-64	4,010	65-74	3,470	-540	-13.5%
65-74	2,571	75-84	1,994	-577	-22.4%
75 & older	3,352	85 and over	1,137	-2,215	-66.1%
Total	34,392		34,006	-386	-1.1%

Source: U.S. Census Bureau 2010, ESRI Business Analyst 2021

Harvey County saw growth in four age groups from 2011 to 2021:

- 10 to 14 group
- 15 to 19 group
- 30 to 34 group
- 35 to 39 group

The 0-4 group and 5-9 groups always indicate an increase, since these individuals were not alive for the 2011 ACS Survey.

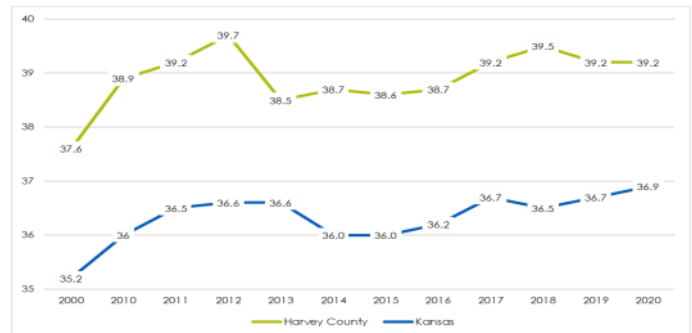
Overall, there was a decrease of 386 people or – 1.1%. The age groups from 2011 showing a declined by 2021 and are as such:

- The group with the greatest loss was the 85+ years (66.1%) or –2,215 people
- 85+ losses can be attributed to two causes: 1) people moving on after 75 years to other communities and senior care facilities, or 2) a dying population base

Median Age

Figure 3.5 on the following page, shows the median age for Harvey County and the state of Kansas between 2000 and 2020. The following are the key items within the figure:

- The median age in Harvey County increased from 37.6 years to 39.2 years
- This increase equaled 4.3% for the entire period

Figure 3.5: Median Age 2000-2020


Source: US Census Bureau 2020

- The peak median age in Harvey County was in 2012 at 39.7
- The overall median age across Kansas increased by 1.7 years or 4.8% for the same period
- Kansas and Harvey County saw their median age increase at similar rates
- Harvey County has shown indications of stabilizing and even a trend toward decreasing; while Kansas is indicating steady increases
- Attracting younger families during the planning period will aid in lowering the median age in coming years

Dependency Ratio

The dependency ratio examines the portion of a community's earnings that is spent supporting age groups typically and historically dependent on the incomes of others.

- < 1: 1 Independent resident is able to support more than 1 Dependent resident
- =1: 1 Independent resident able to support 1 Dependent resident
- >1: 1 Independent resident able to support less than 1 Dependent resident

$$\frac{(\%18 \text{ years and younger} + \%65 \text{ years and older})}{\text{Divided by}}$$

- ratio of 0.58 (36.2%/63.8%); however, by 2020 the ratio had increased to 0.75 (43.0%/57.0%)
- The ratio increased during the time period and needs to be monitored in the future. If the ratio continues to increase toward 1.00, then the county is seeing its working age groups decrease significantly.

Ethnicity

During the past decade, Harvey County has seen a shift in the ethnicity of its people. Race and ethnicity are self-identification terms in which residents choose how they identify themselves. Figure 3.7 on the facing page identifies ethnicity for all reporting groups.

Dependency Ratio

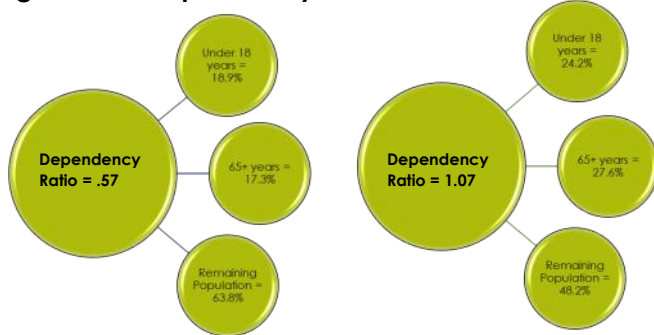
Figure 3.6 indicates the dependency ratios for 2010 and 2020 in Harvey County. The following are key items:

- Persons less than 18 years of age increased by 5.1% between 2010 and 2021
- Those aged 65 years and older increased by 1.7% overall
- In 2010, Harvey County had a dependency

In 2010, the following were the largest ethnic groups Harvey County residents identified as:

- 85.11% white alone
- 10.89% Hispanic (any race)
- 1.76% two or more races
- 1.54% black or African American

Figures 3.6: Dependency Ratio 2010 and 2020



Sources: American Community Survey 2010, ESRI Business Analyst 2021

By 2020, the following were the largest ethnic groups Harvey County residents identified as:

- 80.38% white alone
- 11.92% Hispanic (any race)
- 4.38% two or more races
- 1.75% black or African American

Population Projections

Population projections are estimates based upon past and present circumstances. The use of population projections allows Harvey County to estimate the potential population in future years by looking at past trends. By scrutinizing population changes in this manner, the county will be able to develop a baseline of change from which future

Figure 3.7: Population by Ethnicity 2010-2020

Race	2010		2020		2010-2020	
	Number	% of total	Number	% of total	Net Change	% change
White alone	29,332	85.11%	27,349	80.38%	-1,983	-6.76%
Black or African American alone	530	1.54%	596	1.75%	66	12.45%
American Indian and Alaska Native alone	181	0.53%	183	0.54%	2	1.10%
Asian alone	253	0.73%	260	0.76%	7	2.77%
Native Hawaiian and Other Pacific Islander alone	10	0.03%	10	0.03%	0	0.00%
Some Other Race alone	24	0.07%	82	0.24%	58	241.67%
Two or More Races	607	1.76%	1,489	4.38%	882	145.30%
Hispanic Origin (Any Race)	3,747	10.87%	4,055	11.92%	308	8.22%

Source: U.S. Census Bureau 2010 and 2020

scenarios can be generated. A number of factors (demographics, economics, social, etc.) may affect projections positively or negatively.

At the present time, these projections are the best tool Harvey County has for predicting future population changes. There are many methods to project the future population trends; the projection technique used below are intended to give Harvey County a broad overview of the possible population changes potentially occurring in the future.

Population Projections

Population projections are future estimates based upon past and present circumstances. There are different methods commonly used to project future population, with advantages and disadvantages for smaller and larger communities. Several factors (demographics, economics, social, etc.) also affect the relationship between projections and ultimate population levels, positively or negatively.

Trend Line Analysis

Trend Line Analysis is a process of projecting future populations based upon changes during a specified period of time. In the analysis of Harvey County, four different trend lines were reviewed: 2010 to 2020, 2000 to 2020, 1990 to 2020, and 1970

to 2020. A review of these trend lines indicates Harvey County will see varied levels of population changes between now and 2050. The following projections summarize the decennial population for Harvey County through 2050.

Summary of Projections

Three population projection scenarios were selected and include (1) a Low Series; (2) a Medium Series; and, (3) a High Series.

Low = 1990 to 2020

2030	35,502 persons
2040	37,043 persons
2050	38,652 persons

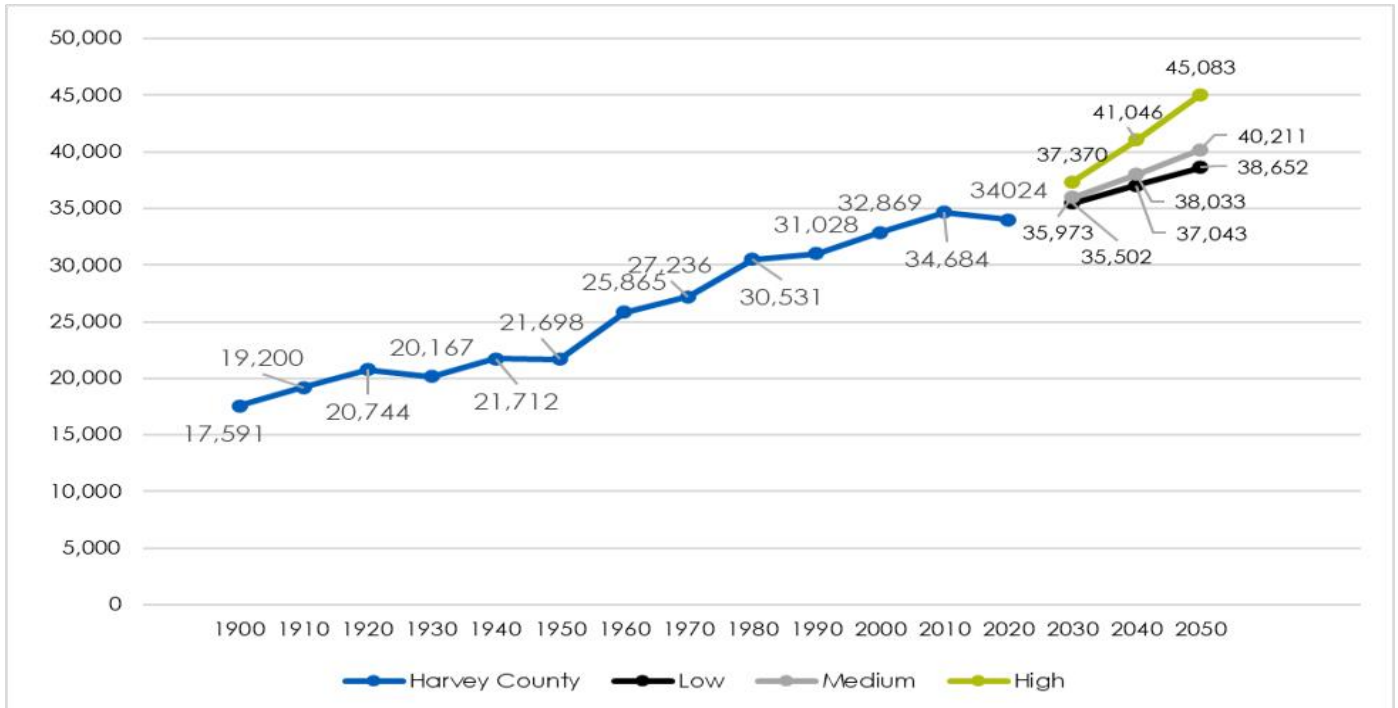
Medium = 2010 to 2020

2030	35,973 persons
2040	38,033 persons
2050	40,211 persons

High = 1970 to 2020

2030	37,370 persons
2040	41,046 persons
2050	45,083 persons

Figure 3.8 Population History and Projections



Sources: US Census Bureau and Marvin Planning Consultants

Page Intentionally Left Blank



Chapter 4 Housing

Housing Profile

The housing profile presents data about past and present housing conditions, while identifying potential needs including provisions for safe, decent, sanitary, and affordable housing for every family and individual residing within the county.

Projecting future housing needs requires several factors to be considered including population change, household income, employment rates, land use patterns, and residents' attitudes. The following tables and figures provide information to aid in determining future housing needs and develop policies designed to accomplish the housing goals for Harvey County.

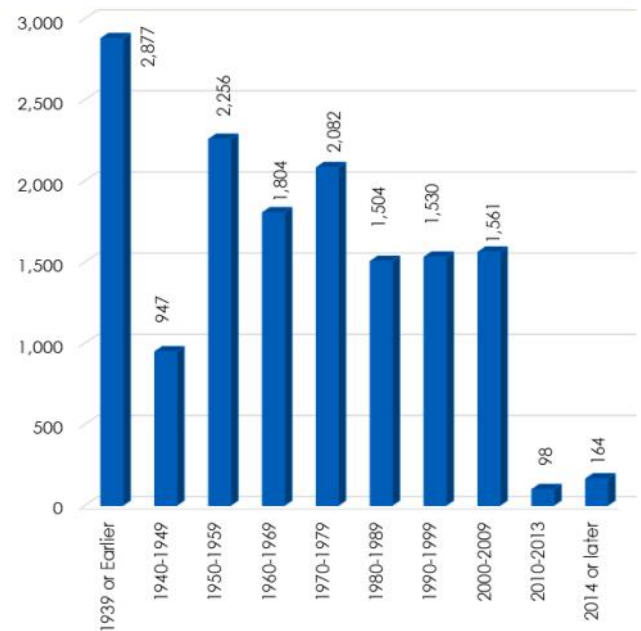
Existing Housing Stock

Analysis of existing housing stock age reveals a great deal about population and economic conditions of the present and past. County-wide housing stock, is important to understand regarding the overall quality of housing available.

Figure 4.1 indicates:

- 2,877 homes, or 19.4% of Harvey County's 14,823 total housing units, were constructed prior to 1940
- The county saw consistent construction activity between 1940 and 2010 with 11,684 (78.8%) homes constructed
- This data indicate the economy was relatively

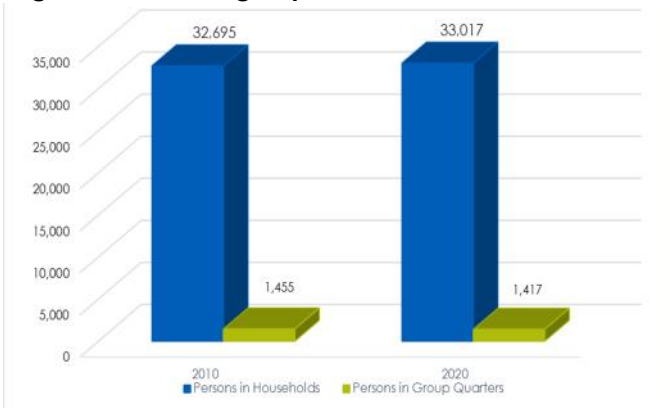
Figure 4.1: Age of Existing Housing Stock



Source: American Community Survey 2020

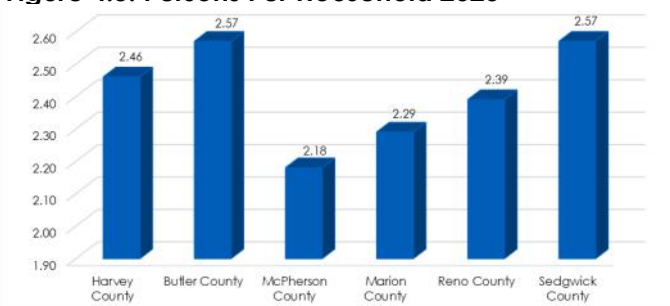
- good during these decades
- Since 2010, the construction of new homes has slowed throughout the county
- A total of 67.2% of all housing units in Harvey County were constructed prior to 1980
- Due to the age of these homes, some may need special weatherization programs

Figure 4.2: Housing Populations 2010-2020



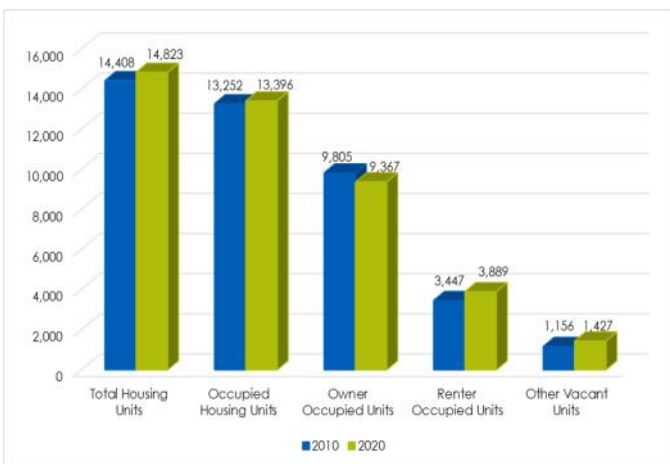
Sources: U.S. Census Bureau 2010, American Community Survey 2020

Figure 4.3: Persons Per Household 2020



Source: American Community Survey 2020

Figure 4.4: Housing Characteristics 2010-2020



Sources: American Community Survey 2010 - 2020

Group Quarters

The Census Bureau classifies all people not living in housing units (house, apartment, mobile home, rented rooms) as living in group quarters. There are two types of group quarters:

Institutional, such as:

- correctional facilities
- nursing homes
- or mental hospitals

Non-Institutional, such as

- college dormitories
- military barracks
- group homes
- missions
- or shelters

Housing Characteristics

Households/Group Quarters

Figure 4.2 examines persons per household and group quarters, the following are the findings:

- In 2020 there were 322 more people living in households than in 2010
- Between 2010 and 2020, the number of people living in group quarters went from 1,455 people in 2010 to 1,417 in 2020

Persons per Household

Figure 4.3 identifies the following:

- Average persons per household in Harvey County was 2.46 in 2020
- The national trend has been towards a declining household size
- The persons per household in Harvey County is more than surrounding counties with the exception of Butler and Sedgwick
- The five county area had an average of 2.42 persons per household

Occupied vs. Vacant Units

Figures 4.4 and 4.5 show occupied vs. vacant housing units statistics. The following are the key items:

- Occupied housing units in the county increased by 2.9% between 2010 to 2020
- An 144 unit increase over 2010
- During the same time frame, vacant housing units increased from 1,156 units to 1,427 units, or 23.4%
- The overall percentage for owner- and renter-occupied units vacancy rates in 2020 were 3.6%

- and 8.7% respectively
- Both showed an increase from 2010

Median Gross Rent

- Median gross rent in Harvey County increased by 31.3% between 2000 and 2010.
- By 2020, it had increased to \$729, or an increase of 62.7% from 2000.
- Median gross rent in Kansas increased by 34.7% between 2000 and 2010.
- By 2020, the state's median monthly gross rent had increased by 73.3% from 2000.
- Harvey County and the state have seen significant growth in median gross rent during the time period.
- Both grew faster than the Consumer Price Index, 50.0% from 2000 to 2020.

Median Value Owner-Occupied Units

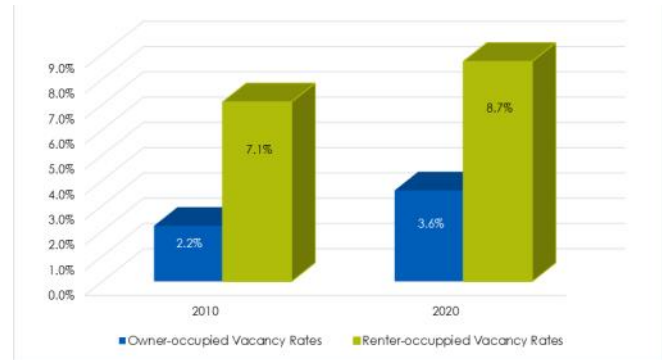
- The median value of owner-occupied housing units from 2000 to 2010 increased from \$76,400
- By 2020, the median value had increased to \$131,000, or an increase of 72.4% from 2000
- During the same time period, the state's median value had increased by 94.6% from \$83,500 to \$157,600
- Harvey County's median value was 83.1% of the state's median value in 2020

Persons Per Household

Figures 4.8 and 4.9 show tenure (owner-occupied and renter-occupied) of households by number and age of persons in each housing unit. The following have been determined:

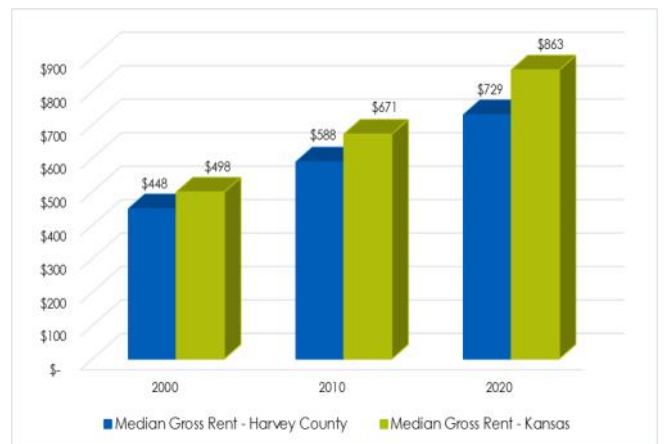
- In 2020, the largest section of owner-occupied housing was in the two-person household, with 3,796 units or 40.5% of the total owner-occupied units
- By comparison, the largest household size for rentals was the one-person household with 1,579 units, or 39.2% of the total renter-occupied units
- In 2020, the age cohorts representing the largest home ownership group were those 45 to 54 years
- Of the total residents living in owner-occupied housing units, 16.8% were between 45 and 54 years of age
- The 35 and 44 years age group was a close second with 15.8% of the total owner-occupied units
- The renter-occupied housing was dominated by two different cohort groups; 25 to 34 (22.2%) and 15 to 24 (15.6%)

Figure 4.5: Occupied vs. Vacant Housing 2010-2020



Sources: American Community Survey 2010 - 2020

Figure 4.6: Median Gross Rent Harvey County and Kansas 2000-2020



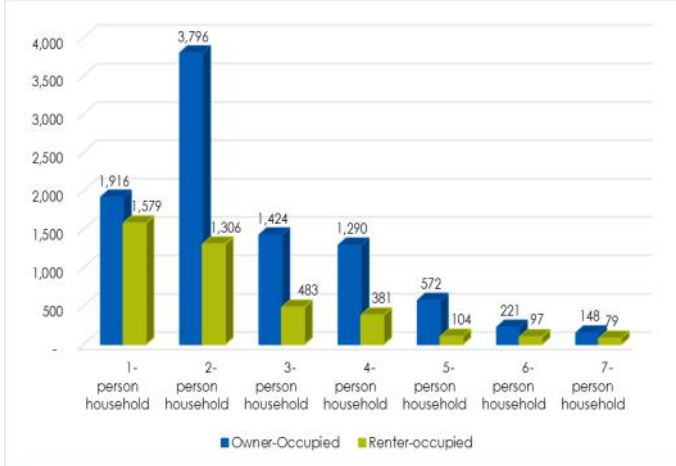
Sources: US Census Bureau 2000, American Community Survey 2010 - 2020

Figure 4.7: Median Value Owner-Occupied Units, Harvey County and Kansas 2000-2020



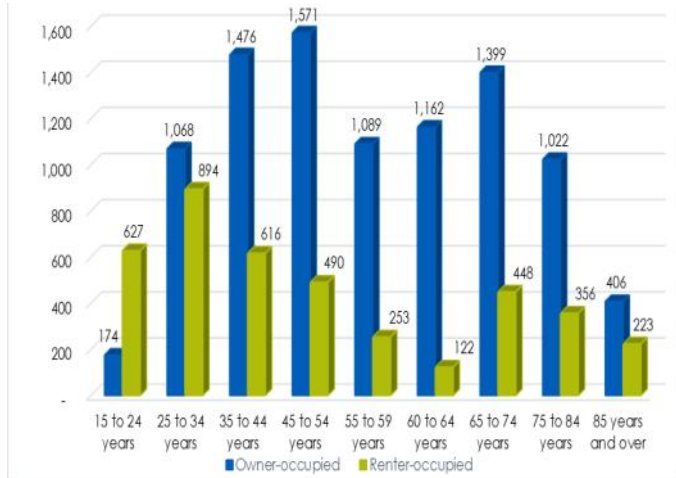
Sources: U.S. Census Bureau 2000, American Community Survey 2010 and 2020

Figure 4.8: Persons By Household Type 2020



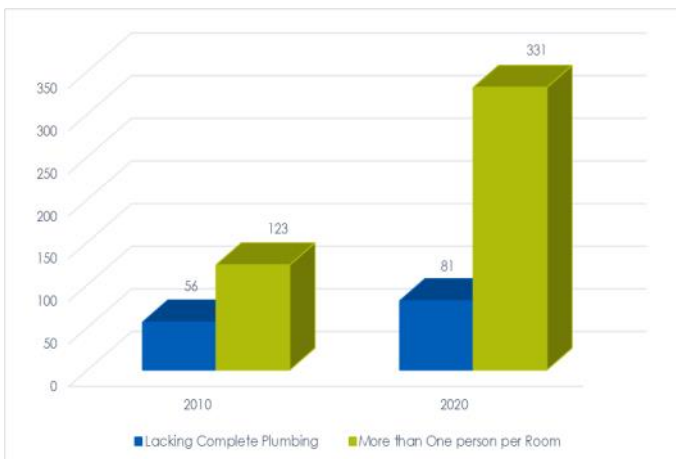
Source: American Community Survey 2020

Figure 4.9: Age By Household Type 2020



Source: American Community Survey 2020

Figure 4.11: Substandard Housing Conditions 2010-2020



Source: American Community Survey 2010 and 2020

- These two cohorts represented 37.8% of all renter-occupied units in 2020.
- Harvey County was comprised of 8,597 1- or 2-person households in 2020, or 64.2% of all households; which represents approximately 6/10 households
- Countywide, households with 5- or more persons accounted for 1,221 units, or 9.1% of the total

Substandard Housing

This criteria, when applied to Harvey County, means:

- 189 units were substandard in 2010, and 412 units were substandard in 2020
- This figure was reached by adding the number of housing units meeting one criterion to the number of housing units meeting the other criterion
- However, the largest amount of substandard units was based on more than one person per room with 123 persons and 331 persons in 2010 and 2020, respectively

Substandard Housing

According to the U.S. Department of Housing and Urban Development (HUD) guidelines, housing units lacking complete plumbing or that are overcrowded are considered substandard housing units. HUD defines a complete plumbing facility as hot and cold-piped water, a bathtub or shower, and a flush toilet; overcrowding is more than one person per room. In addition, anytime there is more than 1.0 persons per room, the housing unit is considered overcrowded, thus substandard.

This data fail to consider housing units having met both criterion and counted twice. Even so, the county should not assume This data overestimate the number of substandard housing. Housing units containing major defects requiring rehabilitation or upgrading to meet building, electrical, or plumbing codes should also be included in an analysis of substandard housing.

County.

Housing Goals and Action Items

Housing Goal H-1

Encourage safe structures.

Action Items:

1. A comprehensive survey of the entire housing stock should be completed every 10 years or as necessary to determine and identify the housing units that would benefit from remodeling or rehabilitation work.
2. Explore grants or programs for repair and clean-up of unsafe rural homes
3. See Housing Goal H-6
4. Develop unsafe structure and nuisance regulations to clean-up structures after fires.

Housing Goal H-2

The Harvey County zoning regulations need to accommodate specific requirements dictated by the courts, financial institutions, etc.

Action Items:

1. Amend county zoning regulations as needed to adhere to mortgage requirements.
2. Amend the county regulations to accommodate special lot size requirements due to governmental purchases of land that create a non-conforming lot.

Housing Goal H-3

Minimize multiple sewer treatment systems per parcel.

Action Items:

1. The new sanitation regulations should examine reducing sewage treatment systems when feasible.

Housing Goal H-4

Review regulations for residential dwellings types allowed as well as their requirements. Example: Include tiny homes, foundation requirements.

Action Items:

1. Within the Land Use Plan, specific housing types should be identified by type and location allowed within the county's jurisdiction.
2. More dense residential units (apartments) should be located within the jurisdictions of the cities.
3. Examine the acceptability of accessory dwelling units within the rural parts of Harvey

Housing Goal H-5

Encourage fire mitigation requirements for Sand Hills Overlay District.

Action Items:

1. Examine potential criterion for elimination of dead vegetation.
2. Develop additional and expanded goals within the next update of the Harvey County Hazard Mitigation Plan.
3. Discuss minimizing development densities within the overlay district.
4. Encourage property owners to work in conjunction with local fire departments to construct fire breaks.

Housing Goal H-6

Consider building codes for electrical, plumbing, and foundations.

Action Items:

1. Research and discuss if limited building codes would be feasible for Harvey County.

Housing Goal H-7

Encourage living in Harvey County.

Action Items:

1. Work with the local communities to promote the county as a great place to live.
2. "Harvey County is Happening Right in the Middle of it All"

Housing Goal H-8

Review and identify rural development zones.

Action Items:

1. Work with all of the additional chapters in this comprehensive plan, especially the Environment and Natural Resource Chapter and the Land Use Chapter.
2. Establish land use policies identifying areas well suited for rural development.
3. Limit development in areas identified as inappropriate for rural development and protect these areas.

Housing Goal H-9

Safe and healthy water for all residents.

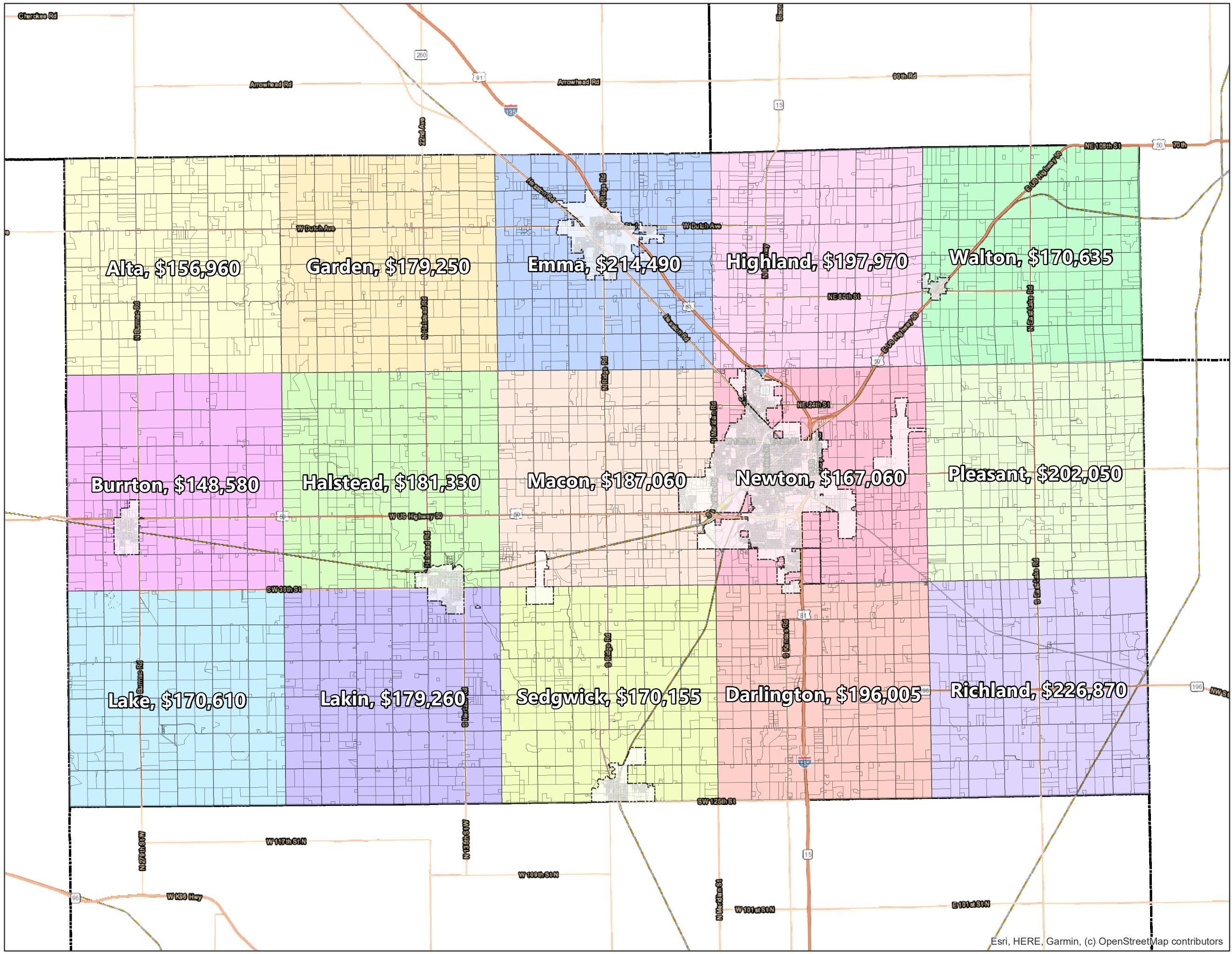
Action Items:

1. Work to expand municipal water systems in Harvey County to areas near and adjacent to the communities.
2. Work to expand the rural water system to parts of the county where municipal systems are unable to reach.
3. Minimize development and the use of hazardous chemicals in environmentally sensitive areas such as the Sand Hills and Equus Beds in order to minimize potential contamination.
4. Continue to protect the Equus Beds from contamination.



Housing within Harvey County

FIGURE 4.12 -
 MEDIAN HOME
 VALUES



LEGEND

- Municipal Boundary
- Parcels
- Alta, \$156,960
- Burrton, \$148,580
- Darlington, \$196,005
- Emma, \$214,490
- Garden, \$179,250
- Halstead, \$181,330
- Highland, \$197,970
- Lake, \$170,610
- Lakin, \$179,260
- Macon, \$187,060
- Newton, \$167,060
- Pleasant, \$202,050
- Richland, \$226,870
- Sedgwick, \$170,155
- Walton, \$170,635

PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



Chapter 5

Economy and Economic Development

Economic Profile

In this section, employment by industry, household income statistics, and commuter analyses were reviewed for Harvey County and State of Kansas.

Income Statistics

Income statistics indicate the earning power of residents. The following data show personal and household income levels for Harvey County in comparison to the state. This data were reviewed to determine whether households experienced increases in income at a rate comparable to the state of Kansas and the Consumer Price Index (CPI).

Figure 5.1, on the following page, shows the number of Harvey County households in different income ranges from 2000 to 2021 according to US Census.

The following is the summary of the graphic:

- In 2000, the most common income range reported was \$50,000 to \$74,999 (22.7% of all households)
- In 2010, the most common income range was \$50,000 to \$74,999 (18.7% of all households)
- In 2021 the most common income range was still \$50,000 to \$74,999 (24.3% of all households)
- Those households earning less than \$15,000

Economic Development

Economic development is a process of investment to expand prosperity in a community. New enterprises and the retention and expansion of existing businesses creates jobs and provides new sources of income. A diversified economic base enables a community to respond to changing economic conditions, improve local incomes, increase job opportunities, and improve the quality of life of a community.

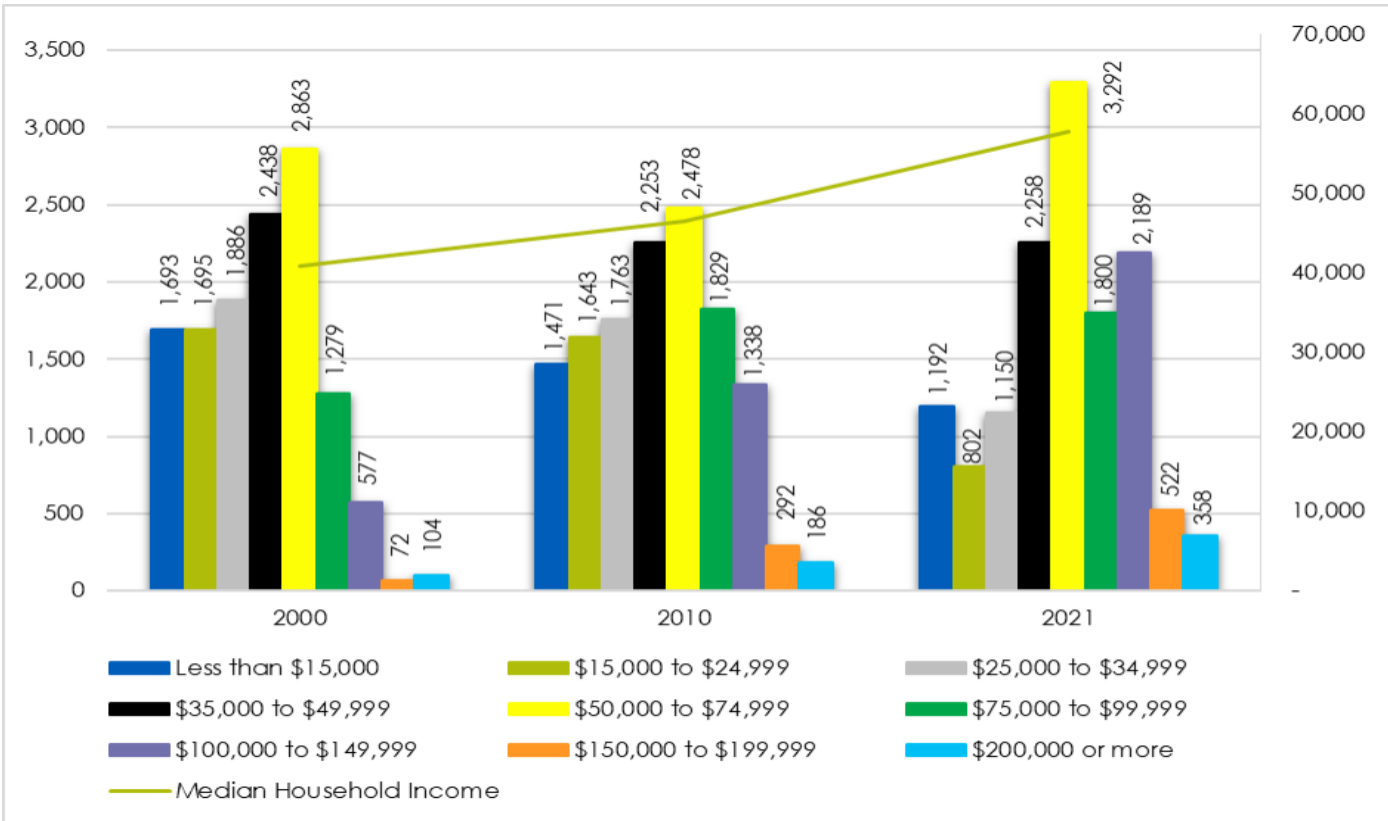
Consumer Price Index

The CPI is used to measure the change in income a consumer would need to earn in order to maintain the same standard of living over time, given changing prices. It is also used to indicate the level of inflation in a nation

accounted for 13.4%, 11.1%, and 8.8% of all households for the three time periods. These households account for the poorest of the poor in the county

- In addition, the households earning less than \$35,000 made up 41.8%, 36.8%, and 23.2% of all households for the time period
- The median household income for Harvey County was \$40,907 in 2000, which was slightly more than the state's median income of \$40,624.
- By 2010, the median household income

Figure 5.1: Household Income 2000 to 2020



Sources: U.S. Census Bureau 2000, American Community Survey 2010, ESRI Business Analyst 2021

increased to \$46,604 (an increase of 13.9%), which was also greater than the state's median household income

- In 2021, the median household income had risen to \$57,823, an increase of 24.1% from 2010
- The median household income in 2021 was slightly less than the state's median household income
- The total increase of median household incomes over the time period was 41.3%
- The CPI, between 2000 and 2021 was 57.4%, indicating household incomes failed to keep pace with inflation
- Households were actually earning less in real dollars in 2021 than in 2000

Income by Source

Figure 5.2, on the following page, indicates personal income by source from 1980 to 2020. Based upon the graphic, the following can be determined:

- Total personal income in 1980 was \$288,732,000 and Farm Income accounted for only \$603,000, or 0.2% of the total
- Total personal income, 1990, increased to \$538,951,000; while Farm Income was \$9,728,000

Farm Income

Farm income- Consists of wages and salaries, employer contributions for employee pension and insurance funds, and proprietors' income in the farm industry (NAICS subsectors 111-Crop Production and 112-Animal Production). Farm personal income comprises the net personal income of sole proprietors, partners, and hired laborers arising directly from the current production of agricultural commodities, both livestock and crops. It excludes corporate farm income, and purchasing services.

Nonfarm Income

- Includes all U.S. nonfarm sole proprietorships that are required to file Internal Revenue Service (IRS) Schedule C (Profits or Loss from Business) of IRS Form 1040 (Individual Income Tax Return) or that would be required if they met the filing requirements.
- Includes all U.S. nonfarm partnerships that are or would be required to file IRS Form 1065 (U.S. Partnership Return of Income).
- Includes all other U.S. unincorporated private businesses— tax-exempt cooperatives providing utility services and farm marketing and purchasing services.

Transfer Payments

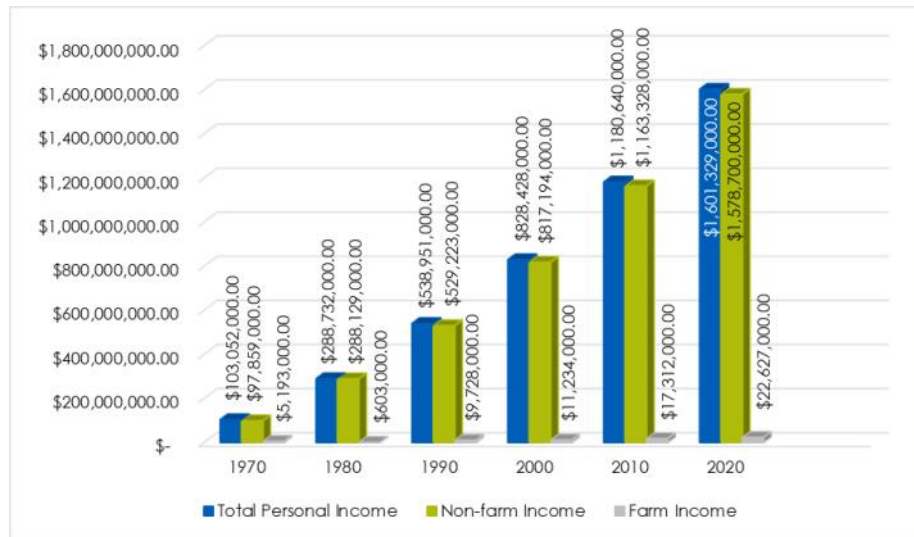
Government transfer payments span a wide range of uses and organizations. The funds for these payments also come from many different sources. However, the most common form of transfer payment is retirement and disability insurance benefits. These payments are made to those who qualify for OASDI benefits, railroad retirement and disability benefits, workers compensation programs and others.

Medical benefits are the second most common form of transfer payments. These types of benefits are government payments made through intermediaries to beneficiaries of medical care. Specifically, medical benefits come from either public assistance medical care or military medical insurance benefits. Public assistance is received by low-income individuals and payments come through the federally assisted, state-run Medicaid program and the Children's Health Insurance Program (CHIP). Military insurance is provided to military personnel through the TriCare Management Program.

Unemployment insurance is perhaps the third most common type of government transfer payments. This insurance includes state unemployment, federal unemployment and other organizations of unemployment compensation. Veterans' benefits are also a fairly common form of transfer payment. Transfer payments that surround these types of benefits are made up of veterans' pension and disability benefits, veterans' life insurance benefits and other types of veterans assistance.

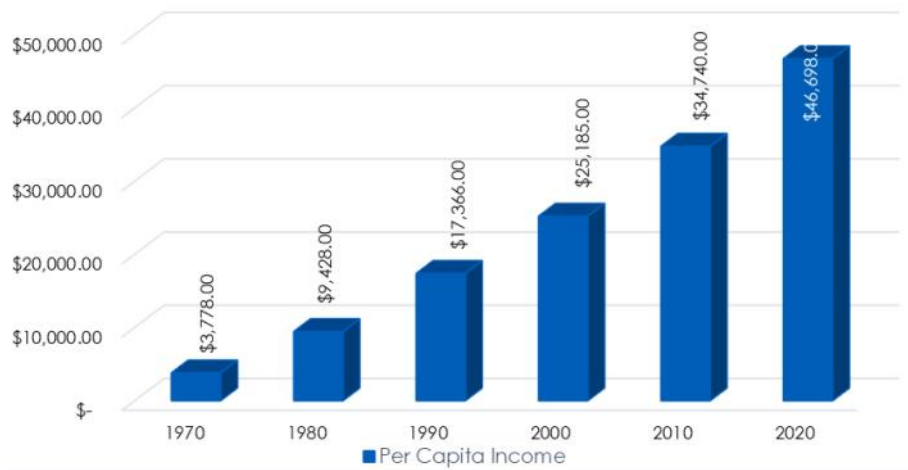
Finally, education and training assistance is considered a type of government transfer payment. This government assistance consists of higher education student assistance, interest payments on student loans and state educational assistance. The combination of these benefits help individuals at all levels of education afford school. They also help people from all types of backgrounds. From individuals who may only need a loan to people who need more assistance, all people can be helped with these transfer payments.

Figure 5.2: Income by Source 1970 to 2020



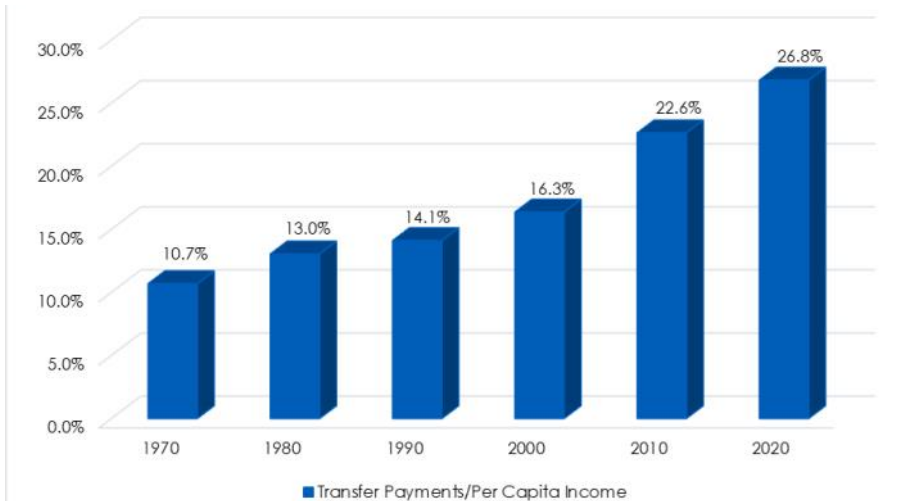
Source: BEA, Regional Economic Information System, 2020

Figure 5.3: Per Capita Income



Source: BEA, Regional Economic Information System, 1970 - 2020

Figure 5.4: Transfer Payments as a Proportion of Income



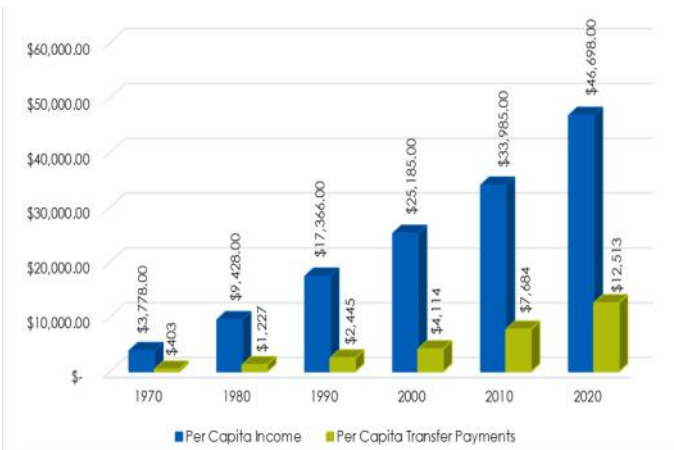
Source: BEA, Regional Economic Information System, 1970 - 2020

Figure 5.5: Transfer Payments 1970-2020

Description	1970	1980	1990	2000	2010	2020	Change	Change/Year
Personal current transfer receipts	10,976,000	37,474,000	75,866,000	135,234,000	266,516,000	407,097,000	3,608.97%	72.18%
Current transfer receipts of individuals from governments	10,361,000	35,495,000	72,292,000	128,939,000	259,394,000	150,636,000	1,353.88%	27.08%
Retirement and disability insurance benefits	6,355,000	21,862,000	42,170,000	63,070,000	104,667,000	141,037,000	2,119.31%	42.39%
Medical benefits	1,786,000	8,048,000	22,418,000	53,047,000	104,784,000	95,792,000	5,263.49%	105.27%
Income maintenance benefits	731,000	1,707,000	3,234,000	6,181,000	19,270,000	3,534,000	383.45%	7.67%
Unemployment insurance compensation	451,000	1,354,000	1,533,000	2,258,000	14,709,000	25,549,000	5,564.97%	111.30%
Veterans' benefits	909,000	1,435,000	1,612,000	1,945,000	3,985,000	3,665,000	303.19%	6.06%
Education and training assistance	129,000	1,088,000	1,280,000	2,331,000	3,337,000	38,722,000	29,917.05%	598.34%
Other transfer receipts of individuals from governments	0	1,000	45,000	107,000	8,642,000	18,380,000	NA	NA
Current transfer receipts of nonprofit institutions	327,000	1,128,000	1,437,000	2,650,000	4,144,000	3,594,000	999.08%	19.98%
Current transfer receipts of individuals from businesses	288,000	851,000	2,137,000	3,645,000	2,978,000	2,942,000	921.53%	18.43%

Source: BEA, Regional Economic Information System 1970 - 2020

Figure 5.6: Transfer Payments/Capita/Per Capita Income 1970-2020



Source: BEA, Regional Economic Information System, 1970 - 2020

- or 1.8% of the total
- By 2020, total personal income reached \$1,601,329,000 while Farm Income lagged behind at \$22,627,000 or 1.4% of the total
- Total personal income increased by 1,453.9% over the 40 year period; while the CPI rose 567.0%
- Farm income increased by 3,652.4% which is also greater than the CPI for the period

Per Capita Income

Per capita income is all income earned divided by all residents.

- The per capita income in Harvey County increased from \$9,428 in 1980 to \$46,698 in 2020, or an increase of 1,136.1%, significantly higher than the CPI
- Harvey County's per capita income was 83.9% of the state's per capita income level of \$55,664 in 2020

Transfer Payments

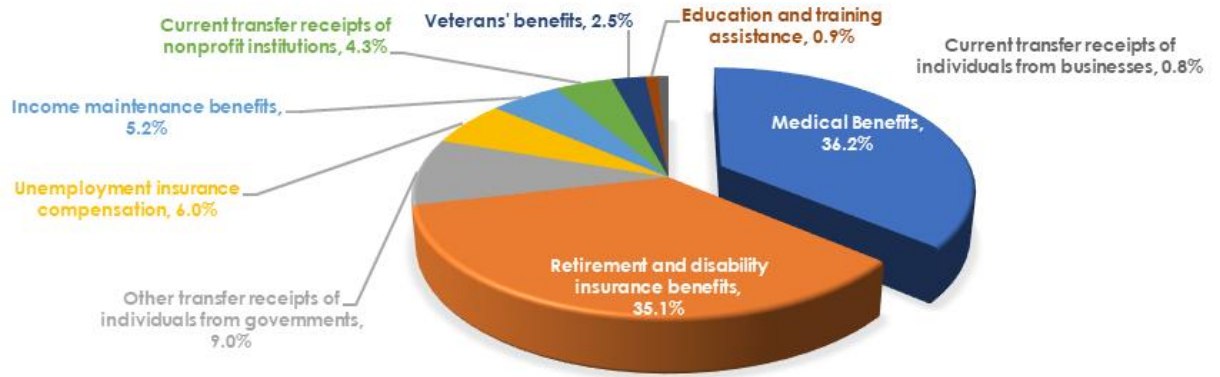
Another income source is transfer payments, which are a component of non-farm income. Transfer payments as a proportion of personal income have risen considerably since 1970.

- In 1980, transfer payments comprised 13.0% of total personal income (Figure 5.4)
- In 1990, this figure increased to 14.1%
- By 2020, transfer payments represented 26.8% of total personal income
- Per capita transfer payments rose to \$12,513 by 2020 (Figure 5.6)
- Figure 5.5 indicates the majority of transfer payments, in 2020, were in the form of medical benefits and retirement benefits, indicating a major impact of the aging population

Figure 5.5 displays different categories of transfer payments from 1970 to 2020.

- The largest major category increase in transfer payments was education and training assistance at 29,917.05% or an annual increase of over 598%.

Figure 5.7: Transfer Payments by Percentage 2020



Source: BEA, Regional Economic Information System, 2020

- The second largest increase was in unemployment insurance compensation at 5,564.97% or an annual average of 111.30%
- The third largest increase, medical benefits at 5,263.49 or an annual average of 105.27%
- The CPI for 1970 to 2020 was 565.2%
- The bold text in Figure 5.5 highlight the highest year of expenditures in each category

Industry Employment

Employment by industry data assists in understanding the key generators of income. This section provides data on the types of jobs in Harvey County and the type of employment and occupations of residents.

Harvey County is home to a multitude of national major employers including:

- Ag Spray Equipment
- Ardent Mills
- AGCO Corporation
- BNSF Railroad
- Bunting Magnetics
- LEGG—ContiTech USA, Inc
- Stanley Black & Decker (Formerly Excel Industries)

Figure 5.8 shows Harvey County residents' employment by industry for 2010 and 2020. The Figure indicates:

- Eight sectors showed increased employment between 2010 and 2020, led by public administration; other services; arts, entertainment/recreation, and accommodation services; and educational services, and health and social assistance
- Major sectors indicating losses were

transportation/warehousing/utilities; retail trade; manufacturing

- The largest employment base was in the education/health care, and social assistance with 4,978 employees

Employment Classes based on Figure 5.8

The source for these definitions is the Bureau of Labor Statistics unless otherwise noted.

Public administration

Public administration is a broad field covering the administrative services needed to help build and strengthen society. The National Center for Education Statistics (NCES) defines it as a branch of study preparing you to serve as a public service manager in local, state or federal government.

Source: <https://www.snhu.edu>

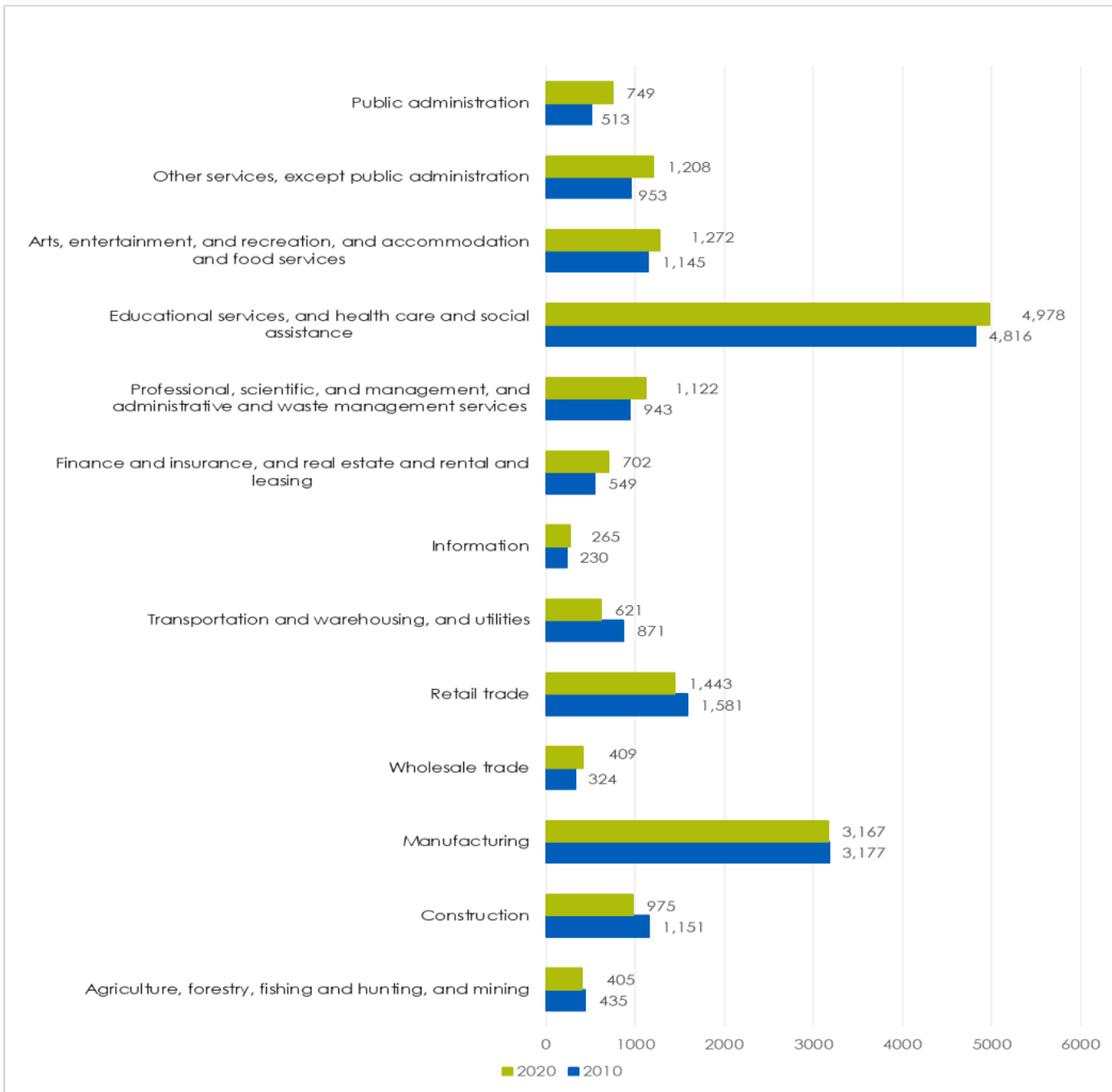
Other services, except public administration

The other services (except public administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing drycleaning and laundry services, personal care services, death care services, pet care services, photofinishing services,

Arts, entertainment, and recreation, and accommodation and food services

The arts, entertainment, and recreation sector includes a wide range of establishments operating facilities or provide services to meet varied cultural, entertainment, and recreational interests of their

Figure 5.8: Employment by Residents by Industry 2010-2020



Source: American Community Survey 2010 and 2020

patrons. The accommodation and food services sector comprises establishments providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

Educational services, and health care and social assistance

The educational services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. The health care and social assistance sector comprises establishments providing health care and social assistance for individuals.

Professional, scientific, and management, and administrative and waste management services

The professional, scientific, and management sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

Industries in the administrative and waste management services subsector group are establishments engaged in the collection, treatment, and disposal of waste materials. There are three industry groups within the subsector that separate these activities into waste collection, waste treatment and disposal, and remediation and other waste management.

Finance and insurance, and real estate and rental and leasing

The finance and insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. In addition, monetary authorities charged with monetary control are included in this sector. Industries in the real estate subsector group establishments that are primarily engaged in renting or leasing real estate to others; managing real estate for others; selling, buying, or renting real estate for others; and providing other real estate related services, such as appraisal services. Industries in the rental and leasing services subsector include establishments that provide a wide array of tangible goods, such as automobiles, computers, consumer goods, and industrial machinery and equipment, to customers in return for a periodic rental or lease payment.

Real estate

Industries in the Real Estate subsector group establishments that are primarily engaged in renting or leasing real estate to others; managing real estate for others; selling, buying, or renting real estate for others; and providing other real estate related services, such as appraisal services.

Information

The information sector comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data.

Transportation and warehousing, and utilities

The transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. The utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal.

Retail trade

The retail trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

Wholesale trade

The wholesale trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing.

Manufacturing

The manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

Construction

The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector.

Agriculture, forestry, fishing and hunting

The agriculture, forestry, fishing and hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber,

and harvesting fish and other animals from a farm, ranch, or their natural habitats.

Economic Base

A county's economic base is made up of those businesses producing goods and services sold primarily outside the area. The revenues of base industries are returned to the local area in the form of wages to employees and payments to local suppliers. While, non-basic employment relies on business activity providing goods and services primarily within the local area, and the revenues of such sales recirculate within the community in the form of wages and expenditures by local citizens.

In order to estimate the number of basic jobs in a local area, a comparative area must be selected. For purposes of this analysis, Harvey County will be compared to the State of Kansas. This allows the analysis to establish where Harvey County is producing goods and service for export compared to the state as a whole.

Occupations

Industry is the type of activity at a person's place of work. Occupation is the kind of work a person does to earn a living. The following data examine five occupational areas established by the U.S. Census Bureau to evaluate trends in employment and the area economy. The five occupational categories used in the analysis are:

1. Managerial business, science, and arts occupations
2. Service occupations
3. Sales and office occupations
4. Natural resources, construction, and maintenance occupations
5. Production, transportation, and material moving occupations

Figure 5.9 on the following page, compares Harvey County to the State of Kansas and the surrounding counties. The Table shows:

- Harvey County has three occupational areas with basic employment, numbers 2, 4, and 5 above. Number 4 includes agriculture
- Sedgwick County has the greatest number of basic occupational sectors of the area with four

Basic employment

Basic employment is business activity providing services primarily outside the area through the sale of goods and services, the revenues of which are directed to the local area in the form of wages and payments to local suppliers.

Non-Basic employment is business activity providing services primarily within the local area through the sale of goods and services, and the revenues of such sales recirculate within the community in the form of wages and expenditures by local citizens.

Base multiplier is calculated by determining the ratio between total employment in a particular year and the basic sector employment of that year. It measures how many non-basic-sector jobs are created for each basic-sector job.

Basic Employment

The occupation categories are compared to the same categories for the state and where Harvey County's percentage exceeds the state's percentage there is basic employment. Figure 5.9 indicates Harvey County has exports in three of the occupational categories:

- Service occupations;
- Natural resources, construction, and maintenance occupations
- Production, transportation, and material moving occupations

Figure 5.9 shows the following:

- Harvey County has basic employment in three of the five categories (**marked by green boxes**)
- Both non-basic and basic employment can be stronger
- If the county were to bring the other two categories up to being basic, the local economy would begin to be more balanced and would be able to weather smaller to average economic swings
- Overall, 5.8% of the employment base in Harvey County is tied to the exportation of goods or services

$18.60\% - 16.30\% = 2.3$
$10.30\% - 9.50\% = 0.8$
$17.20\% - 14.50\% = 2.7$
$2.3 + 0.8 + 2.7 = 5.8\%$

Figure 5.9: Basic/Non-Basic By Occupations - 2020

Location	Management business, science, and arts occupations	Service occupations	Sales and office occupations	Natural Resources, construction and maintenance occupations	Production, transportation, and material moving occupations	Base Multiplier
Harvey County	37.60%	18.60%	16.20%	10.30%	17.20%	17.2
McPherson County	34.60%	18.60%	17.70%	8.60%	20.50%	12
Marion County	34.40%	15.10%	17.20%	13.50%	19.70%	10.9
Butler County	40.50%	15.80%	20.70%	9.90%	13.10%	50
Sedgwick County	36.40%	16.80%	21.20%	10.10%	15.50%	34.5
Reno County	30.70%	18.10%	22.30%	9.40%	19.50%	11.5
Kansas	39.20%	16.30%	20.40%	9.50%	14.50%	NA

Source: American Community Survey 2020

The county needs to continually work on their business retention and expansion process in order to make certain these employers can stay in Harvey County, and also to increase the other two categories.

Base Multiplier

The information in Figure 5.9 shows:

- Harvey County has a base multiplier of 17.2, which means for every job considered to be basic, 17.2 other jobs in the county are supported and/or impacted
- This is illustrated by comparing the total employment with basic percentages against each other
- There are 17.2 jobs created/supported by those employed in basic sectors. If Harvey County lost just one of the jobs tied to exports then there is the potential to lose approximately 17.2 jobs from the non-basic employment side

$100\% / 5.8\% = 17.2$

There is no magical multiplier a county can aim to achieve. Every county is different and the dynamics involved are different. The unique and ever changing dynamics are what make a particular county's economy unique and attractive to different employers. It is critical for a county to determine their future vision for business and industry and work towards that end.

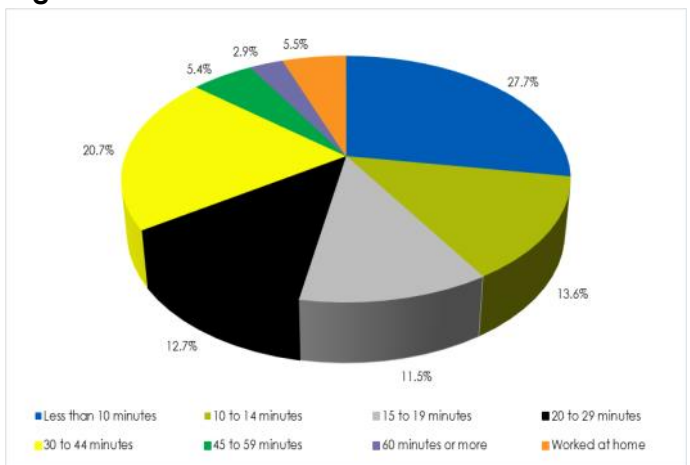
Some counties become too focused on attracting the next big catch and forget about the opportunities existing employers can offer through expansion of their operations.

Commuter Trends

Figure 5.10 shows the commuter characteristics for Harvey County in 2020. Travel time to work is another factor used to gauge where Harvey County's workforce is employed. Figure 5.10 shows how many residents of Harvey County travel to work in each of several time categories.

Figure 5.10 indicates 27.7% of the commuters were traveling 10 minutes or less to work. A total of 934 people, or 5.5%, work from home. Those traveling 20 minutes or more to work totaled 7,133 people (41.7%). Those traveling 45 minutes or more totaled 1,424 people (8.3%).

Figure 5.10: Travel Time to Work 2020



Source: American Community Survey 2020

Economic Base - Agriculture

Agriculture is a critical economic driver in Harvey County. Based upon data from the Kansas Department of Agriculture (KDA) dated August 31, 2022, Harvey County had the following agricultural

statistics:

- 752 farms
- Average farm size was 457 acres
- Total land is farms 343,952 acres

The KDA report shows the following:

- 30 agriculture and agricultural-related sectors has a total direct output of \$1.3 billion and was responsible for over 3,000 jobs in the county
- These sectors had a total estimated economic impact of \$1,614,923,000 in output
- Total output is the intermediate inputs + value added

Figure 5.11 indicates the Direct Agriculture Sectors in Harvey County along with their economic output and employment figures. The largest sector was farm machinery and equipment manufacturing with a Total Output \$997,127,000 (61.7%); this is not surprising considering the AGCO production facilities in Hesston.

Animals, except for poultry and slaughtering was number two with \$88,125,000 (5.5%) in total output, while grain farming was third with \$62,125,000 (3.8%) in total output. Finally, beef cattle ranching and farming, etc. was fourth with a total output of \$54,934,000 (3.4%).

Obviously, the agricultural economy is critical to the economic health of Harvey County and needs to have a solid emphasis within the economic development efforts of the county.

Economic Development Goals and Action Items

Economic Development Goal ED-1:

Preserve and support agriculture in all forms. Agriculture is a major component of the economy in Harvey County and should be supported as such.

Action Items:

1. Land use regulations need to protect the agricultural economy of Harvey County.
2. Residential land use regulations should minimize non-farm dwelling units in the agricultural portions of the county.
3. Work to increase/maintain current production levels with industries such as AGCO and similar businesses.

Figure 5.11: All Direct Agriculture Sectors, Harvey County - 2022

Sector	Total Output (\$000)	Total Employment
Farm machinery and equipment manufacturing	\$997,127	1,761.23
Animal, except poultry, slaughtering	\$88,125	118.41
Grain farming	\$62,862	186.58
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$54,934	367
Lawn and garden equipment manufacturing	\$41,357	68.25
Oilseed farming	\$40,408	34.17
Flour milling	\$37,537	21.72
Fertilizer mixing	\$21,626	39.30
Bread and bakery product, except frozen, manufacturing	\$12,656	60.61
Landscape and horticulture	\$5,737	81.31
Animal production, except cattle and poultry and eggs	\$5,494	32.22
Poultry and egg production	\$4,906	5.08
Wineries	\$4,098	11.33
Veterinary services	\$3,222	44.73
Dairy cattle and milk production	\$2,918	5.04
Cotton farming	\$2,151	16.26
All other crop farming	\$2,096	52.25
Frozen cakes and other pastries manufacturing	\$1,905	20.08
Support activities for agriculture and forestry	\$1,834	76.01
Other snack food manufacturing	\$869	1.09
Other animal food manufacturing	\$631	0.57
Roasted nuts and peanut butter manufacturing	\$534	1.08
Commercial logging	\$270	5.68
Vegetable and melon farming	\$115	0.59
Forestry, forest products, and timber tract production	\$95	1.04
Commercial hunting and trapping	\$84	4.01
Tree nut farming	\$53	0.35
Fiber, yarn, and thread mills	\$43	0.16
Greenhouse, nursery, and floriculture production	\$24	0.14
Fruit farming	\$17	0.11

Source: Kansas Department of Agriculture 2022

Economic Development Goal ED-2

Harvey County strives to create a healthy and stable local economy by recapturing lost sales tax dollars by improving retention, expansion, and recruitment of businesses locally.

Action Items:

1. Harvey County will continue to work closely with Harvey County Economic Development Council (EDC) to implement their "Blueprint for Regional Growth" BREG.
2. Direct existing and new businesses to Harvey County EDC and their business assistance programs.
3. Prioritize visits with corporate office headquarters of local primary employers every two years.
4. Meet with local ownership to determine specific needs and concerns of their business.
5. Encourage working with local businesses to develop business transition plans so retirements do not also mean a loss of a business in the county.
6. Perform business retention/expansion surveys for every primary/industrial company within the county at a minimum every two years.
7. Encourage public/private partnerships for creative financing of local economic development and affiliated projects.

Economic Development Goal ED-3

Harvey County strives to make the county and its communities attractive and viable for retaining and attracting young adults.

Action Items:

1. Determine what the county and its communities have to offer young people over regional communities.
2. Amenities identified should have planning and funding priority.
3. Vocational training in schools for both agricultural and non-agricultural career paths.
4. Improve the perception there is not enough opportunity for all who wish to stay and work in the county.



Agricultural and agricultural manufacturing are critical to the local Harvey County economy.

Page Intentionally Left Blank



Chapter 6 County Facilities

County Facilities

State and local governments provide a number of services and facilities to the citizens. Public facilities represent a wide range of buildings and services provided by different levels of government. The facilities and services provide residents with legal services, educational opportunities, and health care services designed to meet area needs.

In the case of Harvey County, several of the facilities serving the county residents are located within the major communities of the county. The following information is in regard to the facilities owned and operated by Harvey County as well as other governmental entities in the county.

County Facilities Plan

The facilities plan for Harvey County is divided into county buildings and services.

Buildings and Services

Harvey County Courthouse

Harvey County utilizes several locations for their offices and staff. The Harvey County Courthouse is the current location for most of the departments. However, as department and staff needs changed, the courthouse began to run out of space. In 2023, Harvey County purchased the Pine Street Building.

The Pine Street Building is the current location for the Harvey County Health Department. Some of the services currently at the courthouse will be moved into the new location on Pine Street after renovations to the building are complete. Court related services will remain in the courthouse. The courthouse is located at 800 N Main Street in Newton.



County Pine Street Building - Harvey County Health Department
Source: Harvey County

The courthouse facility houses the following departments:

- Administration
- County Appraiser
- Board of County Commissioners
- County Attorney
- County Clerk
- District Court Services
- Information Technology
- Department on Aging
- District Court
- Driver's License
- Planning, Zoning and Environmental
- Register of Deeds
- County Treasurer

(Note: text modified slightly from website.)

Source: <https://www.harveycounty.com/departments.html>

In addition to the Harvey County functions within the Courthouse the following outside agencies are in the facility:

- CASA
- K-State Extension Council/4H
- Safe Hope

Administration

The Administration Office implements and monitors policies of the Board of Harvey County Commissioners. The Administration Office also carries out the following functions:

- Payroll for all Harvey County departments
- Human resource services for all County departments
- Maintenance and interpretation of the personnel manual
- Risk management and insurance coordination for all County departments
- Purchasing
- Budget preparation and management
- Public information, website, and social media management
- Coordination of debt financing
- Management of the annual audit
- Co-ordination of county investments
- Monitoring citizen boards
- Oversee Geographic Information System (GIS) maintenance & expansion
- Other functions as needed

County Appraiser

The Appraiser's Office places values on real and personal property in Harvey County in accordance to Kansas statutes and directives from the Property Valuation Division. The Property Valuation Division

places values on railroad and utility properties. The Appraiser's Office processes appeals of real and personal property values by taxpayers and participates in Kansas Court of Tax Appeal hearings concerning appealed property values in Harvey County. The office also regularly visits properties either through data collection, permits, or if a sale occurs.

Board of County Commissioners

The County Commission is the governing body of Harvey County and is responsible for setting policies for the entire organization and the appropriation of resources to accomplish adopted policies. The County Commission's duties include determining the annual budget, setting overall long-range plans for Harvey County, hiring and terminating non-elected department heads, and managing County property.

Commissioners are elected from three single-member districts for staggered four-year terms. One commissioner serves as the chairperson for a one-year term and then the position rotates to the next commissioner in line. Commission meetings, which are open to the public, are held weekly in the Community Room of the Harvey County Courthouse.

County Attorney

The Harvey County Attorney's Office prosecutes violations of the criminal laws of Kansas; institutes proceedings to protect abused and neglected children; prosecutes juvenile offenders; secures care and treatment in alcohol, drug, and mental commitment cases; appears before the appellate courts of Kansas regarding civil and criminal appeals; provides services to victims and witnesses to ensure their fair treatment in the criminal justice system; and, provides other statutory civil proceedings established by law. The County Attorney is an elected position serving a four-year term.

County Clerk

The County Clerk is an elected position serving a four year term. The general duties of the County Clerk include but are not limited to:

- Recording and maintaining the proceedings of the Board of County Commissioners
- Record receipts and expenditures for the County and issue warrants
- Prepare tax rolls for taxes levied and assessed by the state, county, municipalities, townships,

school districts, and any other special taxes levied

- Issue licenses for cereal malt beverages, fishing, hunting, and boat permits
- File Homestead claims for qualifying taxpayers

In addition, the County Clerk is the County Election Officer and is responsible for conducting all elections in Harvey County.

Department on Aging

See Public Health Chapter 10 for more information.

District Court & Court Services

District Court has three full time district court judges, and one magistrate judge, a court administrator, clerk of the district court and support staff.

District Court hears the following types of cases:

- Adult and juvenile (felony and misdemeanor) criminal offenses
- Traffic
- Small claims
- Civil and domestic cases.

District Court also serves as a public servant performing tasks to include but not limited to preparing marriage licenses, and criminal background checks. District Court has a wide range of duties from processing attorney and pro se litigant paperwork to assisting community members with court related questions, requests, and needs.

Court Services is responsible for the supervision of adult and juvenile, misdemeanor and felony, offenders placed on probation through District Court. They also conduct presentence investigation reports, predisposition reports, and perform bond supervision. Court Services has a Chief Court Services Officer, a Deputy Court Services Officer, probation officers, and support staff.

Information Technology

The Information Technology department, in cooperation with a managed services provider, is responsible for developing and maintaining Harvey County's computer network system. Additionally, the department provides technical support for a wide range of technological items. All hardware and software upgrades are administered by the Information Technology department and managed services provider to ensure every Harvey County employee can carry out their daily duties in an

effective and efficient manner.

Planning, Zoning and Environmental

The Harvey County Planning, Zoning and Environmental (PZE) Department is responsible for developing and administering land use regulations within the unincorporated portions of the county, and for analyzing and evaluating development proposals to determine whether such proposals are consistent with the goals and objectives contained in the Harvey County Comprehensive Plan.

It is also the department's responsibility to manage the floodplain. Floodplain management is a delegated responsibility of local governments by the Legislature of the State of Kansas. Local governments are responsible to adopt floodplain management regulations as outlined in K.S.A. 12-741 et seq. and K.S.A. 12-766, to protect the health, safety and general welfare and to minimize losses.

Harvey County Sanitation Codes were adopted to eliminate and prevent the development of environmental conditions that are hazardous to health and safety, and promote the economical and orderly development of land and water resources of the county. It is the environmental staff's responsibility to inform the public of these codes and to enforce them.

Register of Deeds

The duties of the Harvey County Register of Deeds office is to provide accurate recordings and record keeping of public documents in accordance to the law of the State of Kansas. These documents include deeds, affidavits, mortgages, assignments, releases, oil and gas leases, easements, restrictive covenants, right of ways, power of attorney, plats, surveys and other documents. The Register of Deeds also files military discharges, death certificates, financing statements, mechanics liens, and federal and state tax liens. It is the responsibility of the Register of Deeds to preserve and maintain all records stored in the office.

County Treasurer

The County Treasurer is an elected position serving a four year term. The duties of the Treasurer's Office include but are not limited to:

- Billing, collecting and distribution of personal property and real estate tax money for all taxing entities
- Collecting and distributing sales tax, mineral tax

- and motor fuel money
- Processing driver's license transactions
- Processing motor vehicle transactions
- Processing commercial motor vehicle transactions
- Managing all banking accounts and transactions
- Co-coordinating county investments
- Managing yearly tax foreclosure sale

Harvey County Pine Street Building

The County owns and operates a facility at 215 S. Pine Street. The facility is the current home of the County Health Department on the second floor (more detail on this department in Chapter 10: Public Health).

There are plans in place for both the Courthouse and Pine Street Building to be renovated to make space for the growing needs to better serve Harvey County residents.

Law Enforcement Center

The Harvey County Law Enforcement Center is located 120 E. 7th Street. The facility contains:

- 911 Communications
- 9th District Coroner's Office
- Detention Center
- Emergency Management
- Sheriff's Office
- Newton Police Department

More detail on these functions are included in Chapter 8: Public Safety.

Source: Harvey County

Road and Bridge

The Road and Bridge Department is currently located at 1425 N. Spencer Road in Newton. A new facility is being considered for the services provided at this location. The Road and Bridge Department oversees 239 miles of road in the county, as well as 280 bridges and 822 culverts. Road and Bridge also handles snow and ice control on many roads, examines utility permits, clears drifts, repairs erosion near bridges, maintains county roads and regulatory signs, replaces and installs culverts, mows the right of ways, trims trees, grades ditches, hazard mitigation planning and creation of drainage improvements.

Noxious Weed Department

The Harvey County Noxious Weed Department is located at the Road and Bridge location. Noxious

weeds are weeds that can be harmful to crops, livestock, wildlife and humans. The Noxious Weed Department uses herbicides to eradicate weeds deemed noxious by the state along rights-of-way in Harvey County. The County also contracts with townships and the Kansas Department of Transportation to spray their roads. Throughout the year, the Department provides tree trimming along roads and bridges.

County Parks Office

Harvey County Parks Office is located at 1080 Camper's Row, at Harvey County East Lake. This serves for the home office for all three Harvey County-owned parks. See Chapter 8 Parks, Recreation, and Attractions for more information on Parks.

Newton City/County Airport

Administrative offices for the County and City for the jointly owned airport are located at 810 N. Oliver Road. See Chapter 15: Transportation for detailed information.

Transfer Station/Landfill

The Harvey County Transfer Station and Landfill are located at 3205 SW 24th and houses the Solid Waste Department. The transfer station is a collection point for commercial and residential trash. The solid waste transfer station diverts what they can from the waste stream before transporting to the Reno County Landfill. This site houses the Household Hazardous Waste and Hazardous Waste Reuse Program.



Municipal Facilities

All seven cities in Harvey County, Burrton, Halstead, Hesston, Newton, North Newton, Sedgwick and Walton, have their own governing bodies and facilities for their cities. Information on each of the cities governments and facilities can be found on their individual websites.

- Burrton– www.burrtonkansas.com
- Halstead– www.halsteadks.com
- Hesston– www.hesstonks.org
- Newton– www.newtonkansas.com
- North Newton– www.northnewton.org
- Sedgwick– www.cityofsedgwick.org
- Walton– www.waltonkansas.com

Action Items:

1. Prioritize funding for rural roads, bridges, and culverts.
2. As bridges are replaced and or rehabilitated, culverts should be addressed concurrently.
3. Improve facility for road and bridge and noxious weeds department.

County Facilities (CF) Goals and Action Items

County Facilities Goal CF-1:

County facilities will need to be updated during the planning period to deal with growing demands on local government.

Action Items:

1. Prioritize funding for maintenance of facilities.
2. Redevelop the recently purchased facility into a courthouse annex and update the building to meet future needs and demands.
3. Continue working on expanding the existing courthouse to meet the increased demand on District Courts.

County Facilities Goal CF-2:

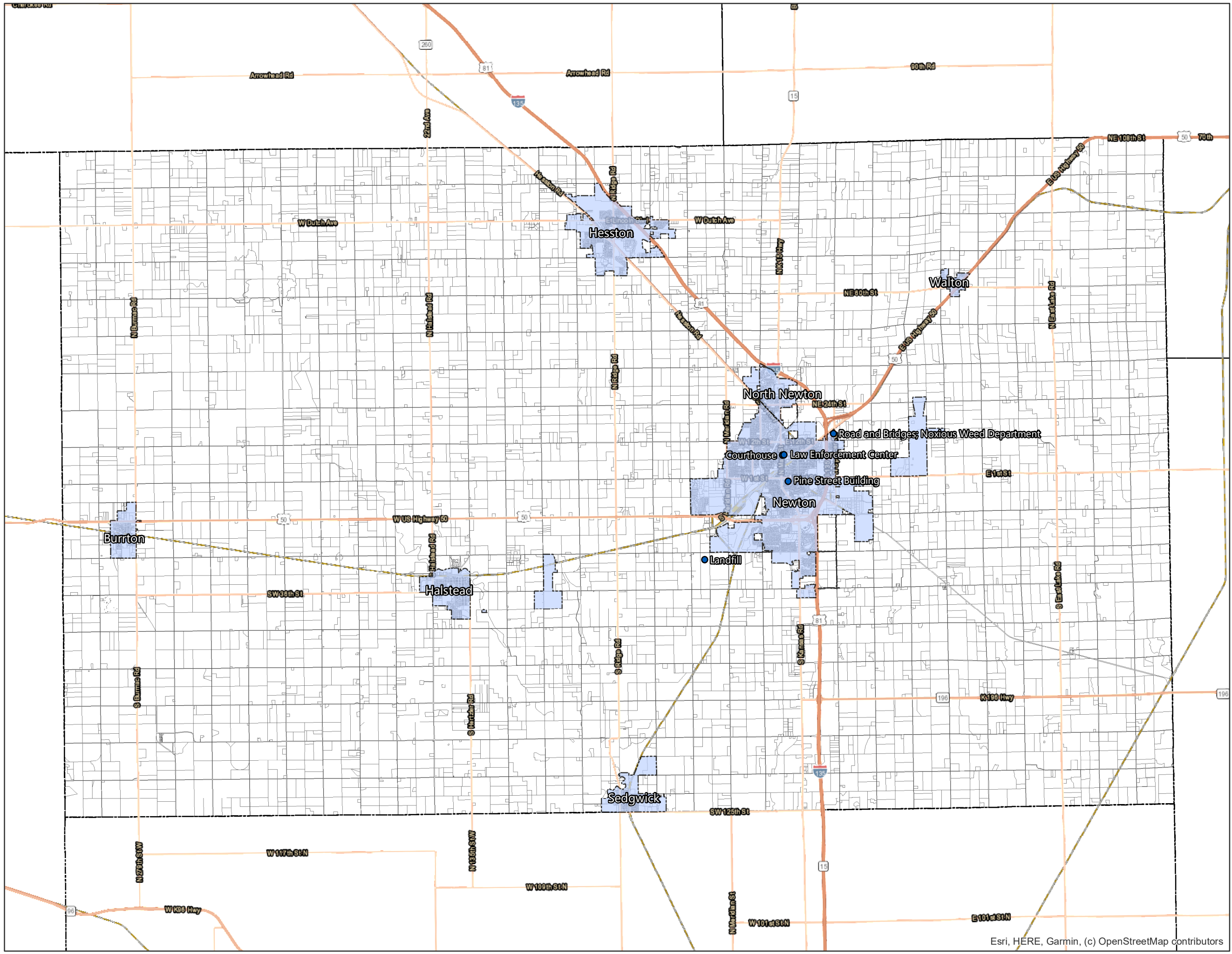
Maintain and rehabilitate aging infrastructure in the county.



Harvey County Transfer Station
Photo courtesy of Harvey County

Page Intentionally Left Blank
Maps continue on following page

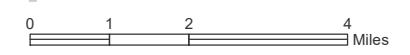
HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 5.1 - COUNTY FACILITIES



- LEGEND**
- County Facilities
 - ▭ Municipal Boundary
 - ▭ Counties
 - ▭ Parcels



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23





Chapter 7

Educational Facilities

Education

Harvey County boasts five public school districts centered in the county. Figure 7.1 only shows those districts based in the county. This section also explores issues at the forefront of school officials in the county.

Education Overview

The major issues regarding schools in Harvey County include:

- People
- Funding
- Infrastructure
- There is a major need for more options for students, especially in an age of virtual learning
- An alternative virtual school would help keep students in the district
- A large number of students have dropped out or not returned recently due to a lack of flexibility
- Support for career and technical programs exists, though the virtual programs do not
- Funding for students who need better food access is lacking
- There is a desire to start a program to provide a clothes closet, toiletries, and a food pantry for those who need it
- In regards to infrastructure, the issue of funding surfaces again; maintenance is deferred consistently

Public Schools

Burrton - USD 369

Burrton is a small, 1-A school district located in south central Kansas. The district traditionally has a student population around 200 students. Pre-K – 12, provides small classes for academics with a student to teacher ratio of 8:1.

The school district offers an elementary school (Burrton Elementary), middle school (Burrton Middle School), and a high school (Burrton High School). The USD 369 district office is located on the school campus at 105 E. Lincoln in Burrton.

Source: <https://www.usd369.org/>

Halstead - USD 440

USD 440 is comprised of Halstead and Bentley. Bentley is home to Bentley Primary School, servicing grades K-3. Halstead is home to Halstead Middle School, grades 4-8, and Halstead High School, grades 9-12. Halstead USD 440 District Office is located on the Halstead Campus at 521 W. 6th, Halstead.

Halstead USD 440 quick facts:

- 3A district with approximately 750 students
- District goal to keep class sizes small
- Strong vocational opportunities for students (CTE: 14 Pathways)

(Note: text edited from website.)

Source: <https://www.usd440.com/district>

Hesston - USD 460

USD 460 is comprised of Hesston Elementary School, Hesston Middle School, and Hesston High School. The district office is located at 150 N. Ridge Road on the campus with the middle school and high school. The elementary school is located on the opposite side of Ridge Road on E. Amos Street. USD 460 quick facts:

- The school district enrolls approximately 860 (corrected number) students
- Hesston schools employ 65 certified and 55 classified staff members
- 96% of Hesston Students complete their education through graduation
- The district's post-secondary effectiveness rate is 70%

Source: <https://www.hesstonschools.org/>

Newton - USD 373

USD 373- Newton Public Schools is made up of Cooper Early Education Center, four elementary schools, Santa Fe 5/6 Center, Chisholm Middle School, and Newton High School. Other programs include Newton Career and Tech Education Center, Harvey County Learning Center, Project SEARCH, Railer Academy Virtual Program and Opportunity Academy. USD 373 District Office is

located at the McKinley Administrative Center, 308 E. 1st St, Newton.

USD 373 is the largest employer in Newton and the second largest employer in Harvey County with a work force of 800 employees, 600 of which are full-time.

(Note: text edited from website.)

Source: <https://usd373-ks.schoolloop.com/info>

Sedgwick - USD 439

USD 439 is a smaller school district with a typical enrollment approaching 500 students. The district is located on one campus, home to R.L Wright Elementary and Sedgwick Junior and Senior High School. USD 439 provides at-risk programs for students, has federally funded programs, and Title I services. Special education services are provided by the Ark Valley Special Education Cooperative, which is based in Valley Center. USD 439 has a strong Career and Technical Education program and prides itself in providing access to exceptional technology for each student.

(Note: text edited from website.)

Source: <https://www.usd439.com/domain/10>

Private/Parochial Schools

Countryside Christian School

Countryside Christian School has offered a faith-based education since 1974. Countryside Christian School is located on Old Settlers Road west of Halstead.



Middle School - USD 440

Source: Halstead-Bentley USD 440 Facebook page



Middle School - USD 373

Garden View Christian School

The Garden View Christian School is a faith-based school located north of Halstead on NW 36th Street. The School began in the Garden View Mennonite Church in 1987. A separate building has now been constructed.

Newton Bible Christian School

Newton Bible Christian School is located at 900 Old Main St in Newton. The school was found in 1973 and provides an educational experience for students from Pre-K through eighth grade.

(Note: text edited from websites.)

Source: <https://www.newtonbiblechristianschool.org/>

Prairie View Special Purpose School

Prairie View Special Purpose School is located in Newton and is a private, school serving grades 5 through 12. The school focuses on children who struggle with emotional problems often experience difficulties in school.

(Note: text edited from websites.)

Source: <https://www.prairieview.org>

St. Mary Catholic Schools

St. Mary is located at 101 E 9th St in Newton. The school provides education to students from Pre-K to eighth grade. Students come to the school from all parts of Harvey County.

Source: <https://stmarynewton.org/schoolabout>

Post-Secondary Education

Bethel College

Bethel College was the first Mennonite college founded in North America in 1887. The college offers programs ranging from religion to business to



Bethel College

education to science based degrees. Bethel College is located at 300 E 27th St in North Newton.

(Note: text edited from website.)

Source: <https://www.bethelks.edu/about>

Hesston College

Hesston College is a Mennonite College and is Kansas' only two-year, Christian liberal arts college. The college was founded in 1909. The school also has a strong aviation program as well as a nursing program.

(Note: text edited from website.)

Source: <https://www.hesston.edu/about/>

Hesston College School of Aviation

Hesston College's aviation-professional pilot program launched in 1970, and has continuously integrated exceptional academics and foundational flight instruction for professional aviators.

An Air Traffic Control option was added to the program in 2009, and in 2010 earned Collegiate Training Initiative (CTI) status from the Federal Aviation Administration (FAA). Hesston's Air Traffic Control program is one of 36 FAA-CTI programs nationwide and the only program in the state of Kansas. In January 2019, Hesston College Aviation was granted approval from the accrediting agency, the Higher Learning Commission (HLC), for a Bachelor of Science degree in Aviation-Professional Pilot. Hesston College Aviation graduates work in a myriad of aviation-based environments, from on-demand charter, regional, domestic and international airlines, corporate flight departments, missionary-based or humanitarian-relief organizations, flight instructors in academic institutions, aerial application operations, FAA roles and more. Hesston College School of Aviation is located at Newton City/County Airport.

Source: Harvey County

Hutchinson Community College at Newton

The Newton HutchCC campus is a full service center offering everything from a complete book store to on site financial aid and academic advising. Students can earn a full degree by taking classes at the Newton Center.

Classes offered at Newton HutchCC include general education classes as well as program specific classes such as business, paralegal, criminal justice, and nursing prerequisites. Classes are held between a mixture of the Axtell Educational Center, Newton High School, and other various centers in Newton.

The Newton HutchCC campus also includes the Brooks Regional Center for Career and Technical Education. The Brooks Regional Center is home to welding and machine technology programs, and lets the youth of the community learn and work right at home, without leaving for another college experience. Through these classes, high schoolers may obtain an associates degree.

(Note: text edited from websites.)

Source: <https://www.hutchcc.edu/newton>

Education Goal E-1:

Improve educational standards in the county through funding of facility improvement and spending on students.

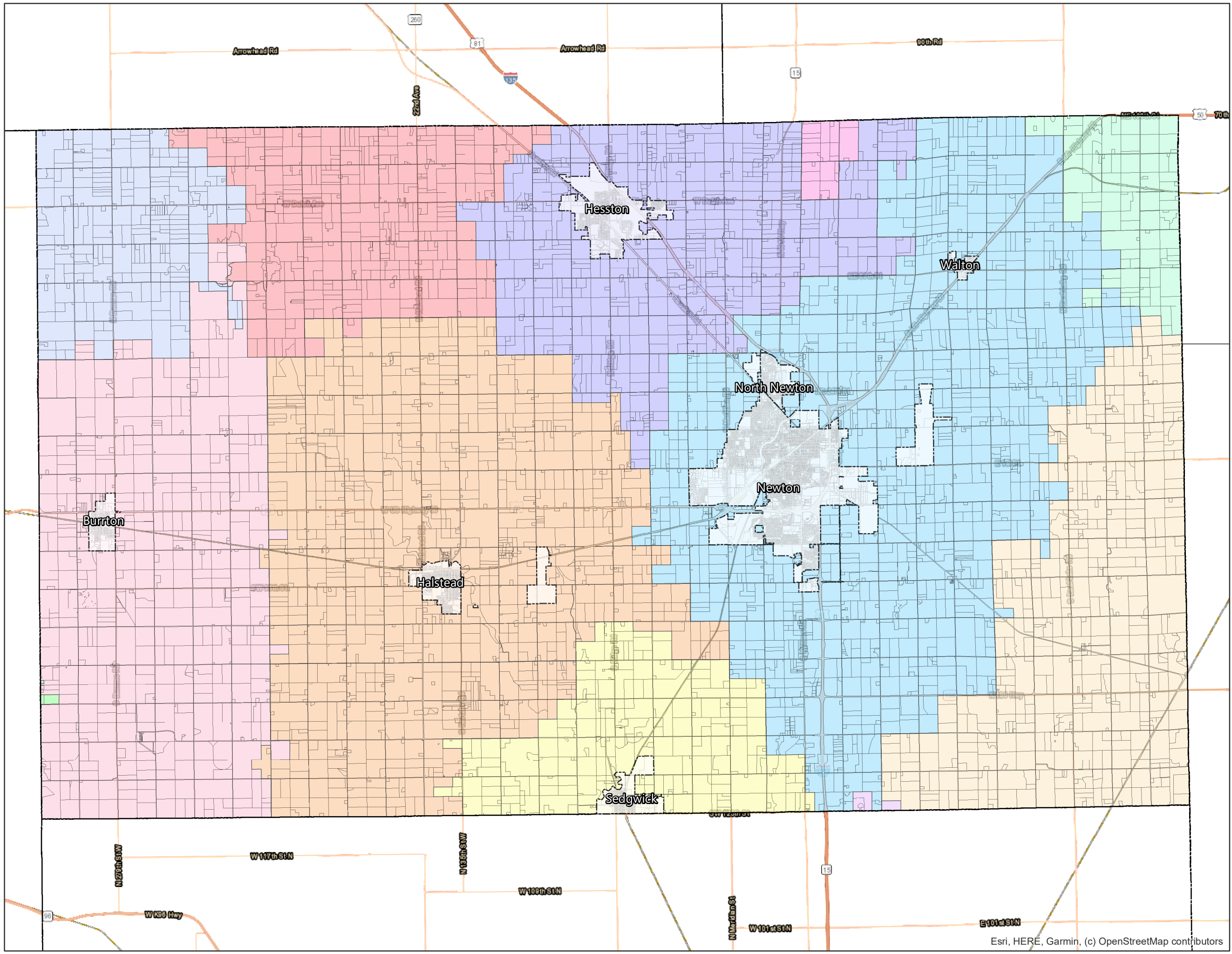
Action Items:

1. Promote and prioritize amenities that would retain students graduating from high schools and or Bethel and Hesston Colleges.
2. Create programs for students who desire virtual learning, vocational skills, and technical learning.
3. Fund or create programs that provide help for students who struggle with obtaining basic supplies and food access. Food access during the summer months when meals are not provided by schools should be prioritized, as food scarcity is a prominent issue for low-income residents of the county.
4. Prioritize funding to eliminate deferred maintenance in schools.






Hesston College
Source: hesston.edu












HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 7.1 - SCHOOL
DISTRICTS



LEGEND

-  Municipal Boundary
-  Parcels
-  Counties

School District

-  BUHLER
-  BURRTON
-  GOESSEL
-  HALSTEAD
-  HAVEN
-  HESSTON
-  MOUNDRIDGE
-  NEWTON
-  PEABODY-BURNS
-  REMINGTON-WHITEWATER
-  SEDGWICK
-  VALLEY CENTER



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23





Chapter 8 Parks, Recreation, and Attractions

Parks, Recreation, and Attractions

The Parks, Recreation, and Attractions chapter includes a brief description of the facilities located throughout Harvey County. Parks, recreation, and attractions provide residents with social, cultural, and recreational opportunities.

Harvey County operates three public parks for outdoor activities. Throughout the year these parks are host to special events. All three of the parks, Camp Hawk, East and West Park have enclosed shelters for the public to rent for special events. East and West Park have open shelters available as well.

Fishing

Camp Hawk, East Park, and West Park offer opportunities to fish, along with the many waterways in the county. Species include:

- Largemouth bass
- white bass
- walleye
- saugeye
- Flathead catfish
- black/white crappie
- channel cat

Source: <https://www.harveycounty.com/departments/parks/fishing.html>

County Trails

Trails in the county include the Osage Nature Trail at Harvey County East Park and Harvey County West Park Trail.

- The Osage Nature Trail Osage Nature Trail is a 1.8 mile lightly trafficked loop trail located near Newton meant for all skill levels. There is also a 7-mile loop trail located featuring a river and is meant for all skill levels
- The West Park Loop is a 6.5 mile trail located near Burton featuring a lake and is rated as moderate.

County Parks and Recreation

Camp Hawk

Camp Hawk is located southwest of Newton at 1801 SW 36th Street. Camp Hawk provides:

- Recreation opportunities including fishing on a 4-acre pond, disc golf, playground, softball diamond and outdoor, lighted basketball court
- The cabin-style shelter building is rented for social gatherings. The facility can host around 100 people, and includes heating and air conditioning as well as a wood-burning fireplace, restrooms, and a kitchen equipped with stove, refrigerator and sink
- Two cabins are available for overnight rental. These cabins are fully furnished cabins including a living room, kitchen, bathroom with shower,



Cabins at Camp Hawk



West Park

Source: getoutdoorskansas.com

downstairs bedroom and additional bed space in the loft. Appliances include a television, refrigerator, oven, microwave, cooking utensils, dinnerware and more. Rocked driveways, with an RV pad, provide easy access to each cabin. A picnic table and fire pit allow for additional outdoor living options.

- Primitive campsites are available at the park as well.

Source: <https://www.harveycounty.com/departments/parks/camp-hawk.html>

East Park

East Park is located east of Newton at 314 East Lake Road and offers:

- 1,300 acres for visitors
- A 314-acre lake
- Campgrounds surround the lake
- East Park offers both RV electric sites and primitive sites. A waste dump station is available for patrons. Water is available to fill tanks but not for hook-up. Some sites offer fire rings and picnic tables
- Playgrounds, a softball diamond, and volleyball courts. Three restrooms, two of which are bathhouses available for patrons
- Volunteer Hall at East Park is an enclosed shelter with heating and air conditioning. Volunteer Hall has a full kitchen and bathrooms. There are horseshoe pits, boat dock, playground, fire pit, and swimming beach within walking distance. RV hook-ups are available near the shelter
- Open picnic shelters are available for rental at East Lake. East Lake has 6 open shelters including Needle Point, Coronado Cove, Egret, Crown Point, Lakeview North and Lakeview South
- East Lake is the only lake in Harvey County allowing motorized boats for fishing and

recreation. There are three boat docks at Harvey County East Lake

- East Lake has a dedicated Pet Swim Park. The swim park provides a fenced in beach play area for pets with direct access to the water
- Circle H Trail offers a place to park horse trailers. The RV hook-ups have access to water and small corrals for overnight stays with horses. There is a picnic shelter located at this location as well
- A mix of trails perfect for walking, running, and horseback riding
- The park includes the Osage Nature Trail, which is also home to the Indigenous Persons Memorial
- The Harvey County Radio Control Park is also located at East Park
- Other facilities located at East Park are:
- Harvey County Parks' Office (1080 Camper's Row)
- East Park Bait Shop opened in 2022 (1080 Camper's Row)
- Park Maintenance & Ranger Station (314 East Lake Rd)

Source: <https://www.harveycounty.com/departments/parks/east-park.html> and Harvey County

Radio Control Park at East Park

The Radio Control Park is located in the Bluestem Area of Harvey County East Park and includes a rock crawler course and runways for model aircraft

Source: <https://www.harveycounty.com/departments/parks/radio-control-park.html>

Hunting at East Lake

In 2018 the Harvey County Commission, with the recommendation of the Harvey County Parks Advisory Board, approved limited seasonal hunting in East Park. The program is a partnership with the Kansas Department of Wildlife, Parks and Tourism.

The decision allowed for hunting of specified game, during specified times and days in specified areas. The program allows for archery deer and waterfowl hunting. One hunter can use the area per day, but can bring up to two other people. There are four blinds set up for waterfowl hunting. One person can reserve one blind and bring up to three other people. Hunting can only be done from the hunting blind.

(Note: text modified slightly from website.)

Source: <https://www.harveycounty.com/departments/parks/hunting.html>

West Park

West Park is the original Harvey County Park and contains 310-acres. The facility is located in the northwestern portion of the county at 2733 West Park Road. The park has:

- Wooded trails along the bends of the Little Arkansas River
- West Park offers a range of difficulty levels for fishermen with its 16-acre fishing pond and access to the Little Arkansas River
- The West Park Bait Shop is open seasonally to help supply visitors
- Campers have an option of sites including primitive and those with electricity
- Sewage dump station and water to fill tanks are available to patrons. Bathhouses with restrooms are open during the camping season. Privies are available for use in the off-season
- A community building can be rented for special occasions
- The community building offers heating/air conditioning, a full kitchen, restrooms, fire place, fire pit, playground and outdoor covered picnic area
- West Park also houses two other closed stone shelters as well as open shelters. These shelters are not climate controlled. The stone shelters have electrical RV hook-up nearby and a fire pit. They are located on the banks for the Little Arkansas River. There are also two open picnic shelters, Lakeside and Walnut Grove available for rental
- Hiking, biking, and horseback trails at West Park wind through wooded areas with views of the lake and the river
- Additional amenities include a softball diamond and playground equipment
- West Park has also hosted the Trappers Rendezvous for the Boy Scouts of America for more than 40 years
- West Park has a dedicated pond for swimming.

The pond is located near the playground, bait shop and horse shoe pits. It is walking distance to the Lakeside shelter and restrooms/shower house

Other facilities located at in the West Park at 2733 West Park Road are the West Park Bait Shop and West Park Maintenance.

Source: <https://www.harveycounty.com/departments/parks/west-park.html> and Harvey County

Community Parks

Harvey County communities all offer parks in their communities. Most communities in Harvey County offer ball diamonds, playground equipment, and picnic areas. Those parks include the following but are not limited to:

Burrton

Burrton City Park (Milburn Stone Park); Burrton Swimming Pool.

Halstead

Tennis Courts; Swimming Pool; Pine Park; Riverside Park; Scout Park; Warkentine Trail; Williams Park; Wedgewood Golf Course.

Hesston

Children's Park; Emma Creek Park; Dog Park; Aquatic Center; Golf Course; Heritage Park; Hickory Park; Interstate Park; King Park; Spray Park and Skate Park.

Newton

Athletic Park; Caperland Park; Centennial Park; Centennial Dog Park; Depot Park; Girl Scout Little House; Haven Park; Midtown Arboretum; Newton Pool; Newton Fairgrounds and Saddle Club Arena; Okerberg Park; Plumbrook Park; Pod Park; Quail Creek Park; Railroad Park; Roosevelt Park; Sand Creek Bike Path; Sand Creek Golf Course; Splash Park at Springlake Park; Springlake Park; Tenth and Ash Park; Veazy Park; Washington Park.

North Newton

Chisholm Trail Park; Goldenrod Tot Lot and Campus Woods Park; Kidron Loop Trail; Sand Creek Trail; Trail of Two Cities.

Sedgwick

Sedgwick City Park; Sedgwick Community Pool.

Walton

Walton City Park

Harvey County

TransAmerica Trail

Attractions, Museums, and Arts

This section highlights some of the attractions found regionally serving the residents of Harvey County. Throughout Harvey County and its the communities, there are numerous attractions including museums, historical sites, performing arts, points of interest, and festivals.

Halstead Heritage Museum & Depot

The Halstead Heritage Museum occupies the 1917 Halstead Railway Station and has four galleries plus reference materials and a gift shop in the former Station Master's Office. Much of the collection is railroad related, but there is a lot of material about Halstead history and one gallery is devoted to rotating exhibitions.

More information can be found on their Facebook page [Facebook.com/Halsteadhistory/](https://www.facebook.com/Halsteadhistory/)

Kansas Learning Center for Health

Founded in 1965, the Kansas Learning Center for Health is the nation's second oldest health care museum.

More information can be found at <https://learningcenter.org/>
Source: <https://learningcenter.org/>

Dyck Arboretum

The arboretum is located in Hesston and was established with when the first tree was planted on October 10, 1981. The Arboretum is now one of the largest native plant gardens in the region, featuring more than 1,000 varieties of native and adaptable trees, shrubs, wildflowers, and grasses. The Arboretum was a gift of Harold and Elva Mae Dyck. In 1999, a Visitor and Education Center was added to the Arboretum.

Source: <https://dyckarboretum.org/history/>

Carriage Factory Art Gallery

Carriage Factory Art Gallery's history can be traced back to 1883, when John Jacob (J.J.) Krehbiel founded a carriage factory on the site where the gallery is now located. Newton Fine Arts Association adopted the building in 1983. The gallery offers regional art exhibits and art for sale.

More information at <https://carriagefactorygallery.com/>
Sources: <https://carriagefactoryartgallery.com/about-us/>;
<https://carriagefactoryartgallery.com/our-history/>



Photo from Dyck Arboretum
Source: dyckarboretum.org

Harvey County Historical Museum & Archives

The museum is housed in the 1904 Carnegie Library (entered into the National Register of Historic Places in 1974) in Newton and is a repository for records and objects telling the story of Harvey County. The Museum & Archives is owned and operated by the Harvey County Historical Society.

For more information see <https://hchm.org>.

Source: <https://hchm.org/research-library/about-us/>

Downtown Newton Walking Tour

A walking tour was compiled by the Newton/North Newton Historic Preservation Commission in 2014. This tour allows readers an understanding of the heydays of old Newton. Sites include buildings both still standing and no longer standing. This walking tour includes the 100 through 600 blocks of Main St. There is a companion children's version of the guide which complements the tour with kid-friendly activities.

A driving tour of historical homes in Newton covering three routes through the community is available.

Sources: Newton Visitor Guide; Historic Newton Downtown Walking Tour

Warkentine House

This Queen Ann-style home was built in 1886-1887 and is a splendid example of the Victorian period in American architecture and furnishings. The house contains approximately 80% of the original furnishings and offers a glimpse into the way the Warkentin's lived. The house is listed on the National Register of Historic Places and the Kansas Register of Historic Places.

Source: <https://www.warkentinhouse.org/>

Newton Mid-Kansas Symphony Orchestra

The community orchestra for Newton, Harvey County, and the surrounding area since 1956, NMKSO presents classical music performed by local musicians. The season includes two classics concerts, summer chamber music, school outreach, and special events. Players comprise professional and community musicians, educators, and outstanding students. More information is available at nmkso.org

Kauffman Museum

The museum is located at Bethel College in North Newton. The original facility was founded in 1896 as the Museum of Natural History and American Relics and between 1941 and 1961 the museum integrated the personal collection of Mr. Charles J. Kauffman into the facility and renamed it the Kauffman Museum. Kaufman's Museum's mission is to preserve the evolving story of central plains Mennonites, exploring their relationship to community, culture and environment. For more information see <https://kauffmanmuseum.org/>



An Exhibit from Kauffman Museum
Source: kauffmanmuseum.org

Robert W. Regier Gallery

The Robert W. Regier Gallery is located in Bethel College, featuring regional exhibits along with faculty and student art. Source: Newton Visitor Guide

Sedgwick Historic Society Museum

The Sedgwick Historical Society is dedicated to sharing the story of Sedgwick. The Museum is open by appointment only. Source: <https://Cityofsedgwick.org/historical-society>

Sedgwick Downtown Historic District

The Sedgwick Downtown Historic District contains eleven buildings located within the district

boundaries. Two are non-contributors and nine are contributors. The style of the buildings are predominantly Italianate and Classical Revival. Source: National Register of Historic Places

Murals and Public Art

Newton and North Newton pride themselves in their prominent pieces of public art. The Blue Sky Sculpture in Centennial Park is ranked as one of the 8 Wonders of Kansas Art, capturing the whimsy of the Kansas sky. The Mennonite Settler Statue in Athletic Park honors Mennonite farmers and the rich heritage of wheat in Kansas. The Sunflower Mural is a colorful addition to downtown, located behind the streetscape on 6th and Main. Source: Newton Visitor Guide

Parks, Recreation and Attractions Goals and Action Items

Parks and Recreation Goal PR-1:

Harvey County and the communities provide quality up-to-date parks and recreation facilities for its residents.

Action Items:

1. Create a master plan for county parks including specific maintenance projects and desired updates.
2. Use the new master plan to create an annual budget focused on different details of the plan. Focus should be given to every park annually if possible.

Page Intentionally Left Blank



Chapter 9 Public Safety

Public Safety

Public safety encompasses fire, emergency management, emergency medical services (EMS), and law enforcement. A mutual aid agreement ties these departments together. These services are made up of municipal and county-wide providers.

Communication Services (911)

Harvey County Communications provides 911 and administrative call answering and dispatching services to the Harvey County Sheriff's Office as well as all municipal police departments.

The communications center service area also includes regions of surrounding counties and the cities of Elbing and Whitewater as defined by fire and EMS response boundaries for the agencies dispatched. Harvey County Communications dispatches responders from all police, fire, EMS and public works agencies within these response boundaries.

Other services provided and responsibilities include:

- Utilizing the Emergency Medical Dispatch system to offer immediate basic life support instructions by telephone until responders arrive
- Coordinating law enforcement, EMS and fire personnel on multiple agency responses
- Gathering information from the scene prior to

unit arrival to assure the safety of those responding and to monitor their safety throughout the call

- Offering support, guidance and structure to emergency callers until units arrive and take physical control of the scene
- Monitor severe weather conditions, notify responders of watches and warnings, and activate tornado sirens
- Enter wanted, missing or endangered persons and stolen property into the National Crime Information Computer and maintain and update those entries as needed
- Process and disseminate criminal history record checks for court services and law enforcement personnel
- Providing on-scene support, communications expertise, and resource gathering and tracking for incident commanders while focusing on the major incident and allowing the Communications Center to continue handling day-to-day events
- Provide oversight and management of Harvey County portion of the State P25 800 Radio system including equipment maintenance, programming and policy

Source: Harvey County

Law Enforcement

Harvey County Sheriff

The Sheriff's Department has many responsibilities within the Harvey County communities. The administration, deputies, reserve deputies, detention deputies, specialized K9's, and staff are responsible for road patrol, civil process, investigations, administration, support services at the detention center, the detention center, and public outreach.

The patrol division actively patrols rural areas to be a presence and deterrent. The patrol deputies respond to calls for assistance within the cities of Harvey County for safety and staff shortage reasons. The Harvey County Drug Task Force is active as well. A full time deputy is in charge of security at the courthouse to improve the safety at that location.

Source: Harvey County

Detention Center

The Harvey County Detention Center provides for the safe, secure incarceration of people admitted to the facility by local, state or federal law enforcement agencies, as well as pretrial and sentenced offenders from other cities, countries, the State of Kansas or federal government. While fulfilling a key component in making communities safer by incarcerating those alleged or convicted of a crime, the Detention Center also strives to serve as a place of rehabilitation, so when an individual is released from custody, they can be guided onto a more productive pathway moving forward. Medical and mental health care is also provided to inmates.

Source: Harvey County

District Coroner

The Harvey County Coroner, located in the law enforcement center, keeps death records for individuals who passed away in Harvey County. The Coroner and Medical Examiner determines a deceased person's time and cause of death, often in the case of sudden or unexpected deaths. The office identifies bodies, notifies the next of kin, and returns personal belongings to the family. They also work with the Harvey County Sheriff's Department and municipal police to investigate suspicious or violent deaths. The Harvey County Coroner creates death records that can be used in criminal investigations, to resolve insurance claims, or to monitor public health.

Source: Harvey County

Municipal Police Departments

Burrton, Halstead, Hesston, Newton, North Newton and Sedgwick have police departments in their cities. Newton Police Department is located in the Law Enforcement Center Building with the Sheriff's Department.

Source: Harvey County

Emergency Medical Services (EMS)

In Harvey County the Cities of Newton, Hesston, Halstead and Burrton offer EMS services. Burrton, Halstead and Hesston operate 24 hours/7 days a week. Halstead and Hesston have full-time staff as well as volunteers. Burrton has part-time staff as well as volunteers. Walton and Sedgwick do not have transporting EMS. They rely on Newton, Hesston and Halstead for those services. Newton EMS is a fully staffed department. All of the EMS departments in Harvey County are combined with the fire departments. The rural areas of Harvey County are served by Burrton, Halstead, Hesston, Newton and Moundridge EMS.

At present the County EMS has positive and negative trends occurring.

Positives for Harvey County Departments include:

- Departments have good working relationships with each other and hospitals
- Newton Paramedics maintain staff affiliate privileges at Newton Medical Center, allowing for enhanced clinical experiences and educational opportunities

Negative points for Harvey County Departments:

- Funding and staffing issues
- City departments currently cover the unincorporated and rural areas of the county

Source: Harvey County

Fire Departments

Harvey County Fire Departments are located in the municipalities of Harvey County. Newton is a full staffed fire department with three locations. Burrton, Halstead, Hesston, Sedgwick and Walton, have full time or part time employed staff as well as volunteers. Departments in Harvey County aid each other to assist with large fires. Harvey County fire departments also assist with out-of-county fires if assistance is needed.

Fire Departments covering the rural areas of Harvey County include:

- Buhler
- Burrton
- Halstead
- Hesston
- Mt. Hope
- Newton
- Peabody
- Sedgwick
- Walton
- Whitewater



Newton Fire Engine
Courtesy of Harvey County

Concerns expressed during planning process from Harvey County Fire Departments include:

- Shortage of staff and volunteers
- Wind Turbines in the wildfire prone areas

Source: Harvey County

State Policy on Fire Relief

During the planning process, concerns were raised about state policy on fire relief in areas with wind towers. During this planning process, wind towers were not yet present in the county. A major concern with allowing them in the county has been fire relief from the state should a wildfire become unmanageable with local fire departments.

According to Kansas policy:

- The state will provide wildfire relief regardless of density of wind towers
- There are also no limitations on ground fire suppression, as the grass around wind towers are usually maintained to be short, keeping flames lower in height

Potential limitations to fighting wildfires is due to the height of turbines. The height of turbines could limit use of aerial suppression means such as aerial tankers, crop dusting planes, or National Guard

Bambi buckets.

Emergency Management

The Harvey County Emergency Management Department is dedicated to serving all of Harvey County by providing assistance to mitigate against, prevent, protect, respond and recover from all types of hazards and threats.

Emergency Management is the managerial function charged with creating the framework within which communities reduce vulnerability to hazards, respond to, and recover from, disasters. Emergency Management is responsible for plans, programs, and training that seeks to mitigate the impact of disasters on our communities. If disasters occur, Emergency Management coordinates the response and recovery efforts.

Some responsibilities of the Harvey County Emergency Management Department include:

- Fulfill the requirements of Harvey County Resolution 1995-32, subsequent resolutions, and Kansas State Statutes that task the Emergency Management Department with responsibility for disaster preparedness and the coordination of disaster response and recovery within the County.
- Support stakeholders across the County by coordinating the five FEMA Mission Areas of disaster preparedness (Prevention, Protection, Mitigation, Response and Recovery).
- Monitoring regularly scheduled tests of public warning systems for the communities of Harvey County.
- Support, promote, and improve the functions of the Local Emergency Planning Committee.
- Identify best practices for assuring all outdoor warning siren systems are functioning effectively and offering counsel to system owners on adequacy of coverage.
- Assist local Long Term Care Facilities and healthcare agencies to support them in meeting the Centers for Medicare and Medicaid Services (CMS) preparedness requirements.
- Enhance the capabilities of the County Emergency Operations Center (EOC).
- Expand stakeholder knowledge of EOC operations.
- Access and provide community disaster education.
- Promote hazard mitigation and facilitate mitigation projects.

- Act as liaison between community partners and State resources.
- Develop a Common Operating Picture and situational awareness briefings for response partners.

Source: Harvey County

Public Safety Goals and Action Items

Public Safety Goal PS-1:

Protect critical infrastructure and prevent cyber crime. Cyber attacks to major industry affects the local, regional, and national economies.

Action Items:

1. Work with the Emergency Management Department to develop a plan to protect critical infrastructure and prevent damaging attacks to major industries in the county and general residents.
2. If not currently existing, create a working relationship with the Federal Bureau of Investigations' Cyber Crimes Division
3. Provide educational opportunities for county residents on how to protect their computer data

Public Safety Goal PS-2:

Local law enforcement is critical to the long-term safety of the county residents.

Action Items:

1. Harvey County elected officials need to continue to support law enforcement via the

budgetary process.

2. The continued safety of the general public will be greatly dependent upon the coordination and cooperation of all area law enforcement agencies.

Public Safety Goal PS-3:

Medical first responders (EMS) needs to be maintained and increased when possible.

Action Items:

1. Similar to law enforcement, the needs (personnel, equipment, and supplies) of medical first responders should be continually supported fiscally.
2. Coordination and cooperation between medical units needs to continue into the planning period.

Public Safety Goal PS-4:

Regular training and education for community partners is a key component of disaster preparedness, response, and recovery activities.

Action Items:

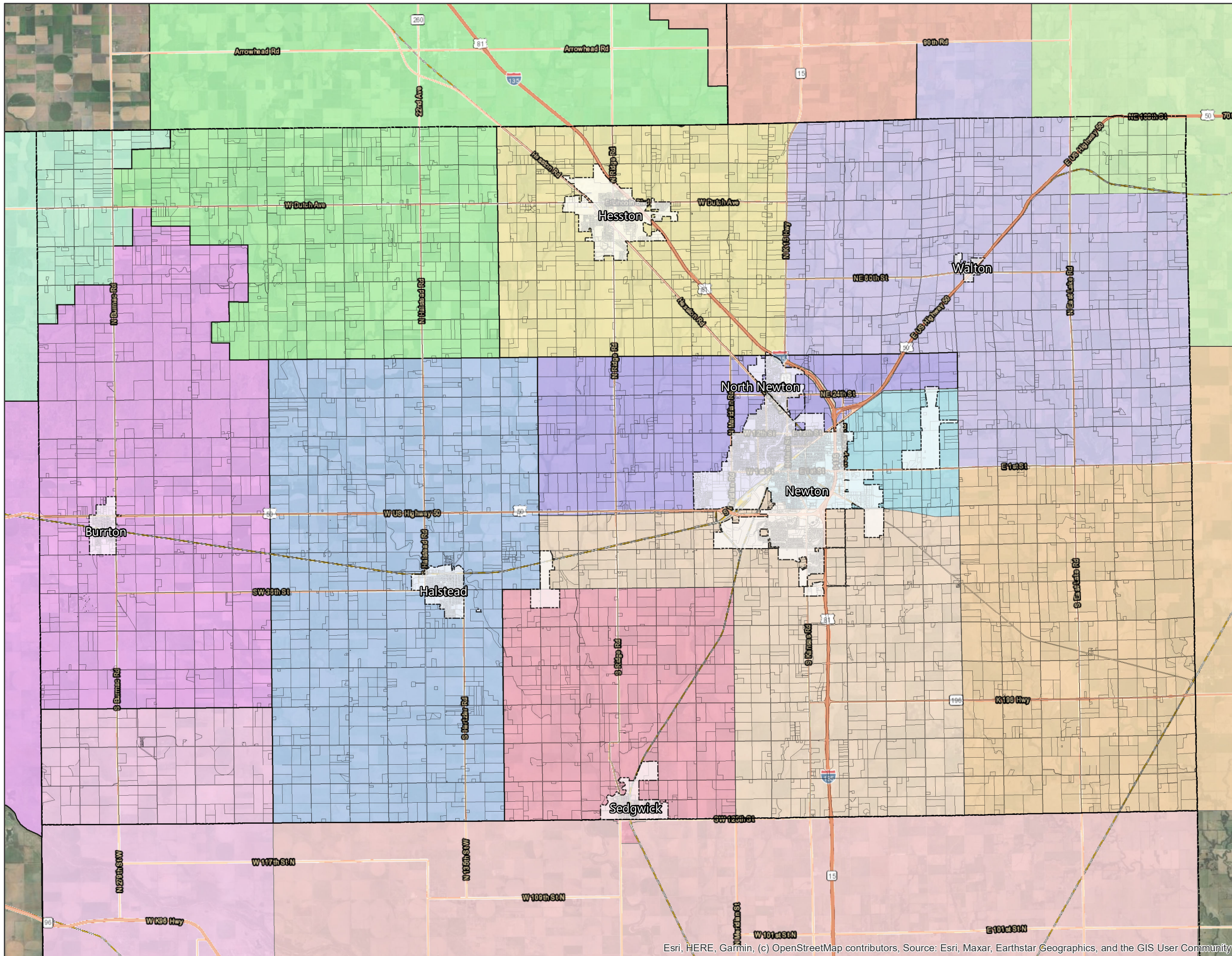
1. The Emergency Management Department will identify, facilitate, and coordinate technical and incident management training for public safety personnel, volunteer organizations, department staff, County residents and non-profit organizations.




Wheat fire in Harvey County

Source: Bing images

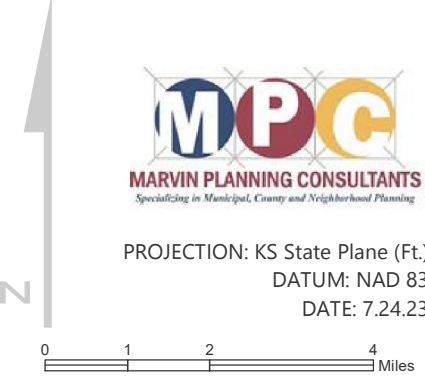
HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 9.1 - FIRE DISTRICTS

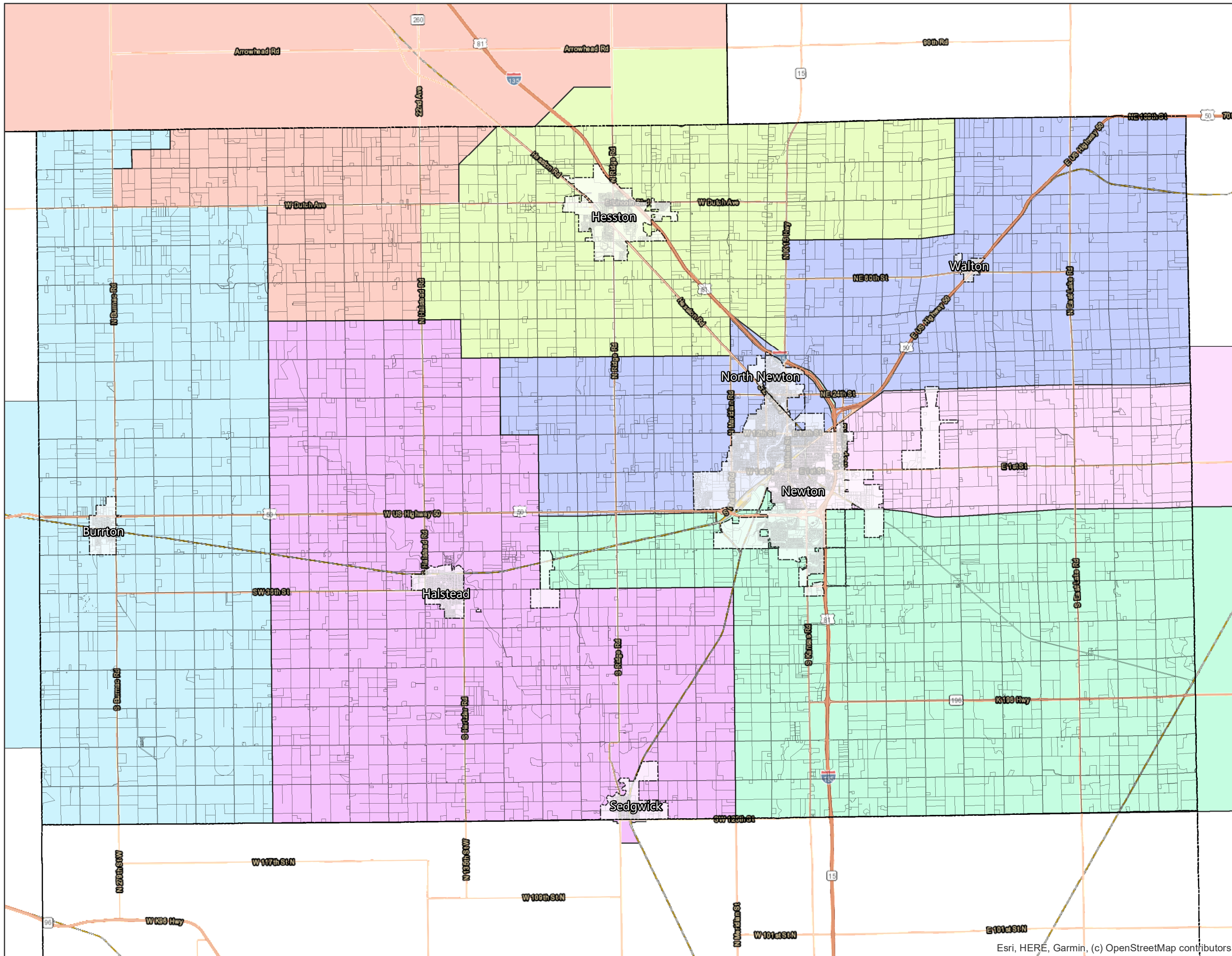


- LEGEND**
- Municipal Boundary
 - Parcels
 - BUHLER
 - BURRTON
 - GOESSEL
 - HALSTEAD
 - HESSTON
 - MOUNDRIDGE
 - MT HOPE
 - NEWTON 1
 - NEWTON 2
 - NEWTON 3
 - PEABODY
 - SEDGWICK
 - SEDGWICK COUNTY
 - WALTON
 - WHITEWATER











MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23


 0 1 2 4 Miles

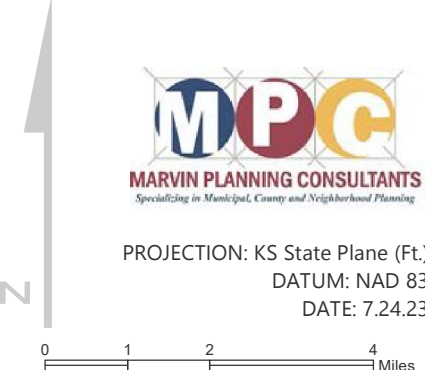


LEGEND

-  Municipal Boundary
-  Parcels
- EMS District**
-  BURRTON
-  HALSTEAD
-  HESSTON
-  MOUNDRIDGE
-  NEWTON 1
-  NEWTON 2
-  NEWTON 3



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23





Public Health

Public health workers track disease outbreaks, and shed light on why some are more likely to suffer from poor health than others. The many facets of public health include speaking out for laws promoting smoke-free indoor air and seatbelts, spreading the word about ways to stay healthy, and giving science-based solutions to problems.

Sources: American Planning Association, Planning and Community Health Research Center, Healthy Plan Making; American Public Health Association

Public Health is the science of protecting and improving the health of people and their community.

People employed in public health try to prevent people from getting sick or injured in the first place. Public health models endorse wellness by educating and encouraging healthy behaviors such as walking and bicycling, reducing use of tobacco, and education on alcohol and other drug misuse. The field of public health works to assure the conditions in which people can be healthy. Public health also sets safety standards to protect workers.

Harvey County Health Department

The Harvey County Health Department is located at 215 S Pine St in Newton. The Department is



Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

dedicated to improving and protecting the health of the people.

Focus Group Discussion

The focus group discussions happened during early 2021 during the Covid-19 pandemic. The pandemic revealed certain gaps in healthcare, such as:

- Transportation to vaccine sites became a challenge during the pandemic; however, this challenge was always present under the

surface

- Transportation to needed services, in the county and to Wichita, was and is still a major challenge for the county's residents
- Food insecurity was also exacerbated by the pandemic, particularly amongst the age groups of 20 to 40 who are of a low income
- While the county does not qualify as a food desert, there are only two cities with grocery stores, Newton and Halstead, however, plans were revealed for a grocery store in Hesston in 2022. In Sedgwick and Burrton, limited groceries may be purchased at the discount store and convenience store
- Transportation to food is a challenge just as much as it is to services

Food system resilience is one of the department's focus with the Harvey County Food and Farm Council.

Improvement of specialized service improvements are also a concern of the department, including:

- Improved services for the older adults since they fail to meet the needed standards
- Older adults cannot find a local board certified geriatric doctors, pushing them to Wichita or elsewhere
- Housing options for the older adults are not sufficient, and go hand in hand with other previously mentioned issues
- Motorized scooter repair does not exist, again pushing the older adults to go, and perhaps live, elsewhere

At the opposite end of the age spectrum:

- Childcare services began to suffer before the pandemic, and were only exacerbated after it's advent
- The county has a desperate need for better childcare hours and providers; school/work hours and childcare hours do not usually line up

Specialized healthcare services needing to be improved also include:

- The LGBTQ+ population. As of the writing of this plan, there are no LGBTQ+ friendly providers in the county
- Specialized services for STI/HIV/AIDS are lacking as well, as there are no infectious or viral doctors in Harvey County

NMC Health Facility

NMC Health is an award-winning, highly specialized medical care system focused on improving health throughout Harvey and surrounding counties. They feature a 99-bed hospital located at the intersection of I-135 and Highway 50, with 10 primary care and specialty clinics.

The Main Campus includes specialty services for Home Care and Private Duty, Neurology, Orthopedics and Sports, Physical Therapy and Rehabilitation, Sleep Disorders, Surgery Center and Wound Healing and Hyperbaric Center.

NMC Health is host to the following health care services:

- Family Birthing Center
- Emergency Department
- ICU – Critical Care
- Surgical Unit
- Medical Unit
- Inpatient Rehab Unit
- Senior Behavioral Health Center
- Infusion Center

NMC Health has a Family Medicine clinic located in Hesston, as well as Wichita, Park City and Valley Center and an Immediate Care Clinic at 118 E. 12th in Newton.

Other Services on NMC Health Campus begin on the following page.

Axtell Clinic is located on the main campus with the hospital. The Clinic offers service including a walk-in clinic, family medicine, ophthalmology, birth control, sports medicine, preventive medicine, pediatrics, research and medical aesthetics.

Integrity Medicine, LLC is Direct Primary Care clinic located on the NMC campus. The clinic offers care directly to patients without the insurance hassle of co-pays, prior authorizations, or decision delays. The clinic offers significant discounts on medications, through their wholesale generic pharmacy, labs, and negotiated prices on radiology. Services provided include:

- Arthritis/Rheumatologic Disorders
- Autoimmune disorders
- Chest pain/EKG/Cholesterol management
- Hypertension
- COPD/Asthma
- Smoking Cessation



NMC Health
Source: mynmchealth.com

- Pulmonary Function Testing
- Skin Disorders and Lesion
- Biopsy/Removal
- Diabetes/Thyroid Disorders
- Women's Health
- Osteoporosis/Metabolic Disorders
- Men's Health—Testosterone and Prostate
- General Physical Exams/Cancer Screening
- Colonoscopy/EGD
- Sports injuries/Back Pain
- Headaches/Neurological Disorders
- Anemia
- Depressive Disorders
- D.O.T. Physicals/Employment Physicals/School Physicals
- Preoperative Evaluations and
- Infusion Therapy

Source: <https://www.mynmchealth.org/>

Health Ministries Facility

Health Ministries Clinic is a Federally Qualified Health Center (FQHC) and Kansas, 501c3, not-for-profit corporation. HMC serves Harvey County and the surrounding communities. Their board-certified providers deliver a range of Primary Medical, Dental, Behavioral Health, and Pharmacy Services to patients of all ages.

The primary health care services are provided by physicians (MD/DO) and Advanced Practice Providers (APRN/PA) supported by a nursing care team. Services are provided by highly skilled and compassionate providers working as an integrated team.

Services are provided on a sliding fee scale to those who qualify. The clinic accepts most major private insurances as well as Medicaid and Medicare. Appointments are needed for most services, although many times the clinic may be able to see you the same day you call. All ages are welcome.

Primary health care services include:

- Same day appointments
- Non-emergency primary care
- Chronic disease management
- Pre-employment physicals
- Well Woman exams
- Immunizations
- Lab services
- Diagnostic imaging (X-ray, CT scan, DEXA scan)
- Acute illness

Pediatrics care services include:

- Same day appointments
- Non-emergency primary care
- Complete care for infants, children, and adolescents
- Newborn care, including breastfeeding education and support
- Treatment of childhood illnesses
- Developmental screening, vision, and hearing tests
- Kan Be Healthy/Well child visit/Sports physicals
- Sick visits
- Screening for mental health problems (such as ADHD, depression, anxiety, and autism)

Providers see newborn patients at HMC Clinic only. After the baby is born at a hospital, birthing center, or any other facility, the pediatrician on-call will see and evaluate your baby immediately following birth.

General dentistry services are provided by dentists (DDS) and registered dental hygienists (RDH) supported by dental assistants. Our general dentistry services include:

- Dental emergencies
- Exams and X-rays
- Cleanings
- Fillings
- Extractions
- Root canals
- Crowns

Behavioral health services are available to patients who have established care with Health Ministries as a medical or dental patient, as a part of the integrated care model. The behavioral health services are provided by a Licensed Specialist Clinical Social Worker (LSCSW) and psychiatric nurse practitioner (APRN) supported by a nurse case coordinator. In-house services include:

- Behavioral assessment

- Brief, solution focused therapy
- Targeted lifestyle change
- Psychiatric medication consultation

Health Ministries Clinic's Medication Assistance Program (MAP) is a partnership between the patient, the Health Ministries Clinic care team, and the manufacturers of prescription drugs. Eligibility is based on household income and not having any other type of prescription coverage through insurance. If eligible the patient may be able to receive some or all of the medications for free or at a reduced price. A MAP coordinator can assist in determining if this program is an option for patients.

As a Federally Qualified Health Center, Health Ministries Clinic provides patient access to certain discounted medications that are prescribed by HMC providers as part of treatment plans. HMC contracts with area pharmacies to provide this service under the Federal 340B Program.

HMC Pharmacy offers no-hassle prescription transfers, a convenient drive-thru window, easy refill options, and refills by delivery or mail options, including:

- Exclusive to HMC patients
- Lowest prices, guaranteed
- Price matching
- Free prescription delivery
- Face-to-face communication with your doctor
- Pick up same day as appointment

Health Ministries Clinics are located at Newton Medical Center Complex and in Halstead. The Dental Clinic is located in the same building as the County Health Department. The HMC Pharmacy is located in the Newton Medical Center Complex.
Source: <https://HMCKS.org>

Focus Group Discussion

The Focus group discussion occurred in early 2021 during the Covid-19 Pandemic. Key issues identified include:

- An unstable workforce
- poverty
- diabetes
- endless delayed care to name a few

The mental health crisis is at the forefront of the hospital's mind due to:

- Mental health issues being exacerbated by the pandemic
- Depression and suicide rates rose considerably due to the pandemic, and have not decreased

- There is not the care or funding necessary to address this issue
- Mental health issues apply to those who are infirmed as well
- The Harvey County Detention Center no longer is able to employ mental health providers in the county for inmates

The workforce in the county, across the spectrum, has been unstable. As with the Harvey County Health Department, there are not enough skilled workers to manage all facilities, especially. The workforce has had an increase of retirements and is not seeing replacements from the college graduates. Burnout is prevalent in the medical workforce.

Major social determinants of health care are:

- Poverty which manifests itself primarily in children
- Children born into poverty, families with drug addictions, and babies born into Medicaid are a new focus of the NMC Health. Newton has strong social assistance programs for these children, which the NMC Health is able to access

Lastly, Harvey County has a:

- 1% higher rate of diabetes than other counties in the state
- The NMC Wound Center sees approximately 30-40 patients a day; a majority are diabetic
- This population typically does not have adequate insurance to cover all of the services

Department of Aging

The Department of Aging is located in the Harvey County Courthouse. The Department aims to support Harvey County residents over 60 with the information and assistance necessary to maintain wellness and independence. The values guiding these efforts include respect and dignity for each individual, each person's right to self-determination, the importance of self-reliance and self-care, diversity, and advocacy. The Department on Aging receives guidance from the Aging Advisory Council appointed by the Harvey County Commission, which meets eight times yearly on the second Thursday of the month.

The Department on Aging is also home to Harvey County AmeriCorps Senior - RSVP program for volunteers 55 years and older using their expertise and skills to build support for strong Harvey County

Communities. In 2022/2023, Harvey County RSVP volunteers provided 11,428 hours, equating to a \$307,070 financial service impact.

Harvey County Interurban is also part of the Department on Aging. Interurban offers general public transportation to Harvey County residents under the federal USC 5311 guidelines. In 2022, Interurban provided 3,594 trips traveling 71,970 miles in service of Harvey County citizens. Social trips have resumed in 2023, offering transportation from Newton to various community programs.

Focus Group Discussion

The pandemic presented new challenges to the department, with:

- Nutrition services - malnutrition and lack of access to grocery stores
- Non Covid-19 needs have always been present, food included
- The State of Kansas has reduced funding for the meal deliver match program, reducing food security for those who often need stable access the most - seniors.

Living and aging in place also means working in place.

- Harvey County has a high population of adults who work well past retirement, particularly in the rural areas
- The senior population has a higher work ethic but younger medical professionals do not operate in the same manner
- As with the other departments interviewed, it is hard to find workers who want to work in senior care

Aging and living in place once being widowed leads to loneliness amongst seniors.

- Loneliness and mental health issues are not mutually exclusive
- Mental health issues in the county apply to all ages, especially those seniors who age and live in place without their partners

Based upon the comments received during this focus group, a key for Harvey County is the need seniors to stay in their housing. The department could make living and aging in place more viable, however:

- Funding is lacking for minor home repair programs, making this difficult to work towards
- As of the writing of this plan, age in place

programs do not exist in the county at a sufficient level

- Minor home repair programs have very high requirements for those who want to stay at home and age in place
- There is a long waiting list for these programs, which rely entirely on local contractors.
- Housing stock issues make this a difficult goal to work towards as well.

Social Determinants of Health

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age affect a wide range of health, functioning, and quality-of-life outcomes and risks.

SDOH can be grouped into five domains:

- Economic Stability
- Education Access and Quality
- Health Care Access and Quality
- Neighborhood and Built Environment
- Social and Community Context

SDOH have a major impact on people's health, well-being, and quality of life. Examples include:

- Safe housing, transportation, and neighborhoods
- Racism, discrimination, and violence
- Education, job opportunities, and income
- Access to nutritious foods and physical activity opportunities
- Polluted air and water
- Language and literacy skills

SDOH can contribute to wide health disparities and inequities. For example:

- People who do not have access to grocery stores with healthy foods are less likely to have good nutrition
- This raises their risk of health conditions like heart disease, diabetes, and obesity — and even lowers life expectancy relative to people who do have access to healthy foods
- Just promoting healthy choices will not eliminate these and other health disparities
- Public health organizations and their partners in sectors like education, transportation, and housing need to take action to improve the conditions in people's environments

Source: <https://health.gov/healthypeople/priority-areas/social-determinants-health>

Community Supported Agriculture

Per the USDA, Community Supported Agriculture consists of a community of individuals who pledge support to a farm operation so the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production.

In a traditional CSA model:

- Members share the risks and benefits of food production with the farmer
- Members buy a share of the farm's production before each growing season
- In return, they receive regular distributions of the farm's bounty throughout the season
- The farmer receives advance working capital, gains financial security, earns better crop prices, and benefits from the direct marketing plan

Current business models for CSAs are diverse and innovative. Producers have adapted the CSA model to fit a variety of emerging direct marketing opportunities, including:

- Institutional health and wellness programs
- Multi-farm systems to increase scale and scope
- Season extension technologies
- Incorporating value-added products, offering flexible shares, and flexible electronic purchasing and other e-commerce marketing tools

Sources: T. Woods, M. Ernst, and D. Tropp. Community Supported Agriculture – New Models for Changing Markets; USDA, Agricultural Marketing Services; <https://www.kalayaemuestate.com/>

Community Health Needs Assessment

Harvey County undertook a Community Health Needs Assessment in 2020. The assessment is being used to address current and future health needs for the communities of the county. Such reports address both individual health as well as overall community health.

The Healthy People 2030 Action Model was used as a comprehensive model for the assessment. This model works to cultivate healthier environments, increase knowledge and action, and close gaps to improve health and well-being for all citizens of the county.

The sources for this assessment include surveys,

focus groups, and objective studies. After gathering this data, a Community Health Improvement Plan (CHIP) was created to drive forward health identified health priority efforts.

Goals of Assessment

Three health priorities were identified as the current and future focus points for the county. The timeframe for accomplishing these goals was July 2020 to June 2023. Accomplishment of these goals required the county and its stakeholders identify lead agencies to guide the planning and implementation of policies, systems, programs, and environmental changes designed to produce successful health-changing outcomes within three years.

These three goals were as follows:

- Prevent and manage chronic diseases: Key indicators of need were improving prevalence and outcomes of chronic diseases, such as diabetes and heart disease, and improving health literacy aided by adoption of digital connectivity and data
- Increase behavioral health services and education: Depression and substance misuse were key indicators from data and perceptions
- Increase economic stability: Areas of employment, food insecurity, housing instability, and poverty were key indicators

Efforts outside of Assessment

Harvey County employers are already working to address these priorities by following evidence-based model. The improvements include focusing on well-being, tobacco-free job sites, increased physical activity, and healthier options at worksites. This model returns to the crux of public health; working to assure the conditions in which people can be healthy.

Coalitions aside from employers are also working to make Harvey County residents healthier. D-FY, a drug free youth coalition, is represented by twelve community sectors with a mission to reduce the use of drugs by youth while changing the perception of youth drug use. Among those sectors is STAND, a youth prevention group, partnered with a prevention and treatment center. A major success of this coalition was the passing of an ordinance by the Newton City Commission prohibiting the sale of all tobacco and nicotine products to persons under the age of 21; again returning to the crux of public health.

Assessment Methods

Participant information was gathered via survey, focus groups, and data research.

Survey

Survey participants were required to be Harvey County residents 18 years and older. The electronic survey, available in English and Spanish, was open from January 7, 2020 to January 27, 2020. There were 653 people responded. Of the respondents, 75% were female. Respondents were split three ways between Yes, No, and Don't Know on if they have any general concerns about health or healthcare in Harvey County. The following were identified from the survey:

- Top three most important factors: access to health care, low crime/safe neighborhoods, and having a healthy economy
- Three most important risky behaviors: drug abuse/misuse, alcohol abuse, and being overweight

Focus Groups

Focus groups were made up of people lacking representation during the survey process. Those areas were males, Latinx, those of lower income, and those with a high school degree or less. The groups were put together by Circle of Hope, a community initiative supporting families, and New Jerusalem Missions, a ministry serving males who are homeless or in need of transitional services. Focus group sizes ranged from six to 23 persons each.

Focus group responses identified five core areas deficient in resources in the county:

- Housing
- Economic needs
- Healthcare
- Mental health, and
- Service

Some issues outside of the five core areas included churches not living their faith (some churches were not accepting of certain people's lifestyles), police discrimination, systemic issues, and the state's financial situation.

Data Research

Sources used during this assessment included the US Census Bureau, Kids Count, the Behavioral Risk Factor Surveillance System.

Health indicators were identified through secondary data sources and then selected by the assessment team. This data sources included Healthy People 2020, and those recommended by the Centers for Disease Control and Prevention. Data related to selected indicators were accessed through public health databases including Kansas Health Matters, County Health Rankings, Kansas Communities that Care. And accesskansas.org.

Socioeconomic Factors

Factors affecting a persons health include:

- Income
- insurance coverage
- Employment
- Food access

Incomes and employment are addressed in Chapter 5. Household incomes lag behind Kansas and the United States, while employment is also adjusting due to repercussions of the pandemic and lack of workforce.

Lack of health insurance and those living below the poverty level play a significant role on the health and socioeconomic impact of Harvey County residents. According to the Kaiser Family Foundation analysis of the 2017 National Health Interview Survey, individuals who are uninsured are three times more likely to bypass a clinic visit or primary care visit than those who are insured. As of 2017, 6.2% of all residents had no health insurance, while 11.2% were below the poverty level (US Census Bureau).

Food insecurity is a households failure to supply nutritionally adequate food for every individual to lead an active and healthy lifestyle. Food insecurity provides ways to assess and measure risks of hunger in each community, as well as unemployment and poverty.

Food insecurity is also tied to health conditions such as diabetes and heart disease. Studies have shown one in four Americans worry if they will be able to provide adequate meals for their family yearly. As of 2017, the food insecurity rate was 11.6%, lower than the 12.7% rate overall for Kansas (Kansas Health Matters, 2017).

Lunches provided at schools are also a major part of food insecurity. The eligibility for students in Kansas is dependent on guidelines and household

size. Harvey County's participation in the National School Lunch Program has decreased recently. Despite a downward trend, Harvey County was still behind Kansas in the need for reduced or free lunches. As of 2020, 47.0% of students were eligible for reduced or free lunches (Kansas Department of Education).

Health Outcomes

Positive health outcomes such as preventing chronic disease, reducing premature deaths and disabilities, and attaining quality healthcare for all members of a community can be improved by access to healthcare. Healthcare impacts areas of life such as physical, social, and mental health.

Healthcare Access

Harvey County has a higher than average availability than both Kansas and the United States. As of 2017, there were 29 primary care physicians, or a rate of 84.7% primary care physicians per 100,000 persons.

Adults 18-64 are among the highest uninsured populations in Harvey County, while those under 18 had a higher uninsured population than both Kansas and the United States (Community Commons).

Chronic Diseases

High cholesterol is one of the chronic diseases that is a focus in Harvey County. There are efforts to try to reduce the cholesterol and improve health. In the 2017 Community Health Needs Assessment, the cholesterol goals were to reduce adults with high cholesterol to 13.5%. The county did not meet the goal by the new 2020 assessment.

Harvey County has a lower rate of diabetes than the State and National average overall. Unique to Harvey County is a federally-qualified health care center, Health Ministries Clinic, which focuses on diagnosing diabetes and relationship of obesity.

Diagnosis of high blood pressure was also lower than the state and national rate.

Obesity

Obesity has decreased in the county since 2015, though it did not reach the Healthy People 2020 goal of reducing obese adults to 30.5%.

According to the CDC, only one in ten adults consume enough fruits and vegetables to live

healthier lifestyles. The federal guidelines recommend adults consume 1.5 to 2 cups of fruit and 2 to 3 cups of vegetables per day; without following these guidelines, adults are putting themselves in vulnerable positions to develop chronic diseases. In Harvey County, only 20.6% of adults met the recommended guidelines of fruit and vegetable consumption.

Adolescents

A goal of Healthy People 2020 was to improve the healthy development, well-being, safety, and health of young adults. According to the 2019 Kids Count data, Harvey County has a higher level of prenatal care than Kansas, and yet, has double the infant mortality of Kansas. Harvey County also has a higher number of youth hospitalizations due to mental health issues than the state of Kansas. According to the American Journal of Managed Care, social media and cyberbullying can be directly linked to self-harm, depression, and suicidal thoughts.

Addiction

Harvey County has seen a rise in drug overdose mortalities since 2004, while drug poisoning hospital admission rates have gone down, addiction is still an issue in the county predicated by access to alcohol and tobacco.

Tobacco use had seen swings in Harvey County over the period of 2015 to 2017. A response to the increase in tobacco usage was the passing of the ordinance limiting tobacco sales to only those who are 21 and above. While cigarette usage has seen a decline, the use of e-cigarettes has increased. A trend was noted during the assessment was an increase in youth usage of e-cigarettes. While the number is lower than the state of Kansas, the usage of e-cigarettes was also a major factor in passing the tobacco limiting ordinances.

Mental Health

Both mental and physical health go hand in hand, and public health can have a major impact on mental health outcomes. Depression and anxiety can be impacted by genetic, biological, environmental, and psychological factors. A person's living conditions and environment have a considerable impact on how they perceive the world around them. The CDC reported at the time of the county assessment that suicide was in the top ten leading causes of death in the United States (as of 2022, it is now the 12th leading cause of death in the United States).

Mental health is also impacted majorly by ones physical health. In 2017, those persons with poor physical and mental health (or a combination of both) kept them from their usual activities was nearly 40.0% (Kansas Behavioral Risk Factor Surveillance System Local Data).

Depression rates, those who have had depressive episodes, and thoughts of suicide have all seen increases since 2011. Females more so than males are more likely to experience suicidal tendencies or thoughts (Community Commons, CHNA Assessment; Substance Abuse and Mental Health Services Administration; CDC)

Due to the prevalence of mental health issues in the United States, Kansas, and Harvey County, one of the goals of the assessment became to increase mental health and behavioral health services and education.

911 Calls and Crime

Crime in a community is a strong indicator of public health outcomes. Safe and clean environments in turn lead to improved health outcomes. Monitoring the calls received and crimes reported help to identify where people do and do not live in safe and clean environments. Calls monitored ranged from disputes to fires.

The most frequent 911 general (non criminal) call in 2019 was for vehicles, while the least frequent was for complaints. The most frequent criminal 911 calls were for child in need of care calls, while sex offenses and stabbings came in tied at the bottom. The overall calls to 911 in 2019 were 54,883 (Harvey County Communications/911).

Harvey County displayed a relatively low crime index compared to Kansas and the United States as a whole. From 2013 to 2018, the crime index dropped considerably (accesskansas.org).

Priority Setting and Conclusion

After deliberation and input from community stakeholders, the health needs of:

- Prevent and manage chronic disease
- Increase mental health and behavioral health services and education
- Increase economic stability were established

The data collected and compiled was used to develop SMART (Smart, Measurable, Achievable,

Relevant, and Time-bound) goals. Goals will drive the CHIP (Community Health Improvement Program) development. Addressing these priorities, stakeholders identified lead agencies to guide the planning and implementation of evidence-based policy, systems, programs, and environmental changes designed to produce successful outcomes within the time period of 2023.

Aging Goal PH-1:

The Department of Aging is working to increase the community outreach and awareness of aging needs and services.

Action Items

1. Continue working on the **As We Age, Strengthening the Journey**
2. The Department on Aging will increase social media posts, website updates, public speaking, and educational presentations.
3. The Department on Aging will increase the number of fall prevention and education opportunities offered in the community.
4. Harvey County RSVP will continue to work on expanding the **Store to Door** program and increasing the number of volunteers working with this program to allow additional referrals.
5. Store to Door will continue to be a supporting service for homebound older adults, volunteers will shop and deliver groceries, and the recipient will pay the amount listed on the grocery receipt.
6. This program should support Harvey County residents when returning home from the hospital or rehabilitation stay until they are strong enough to resume grocery shopping for themselves.
7. Interurban Transportation will continue working to offer educational and fun social trips in the future.
8. Interurban Transportation will also work to secure funding for low-income individuals to support access to health care, nutrition, and other social services programs.

Page Intentionally Left Blank



Chapter 11

Communication, Utilities, and Energy

Introduction

Communication, utilities and energy are critical to most people. This chapter outlines the different communication media available throughout Harvey County, as well as the different utilities provided and finally examines the production of energy now and into the future in Harvey County.

Communications

Humans want to stay in touch with our families, friends, and the day to day activities and news occurring around us. Residents communicate via newspapers, radio, television, cable, and the internet.

Newspapers and Radio

The news media provides information in various ways to Harvey County, including:

- Two locally published newspapers
- Regional coverage via daily newspapers published in Wichita and Hutchinson
- Over-the-air via television and radio station, most of which are located in Wichita and Hutchinson areas

Cable Television

Cable television is available in municipalities of Harvey County Satellite television is an option for all

of the county.

Internet

Harvey County has several options for broadband internet access, not all options are available in all areas of Harvey County as many of the rural areas are limited on internet access options :

- Leased lines
- Frame relay
- DSL services
- Fixed wireless internet is available where not blocked by topography, trees or structures
- Cable high-speed internet connections are available in some areas, which are attractive for remote hosting, server farms, and related information technology (IT) services

Broadband access on the eastern and western part of the county, particularly in the county parks, is poor. Poor access was noted during public input sessions as well as focus group meetings with county stakeholders. Increasing access to good quality internet is something rural residents feel is a strong need in Harvey County.

Utilities

While providing opportunities for growth where appropriate, maintaining existing infrastructure is an important consideration for Harvey County. By

efficiently planning for maintenance and strategically locating maintenance equipment and personnel, the county can ensure maintenance and construction occur in a timely and cost effective way.

Rural Water Systems

There are a number of different providers within Harvey County for water including:

- Municipal systems
- Rural Water Districts (RWD)
- Private wells

At least half of the county water supply is provided by rural water districts and individual wells.

Harvey Rural Water District #1 covers the entire eastern third of the county, while Marion Rural Water District #4 covers a small portion of land in the northwest corner of the county. The incorporated municipalities in Harvey County are serviced through Public Wholesale Water Service Districts.

Water service beyond the rural water districts and municipalities operates off of water wells. Several cities and rural water districts, including those located in surrounding counties, get their water from the underground Equus Beds Aquifer located in Western Harvey County.

Any substantial future development in the rural areas would require the upgrading and expansion of the existing rural water distribution systems. Existing sources for the rural water districts are believed to have adequate water supplies but the current distribution system cannot support substantial growth. See Figure 11.3 at the end of the Chapter for the coverage of the different rural water districts, public wholesale water district, and water wells.

Wastewater

Developments outside of the municipalities of Harvey County will typically be made up of multiple individual septic systems. These systems should continue to be monitored closely by the County Environmental Office. This includes proper separation distances from property lines and water supply wells as required by local codes and the Kansas Department of Health and Environment (KDHE). In subdivisions with a gross density of more than one unit per two acres, community

wastewater systems meeting wastewater treatment standards established by the KDHE should generally be installed.

The county should encourage replacement of septic systems in subdivisions with community systems when feasible. This is particularly important where residential densities are too high to accommodate replacement of septic systems. Developments using individual septic systems should design lots to provide efficient septic fields are not less than two acres. Thus, nearly square lots or lots with a smaller ratio of depth to width are more effective than deep narrow lots.

Alternatives to individual septic system treatment should be encouraged especially where rock is relatively shallow below the ground surface.

Community wastewater treatment options include:

- Community collection systems with pumping to an existing community treatment facility
- Community non-discharging lagoons and collection systems
- Individual septic tanks with community collection systems and lateral fields
- Community collection systems with packaged treatment plant facilities
- Tandem systems using individual septic tanks limit the cost of service lines by reducing solids from the liquid effluent and permit smaller, less expensive treatment plants

In new developments, the county should also encourage the use of environmentally sensitive methods of wastewater treatment and disposal. The conservation concept and maintaining common open space provides greater opportunities for development of these systems. Techniques such as spray irrigation and land treatment are becoming more applicable and should be considered for projects when feasible. This may represent cooperative efforts among several developments. With these methods, wastewater is aerated in deep lagoons and applied to the land surface at rates consistent with the absorption capacity of the soil. This process will require a close working relationship with KDHE to ensure all state and federal regulations are being met.

Figure 11.1: Oil and Natural Gas Production

Year	Oil			Gas		
	Production (bbls)	Wells	Cumulative (bbls)	Production (mcf)	Wells	Cumulative (mcf)
1996	158,072	138	41,657,985	365,348	58	38,993,385
1997	163,021	132	41,821,006	331,755	60	39,325,140
1998	141,064	122	41,962,070	333,507	57	39,658,647
1999	136,517	120	42,098,587	295,316	54	39,953,963
2000	134,502	125	42,233,089	265,328	50	40,219,291
2001	140,650	126	42,373,739	271,750	49	40,491,041
2002	144,804	129	42,518,543	245,518	46	40,736,559
2003	139,557	123	42,658,100	238,743	42	40,975,302
2004	133,499	127	42,791,599	254,049	45	41,229,351
2005	134,088	124	42,925,687	229,665	46	41,459,016
2006	145,486	121	43,071,173	230,062	40	41,689,078
2007	137,152	120	43,208,325	225,034	42	41,914,112
2008	130,725	112	43,339,050	227,596	42	42,141,708
2009	130,584	114	43,469,634	275,506	42	42,417,214
2010	124,005	114	43,593,639	246,127	42	42,663,341
2011	129,304	116	43,722,943	374,802	42	43,038,143
2012	124,894	114	43,847,837	316,068	42	43,354,211
2013	127,964	115	43,975,801	303,864	39	43,658,075
2014	130,063	119	44,105,864	258,293	34	43,916,368
2015	121,866	120	44,227,730	228,941	33	44,145,309
2016	102,481	117	44,330,211	159,874	29	44,305,183
2017	100,749	117	44,430,960	131,611	27	44,436,794
2018	95,661	121	44,526,621	176,022	26	44,612,816
2019	96,762	119	44,623,383	164,743	25	44,777,559
2020	86,595	111	44,709,978	134,371	25	44,911,930
2021	84,948	114	44,794,926	130,010	23	45,041,940

Source: Kansas Geological Survey

Other environmentally sensitive techniques include:

- Wastewater reclamation and reuse. This represents a refinement of the land treatment option. Treatment is typically achieved in deep aerated cells over 14 to 40 days. After further treatment and settlement, the water can then be applied to cropland and open space
 - Constructed Wetlands
 - Artificial wetlands are gaining growing acceptance for treatment of wastewater. This technique supplements rather than replaces septic treatment. The wetlands provide further treatment for effluent and have been combined with aerobic treatment units (ATUs) before effluent is conducted to drainage fields

Energy

Energy usage in the early 21st Century is becoming a critical issue throughout Kansas as well as the entire United States. Our dependence on non-renewable energy sources has increased significantly over the past 100 years. The 21st Century has ushered in an increased concern for energy usage and its impacts on the environment. In addition, the phrase and concept of sustainability has become more widely used.

Energy in Harvey County refers to both the oil and natural gas industry as well as the renewable energy industry. Oil and Natural Gas Oil and natural gas production once had a strong presence in Harvey County. Figure 11.1 shows the number of wells and production by barrels and cumulatively between 1995 and 2021. As of 2021, there are a total of 114 registered oil wells, which is down

slightly from 1995. Between 1995 and 2021, the oil production in Harvey County steadily declined while the barrel production itself increased by over three million barrels. Natural gas production, based upon the Kansas Geological Survey, has decreased in the county over the time period of as well. Figure 11.1 shows the annual production of natural gas, similar to oil production for the county. Despite the production decreasing, the cubic feet sold increased by just over 6 million cubic feet.

Oil production will likely be tied to two critical issues in the future:

- The amount of oil left in the ground
- The price per barrel for oil

The latter is as critical as the other, since oil production typically slows down when the price per barrel drops under \$50 per barrel. The smaller oil producers cannot make a profit when prices drop below the \$50 per barrel level.

Renewable Energy

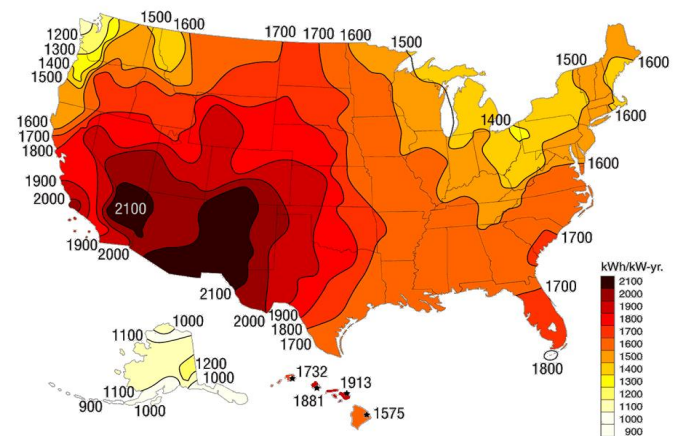
Renewable energy sources, according to most definitions, include natural resources such as the wind, the sun, water, and the earth (geothermal) capable of being used over and over again with minimal or no depletion, as well as tapping into sources of methane (from natural resources or man-made conditions). The most common sources of renewable energy used in Kansas are the wind, the sun, water, and earth. The following are examples of how these renewable resources can be used to diversify the county's energy portfolio.

Commercial Renewable Energy Projects

In 2022, Harvey County adopted renewable energy regulations for large, non-private renewable energy projects referred to as Commercial Renewable Energy Projects ("CREP"). CREPs, defined as: "...An electrical generating facility that utilizes water, wind or sun to produce electric....",

In 2023, the renewable energy regulations were reviewed again. The County put a moratorium on all commercial renewable energy projects in Harvey County until new regulations could be developed. Considerations for making decisions included population density, protection of the Equus Beds, sand hills, wetlands and floodplain areas; radar and communication tower interference; and the residents' priorities to maintain farm ground, recreational areas and the

Figure 11.2: Solar Potential



Source: Solar Energy Industries Association

rural landscaping of Harvey County.

The suitability of commercial projects was weighted heavily on these subjects. Changes in technology and new improved systems may change the suitability of commercial renewable energy in Harvey County in the future.

Wind

Wind energy is currently not harvested in the county. There is significant concern amongst the county government as well as people of the county on:

- The impact of wind farms on the Equus Beds
- The soil in the county, particularly on the west side of the county (the "sand hills"),
- The Equus Beds, are not conducive to wind energy tower construction
- Population density of the county

Wind energy has raised great concerns among the citizens and governing officials in Harvey County. Concerns included groundwater, floodplains, wildfires, communication tower interference, radar interference, airports and private airstrips, density of population and priorities of the citizens expressed through surveys and in-person meetings. There are no commercial wind energy projects in Harvey County. There has been interest by wind energy developers to build a project in Harvey County. Harvey County suitability for commercial projects is of concern. The county was considered suitable for personal use, smaller wind turbines for residential and agricultural use.

Solar

Solar energy has been around for decades and it last hit a high in popularity in the 1970's. However, today's solar energy design is much more efficient and aesthetically pleasing. Some of the aesthetic improvements have to do with the fact today's systems are not as bulky as their ancestors. Today, solar is being used in different ways:

- On a small-scale level (home or business)
- A grander level (solar farms)

Solar energy includes solar water and space heating as well as taking solar photovoltaic panels to convert the sun's rays into electricity. Solar costs, at the time of this plan, have been seeing dramatic cost decreases per kW. Solar is rapidly becoming much more affordable to install and use.

In the future, new subdivisions/ developments may be designed to incorporate renewable energy systems such as solar and wind. In order for this to occur, a standard subdivision regulation and zoning code would likely need to be modified in order to allow these systems.

Commercial solar (limited generation capacity) provides opportunities for agricultural producers through the development of solar farms on lands with low to marginal production capacity. Instead of leaving land unfarmed, producers could work with energy developers to build new facilities. The county desires these facilities to be no more than 10 acres in size and all power used within the county's borders.

There is currently a commercial solar farm on the east side of Harvey County. Many residential customers have installed roof mount and ground mount systems in Harvey County. Utility scale projects were determined to be unsuitable for Harvey County. The determining factors were:

- Population density and
- Environmental protection

Geothermal Energy

Geothermal energy is typically utilized through a process where a series of pipes are lowered into vertical cores called heat-sink wells. The pipes carry a highly conductive fluid to be either heated or cooled by the constant temperature of the ground. The resulting heat exchange is then transferred back into the heating and cooling system of a home or other structure. This is called a geothermal

heat exchange system or ground source heat pump. The California Energy Commission estimates the costs of a geothermal system can earn net savings immediately when financed as part of a 30-year mortgage.

Source: American Planning Association, PAS Memo January/ February 2009.

Currently, this is a popular means of heating and cooling within Harvey County. Geothermal is utilized at the courthouse.

Methane Energy

The use of methane to generate electricity is becoming more cost-effective across the country. Methane electrical generation can be accomplished through the use of a methane digester which takes the raw gas, naturally generated from some form of decomposing material, and converts the gas into electrical power. Attempts have been made to take the methane generated from animal manure and convert it into electricity; most have been successful but were costly to develop. Another approach to methane electrical generation is to tap into the methane being generated from a solid waste landfill; instead of burning off the methane, it can be piped into a methane convertor and generated into electricity for operating a manufacturing plant or placed on the overall grid for distribution. Methane convertors make use of unwanted gases and are able to produce a viable product. As long as humans need to throw garbage into a landfill or the production of livestock is required, there will be a source of methane to tap for electrical generation.

Future Use of Energy

Energy in the future is at a crossroads in the United States. There are some interests wanting to move away from fossil fuels to all renewables and some interests wanting to limit renewable energy sources.

Harvey County has the responsibility to decide role fossil fuels and renewable energy will play in their long term future. County residents and leaders will need to consider all options to decide what is suitable for Harvey County.

Communication, Utilities, and Energy (CUE) Goals and Action Items

CUE Goal CUE-1:

Communication companies will be investing in county-wide broadband within Harvey County.

Action Items

1. The County should take a proactive role in acquiring grant funding to expand broadband county-wide.

CUE Goal CUE-2:

The protection of the Equus Beds is critical.

Action Items

1. Consider limiting or prohibiting the mass installation of certain wastewater systems over the Equus Beds.
2. Continue the prohibition of commercial wind turbines and large scale solar farms in the Equus Bed region.
3. Require future rural subdivisions near the Equus Beds to connect to a rural water district instead of individual wells.

4. Consider expansion of rural water districts to the rural areas in western Harvey County

CUE Goal CUE-3:

Renewable energy sources will be located in appropriate locations within Harvey County.

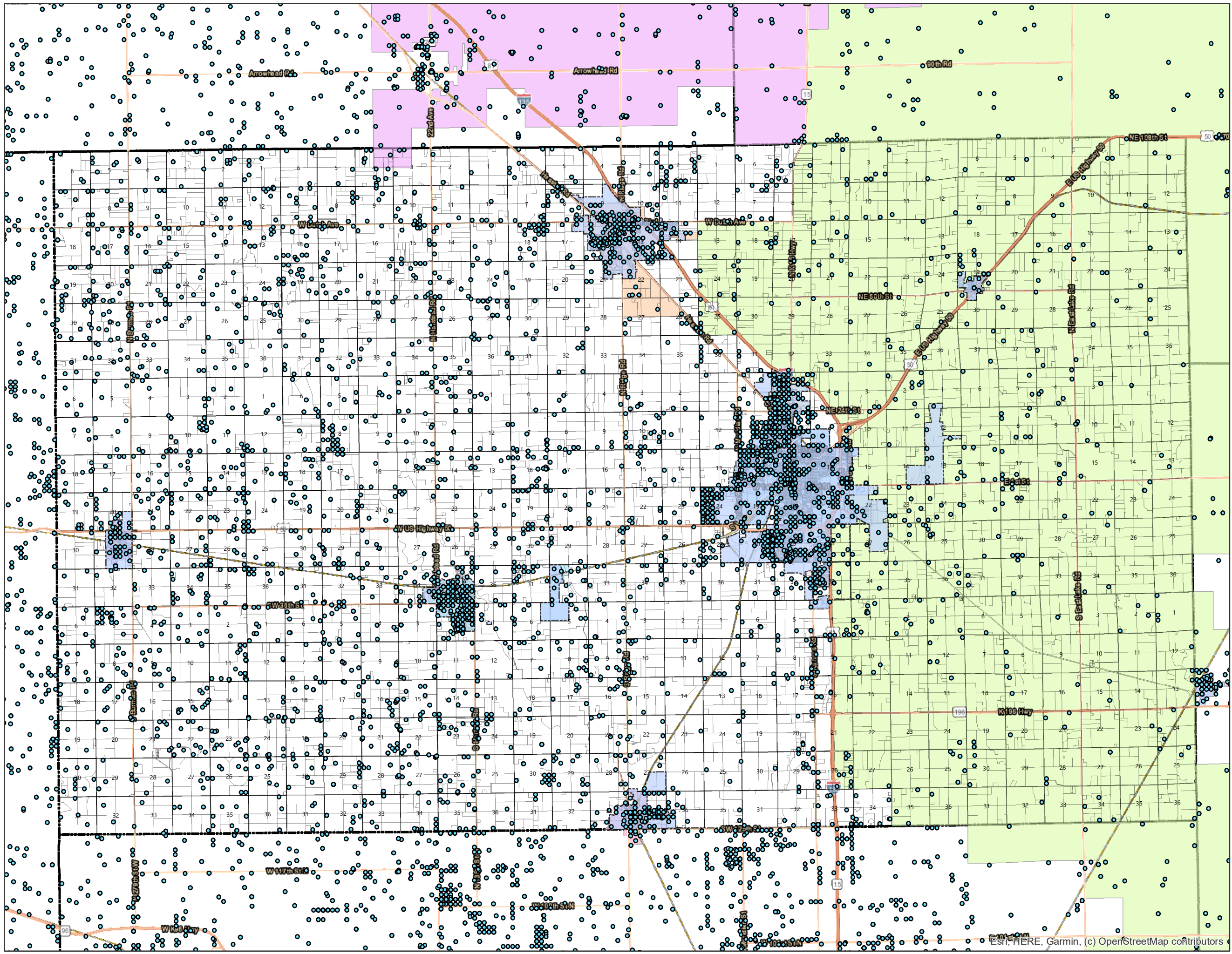
Action Items

1. Continue to protect environmentally sensitive areas of Harvey County from potential harm from renewable energy.
2. Expand the zoning regulations to address new options in renewable energy, while continuing to protect agriculture and natural resources.
3. Encourage the use of methane convertors for larger animal operations and even the landfill.




Harvey County Solar Farm at East Lake Road and First Street
Source: Google Earth

HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 11.1 - RWD/PWWD
AND WATER WELLS



- LEGEND**
- Water Wells
 - Municipal Boundary
 - Parcels
 - Burrton PWWD
 - Halstead PWWD
 - Hesston PWWD
 - Newton PWWD
 - North Newton PWWD
 - Sedgwick PWWD
 - Walton PWWD
 - Whitewater PWWD
 - Harvey Co. RWD #01
 - Marion Co. RWD #04



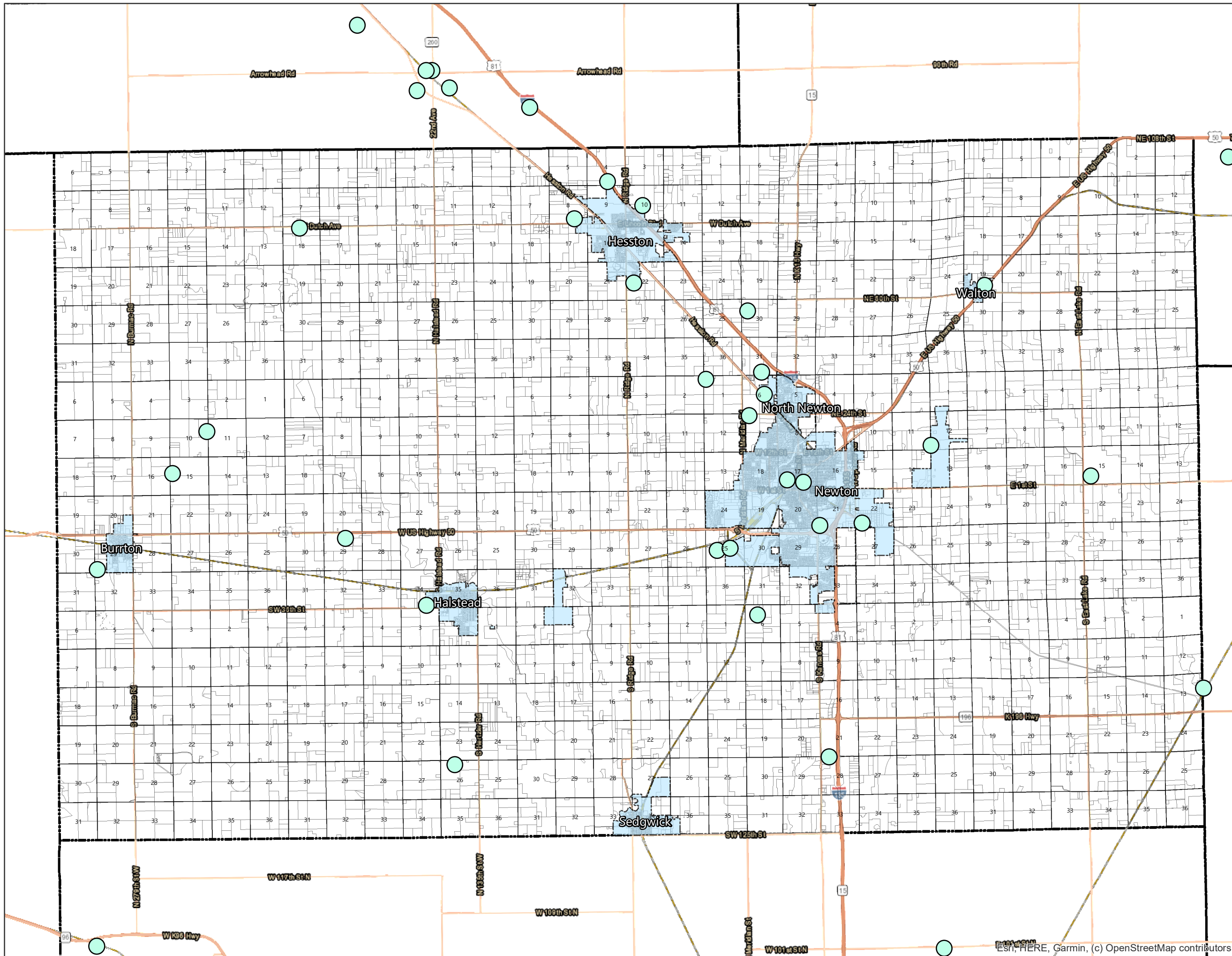
MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning




PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23

0 1 2 4 Miles

Esri, HERE, Garmin, (c) OpenStreetMap contributors

HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIGURE 11.2 - CELL
 TOWERS



- LEGEND**
-  Cell Towers
 -  Municipal Boundary
 -  Parcels



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23

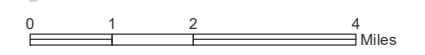
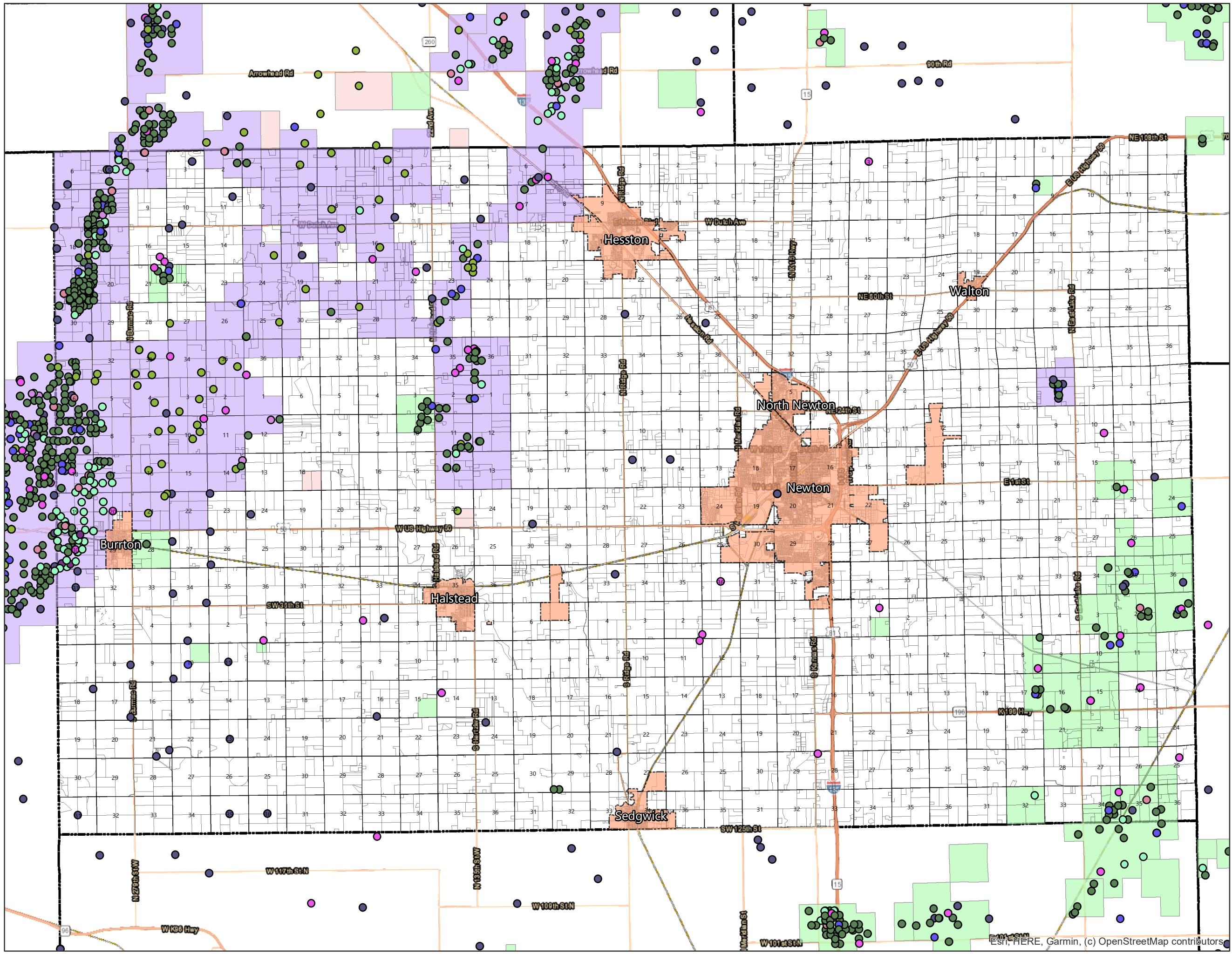


FIGURE 11.3 - OIL AND GAS
 ACTIVE



LEGEND

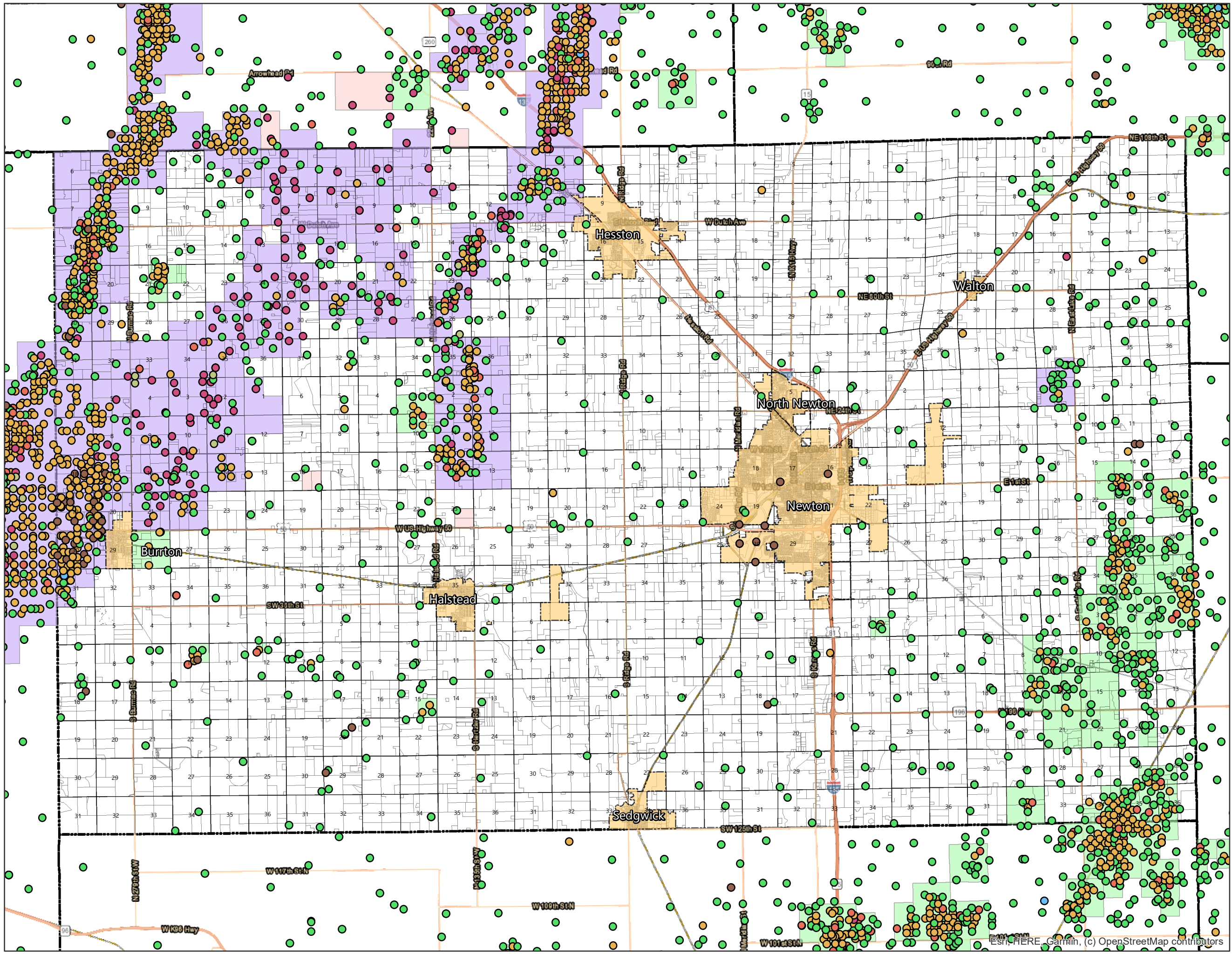
- Enhanced Oil Recovery
- Enhanced Oil Recovery, Plugged
- Gas
- Injection
- Location
- Oil
- Oil and Gas
- Other
- Salt Water Disposal
- Municipal Boundary
- Parcels
- Gas Fields
- Oil Fields
- Oil and Gas Fields















PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



FIGURE 11.4 - OIL AND GAS
PLUGGED/ABANDONED

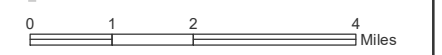


LEGEND

-  Dry and Abandoned
-  Gas, Plugged
-  Injection, Plugged
-  Oil and Gas, Plugged
-  Oil, Plugged
-  Other, Plugged
-  Salt Water Disposal, Plugged
-  Municipal Boundary
-  Parcels
-  Gas Fields
-  Oil Fields
-  Oil and Gas Fields



PROJECTION: KS State Plane (Ft.)
DATUM: NAD 83
DATE: 7.24.23



Esri, HERE, Garmin, (c) OpenStreetMap contributors



Chapter 12 Hazards

Introduction

The Hazards Chapter contains the description of specific hazards within the planning area. Good planning dictates the need to include these issues in the comprehensive plan.

The discussion herein will be focused on those hazards with a likely land use impact for Harvey County.

Hazards Information

The following information is taken directly from the 2024 Hazard Mitigation Plan which includes Harvey County. The expectation of this section and Chapter is that information, goals and mitigation strategies will be updated in the comprehensive plan as new Hazard Mitigation Plans are adopted.

- Extreme temperature
- Flood
- Hailstorm
- Hazardous materials
- Land subsidence
- Landslide
- Lightning
- Major disease outbreak
- Radiological
- Soil erosion & dust
- Terrorism/Agri-Terrorism
- Tornado
- Utility/Infrastructure failure
- Wildfire
- Wind storm
- Winter storm

Hazards Section

One of the key items within the hazard mitigation plan is a risk assessment, based upon types of hazard events and likelihood of reoccurrence in the future. The types of hazards assessed were:

- Agricultural infestation
- Civil disorder
- Dam and levee failure
- Drought
- Earthquake
- Expansive soils

Hazard Mitigation Plan

The Kansas Homeland Security Region G. Hazard Mitigation Plan (MPG) is a multi-jurisdictional hazard mitigation plan for South Central Kansas. The MPG rates the 22 different hazards on location, maximum probable extent, probability of future events, and overall significance.

The key to successfully addressing these incidents is:

- Follow through with the goals and strategies developed to mitigate issues
- Successful mitigation will aid in minimizing the overall loss occurring from any hazard situation.

Figure 12.1: Risk Elements

Probability		Rating	Rating Parameters
Probability	4 Highly Likely		Event is probable within the calendar year
			Event has up to 1 in 1 year chance of occurring (1/1 = 100%)
			History of events is greater than 33% likely per year
			Event is "Highly Likely" to occur
	3 Likely		Event is probable within the next three years
			Event has up to 1 in 3 years chance of occurring (1/3=33%)
			History of events is greater than 20% but less than or equal to 33% likely per year
			Event is "likely" to occur
	2 Occasional		Event is probable within the next five years
			Event has up to 1 in 5 years chance of occurring (1/5=20%)
			History of events is greater than 10% but less than or equal to 20% likely per year
			Event could "Possibly" occur
1 Unlikely		Event is possible within the next 10 years	
		Event has up to 1 in 10 years chance of occurring (1/10=10%)	
		History of events is less than or equal to 10% likely per year	
		Event is "Unlikely" but is possible of occurring	
Magnitude or Severity		Rating	Rating Parameters
Magnitude or Severity	4 Catastrophic		Multiple Deaths
			Complete shutdown of facilities for 30 or more days
			More than 50 percent of property is severely damaged
	3 Critical		Injuries and/or illnesses result in permanent disability
			Complete shutdown of critical facilities for at least two weeks
			25-50 percent of property is severely damaged
	2 Limited		Injuries and/or illnesses do not result in permanent disability
			Complete shutdown of critical facilities for more than one week
			10-25 percent of property is severely damaged
	1 Negligible		Injuries and/or illnesses are treatable with first aid
			Minor quality of life lost
			Shutdown of critical facilities and services for 24 hours or less
		Less than 10 percent of property is severely damaged	
Warning Time		Rating	Rating Parameters
Warning Time	4	Less than 6 hours	
	3	6-12 hours	
	2	12-24 hours	
	1	24+ hours	
Duration		Rating	Rating Parameters
Duration	4	More than 1 week	
	3	Less than 1 week	
	2	Less than 1 day	
	1	Less than 6 hours	

Source: 2019 Hazard Mitigation Plan (Note: this table was recreated from the 2019 Hazard Mitigation Plan.)

Based on the identification of potential hazards, each hazard is profiled to provide data about previous occurrences, the probability of future occurrence and the threat to the planning area. As South Central Kansas is generally uniform in terms of climate, topography, buildings, character, and development trends, overall hazards and vulnerability do not vary greatly across the planning area. Weather-related hazards such as drought, extreme temperatures, hail, tornados, wind storms, and winter storms affect the entire planning area.

As such, one general profile will be created for these hazards. However, some hazards such as dam and levee failure, flood and landslide may have local variances and multiple profiles may be developed if the risk does not match with the entire planning area.

For each identified hazard the following information is provided:

- **Hazard Description:** a general discussion of the hazard and includes information on potential warning time, the potential duration of the event, and potential impacts
- **Hazard Location and Extent:** the geographic extent or location of the hazard in the planning area
- **Previous Occurrences:** information on historic incidents and their impacts
- **Probability of Future Incidents:** frequency of past events used to gauge the likelihood of future occurrences
- **Projected Changes in Hazard Location, Intensity, Frequency, and Duration:** gauging the impacts of a more volatile climate on identified hazards.
- **Vulnerability and Impact:** discussion of the vulnerability of the region, or specific jurisdiction as appropriate, and potential impacts of identified hazards
- **Consequence Analysis:** analysis of the potential impacts using set criteria
- **Jurisdictional Risk and Vulnerability:** ratings of identified hazards for each participating municipality

Hazard Planning Significance

The Kansas Homeland Security Regional G Hazard Mitigation Plan (HMP) quantified the planning significance for a hazard reviewed on multiple levels. The data was looked at the federal (National Risk Index Data) and local (researched plan data relevant to occurrence and vulnerability on a county and local level) levels.

Risks of probability

1. Probability
2. Magnitude/severity
3. Warning time
4. Duration

Figure 12.1 provides a summary for each of the risk elements, including a rationale behind each numerical rating.

$$\begin{array}{r}
 \text{Probability} \times 0.45 \\
 + \\
 \text{Magnitude/Severity} \times 0.30 \\
 + \\
 \text{Warning Time} \times 0.15 \\
 + \\
 \text{Duration} \times 0.10 = \\
 \hline
 \text{Hazard Rating Factor}
 \end{array}$$

Using the rankings described in Figure 12.1, the following weighted formula was used to determine each hazard's rating:

Figure 12.2: Hazard Planning Significance Rating Range

Significance	Score Range	
	Low	High
High	3.0	4.0
Moderate	2.0	2.9
Low	1.0	1.9

Source: 2024 Hazard Mitigation Plan
(Note: this table was recreated from the 2024 Hazard Mitigation Plan.)

Based on their rating, each hazard was assigned a planning significance category. Each planning significance category was assigned a score range, with a higher score indicating greater planning criticality. The following table details planning significance score ranges.

The terms high, moderate, and low indicate the level of prioritization of planning effort for each hazard, and do not indicate the potential impact of a hazard occurring. Hazards rated with moderate or high planning significance were more thoroughly investigated and discussed due to the availability of data and historic occurrences, while those with a low planning significance were generally addressed due to lack of available data and historical occurrences.

Based upon the 2024 Hazard Mitigation Plan's regional/county specific ratings similar to Figure 12.1 and 12.3 calculate a regional score rating for each hazard.

Hazards Goals and Policies

The following goals were established in 2024 for the overall Hazard Mitigation Plan.

Goal 1

Reduce or eliminate risk to the people and property of Kansas Region G from the identified hazards in this plan.

Goal 2

Work to protect all vulnerable populations, structures, and critical facilities in Kansas Region G from the impacts of the identified hazards.

Goal 3

Improve public outreach initiatives to include education, awareness, and partnerships with all entities in order to enhance understanding of the risk Kansas Region G faces due to the impacts of the identified hazards.

Goal 4

Enhance communication and coordination among all agencies and between agencies and the public.

Hazards Funding Sources

The following are potential funding sources for implementing the Hazard Mitigation Plan.

FEMA

provides financial assistance to state, local, tribal, and territorial governments, as well as certain

private non profit organizations, to implement projects that help reduce the risk and impact of future disasters. These grant programs are designed to support initiatives aimed at mitigating hazards and improving resilience. The main grant program offered by FEMA for hazard mitigation is the Hazard Mitigation Assistance (HMA) program. The HMA program includes four subprograms, the Hazard Mitigation Grant Program (HMGP), the HMGP Post-Fire, Building Resilient Infrastructure and Communities (BRIC), and the Flood Mitigation Assistance (FMA) grant program.

Hazard Mitigation Grant Program (HMGP) and HMGP Fire

The HMGP grants assist in implementing long-term hazard mitigation measures following Presidential disaster declarations, including fire declarations. Funding is available to implement projects in accordance with State, Tribal, and local priorities.

Building Resilient Infrastructure and Communities (BRIC)

BRIC supports states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency. Working in coordination with BRIC, the National Mitigation Investment Strategy is intended to provide a national, whole-community approach to investments in mitigation activities and risk management.

FMA Grant Program

FMA is a competitive grant program that provides funding to states, local communities, federally

Figure 12.3: Harvey County Man-Made Hazard Planning Significance

Hazard	Probability	Magnitude/Severity	Warning Time	Duration	Score
Cyber Security Incident	4.0	3.0	3.0	3.0	3.5
Hazardous Materials Event	4.0	1.0	3.0	2.0	2.7
Infrastructure Failure	3.0	3.0	3.0	2.0	2.5
Terrorism, Agri-Terrorism	1.0	3.0	1.0	4.0	1.9
Transmissible Disease	3.0	3.0	1.0	4.0	2.8

Source: 2024 Hazard Mitigation Plan

Note: This table was recreated from the 2024 Hazard Mitigation Plan.

recognized tribes and territories. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the NFIP. FEMA chooses recipients based on the applicant's ranking of the project and the eligibility and cost-effectiveness of the project. FEMA requires state, local, tribal and territorial governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for hazard mitigation assistance projects.

Rehabilitation of High Hazard Potential Dam (HHPD) Grant Program

HHPD awards provide technical, planning, design and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. A state or territory with an enacted dam safety program, the State Administrative Agency, or an equivalent state agency, is eligible for the grant.

Emergency Management Performance Grant

Program provides state, local, tribal and territorial emergency management agencies with the resources required for implementation of the National Preparedness System and works toward the National Preparedness Goal of a secure and resilient nation. Allowable costs support efforts to build and sustain core capabilities across the prevention, protection, mitigation, response and recovery mission areas.

State Homeland Security Program

Program includes a suite of risk-based grants to assist state, local, tribal and territorial efforts in preventing, protecting against, mitigating, responding to and recovering from acts of terrorism and other threats. This grant provides grantees with the resources required for implementation of the National Preparedness System and working toward the National Preparedness Goal of a secure and resilient nation.

Nonprofit Security Grant Program

Program is one of three grant programs that support DHS/FEMA's focus on enhancing the ability of state, local, tribal, and territorial governments, as well as nonprofits, to prevent, protect against, prepare for, and respond to terrorist or other extremist attacks. These grant programs are part of a comprehensive set of measures authorized by Congress and implemented by DHS to help strengthen the nation's communities against

potential terrorist or other extremist attacks. Among the five basic homeland security missions noted in the DHS Strategic Plan for Fiscal Years 2020-2024.

Public Assistance Program

The mission of FEMA's Public Assistance program is to provide assistance to State, Tribal and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the Public Assistance program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit organizations. The Public Assistance Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. The Federal share of assistance is not less than 75% of the eligible cost for emergency measures and permanent restoration. The grantee determines how the non-Federal share (up to 25%) is split with the eligible applicants.

Individual Assistance Program

After a disaster, the federal government determines if any county in the state meets the criteria for individual disaster assistance. The decision is based on damage related to the severity and magnitude of the event. When a county receives an Individual Assistance declaration from the President of the United States, anyone who lives in that county can apply for assistance

Small Business Administration Disaster Loans

The Small Business Administration provides low-interest disaster loans to homeowners, renters, businesses of all sizes, and most private nonprofit organizations. Small Business Administration disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.

The Housing and Urban Development Agency

Provides flexible grants to help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations.

Community Development Block Grant Program

This is a flexible program that provides communities with resources to address a wide range of unique community development needs. The program provides annual grants on a formula basis to general units of local government and States.

Individual and Households, Other Needs Assistance Program

This program provides financial assistance to individuals or households who sustain damage or develop serious needs because of a natural or man-made disaster. The funding share is 75% federal funds and 25% state funds. The program provides grants for necessary expenses and serious needs that cannot be provided for by insurance, another federal program, or other source of assistance. The current maximum allowable amount for any one disaster to individuals or families is \$25,000. The program gives funds for disaster-related necessary expenses and serious needs, including personal property, transportation, medical and dental, funeral, essential tools, flood insurance, and moving and storage.

Wildland Urban Interface (WUI) Grants

The 10-Year Comprehensive Strategy focuses on assisting people and communities in the WUI to moderate the threat of catastrophic fire through the four broad goals of improving prevention and suppression, reducing hazardous fuels, restoring fire-adapted ecosystems, and promoting community assistance. The WUI Grant may be used to apply for financial assistance towards hazardous fuels and educational projects within the four goals of: improved prevention, reduction of hazardous fuels, restoration of fire-adapted ecosystems and promotion of community assistance.

Bureau of Indian Affairs Aid to Tribal Governments

This program provides funds to Indian Tribal governments to support general Tribal government operations, to maintain up-to-date Tribal enrollment, to conduct Tribal elections, and to develop appropriate Tribal policies, legislation, and regulations. Funds may be used in a variety of ways to strengthen the capabilities of Indian tribes in self-government, community planning, and maintenance of membership records.

Bureau of Indian Affairs Replacement and Repair of Indian Schools

fe, functional, code compliant, economical, and

energy efficient education facilities for American Indian students attending Bureau of Indian Affairs owned or funded primary and secondary schools or residing in Bureau owned or funded dormitories.

Bureau of Indian Affairs Wildland Fire Management

Cooperative agreements for grants and reimbursable costs related to wildland fire management directly associated with programs contracted by tribes under the authority of the National Indian Forest Resources Management Act.

Mitigation Strategies

The following pages are key hazard mitigation strategies formulated during the study period.



Photos courtesy of 2024 Hazard Mitigation Plan

Figure 12.4: Region G Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Harvey County-1	Install generators in all county facilities.	All hazards	Emergency Manager, Facilities Department	High	1, 3	\$10,000 to \$50,000 per person	HMGP, BRIC, Jurisdiction budget	Ten years	Carried over due to lack of funding
Harvey County-2	Upgrade and enhance sirens throughout county	All hazards	Emergency Manager	High	1, 2	Staff Time	Jurisdiction budget	Five years	Carried over due to lack of funding
Harvey County-3	Purchase electronic mobile traffic notification signs.	All hazards	Emergency Manager, Public Works	Medium	1, 2	\$35,000	HMGP, Jurisdiction budget	Five years	New
Harvey County-4	Conduct a regular tree trimming and tree wire installation program	All hazards	Emergency Manager	High	1, 2	\$25,000 per occurrence	HMGP, BRIC, Jurisdiction budget	Five years	New
Harvey County-5	Conduct agricultural education program on water reduction methods.	Agricultural Infestation, Drought	Emergency Manager	High	1, 3	Staff Time	Jurisdiction budget	Five years	Carried over due to lack of staff
Harvey County-6	Mail updated information to all agricultural producers concerning emerging threats.	Agricultural Infestation	Emergency Manager	High	1, 2	Staff Time and \$500	Jurisdiction budget	Five years	Carried over due to lack of staff
Harvey County-7	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/Levee Failure	Emergency Manager	Medium	1, 2, 4	\$5,000 per location	HMGP, Jurisdiction budget	Five years	New
Harvey County-8	Map all infrastructure and facilities within dam inundation areas	Dam/Levee Failure	Emergency Manager	Medium	1, 2, 4	\$10,000 per location	HMGP, Jurisdiction budget	Five years	New
Harvey County-9	Conduct a Xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Department	Low	1, 2	\$5,000 - \$50,000 per location	HMGP, BRIC, Jurisdiction budget	Five years	Carried over due to lack of funding
Harvey County-10	Revise building codes to require low water flow toilets and faucets.	Drought	Harvey County Administration	High	1, 2	Staff Time	Jurisdiction budget	Five years	Carried over due to lack of staff
Harvey County-11	Develop and recommend building code updates for seismic events	Earthquake	Facilities Director	Low	1, 2	Staff Time	Local budgets	Continuous	On-going
Harvey County-12	Modernization HVAC systems in jurisdictional facilities.	Extreme Temperatures	Facilities Director	Low	1, 2	\$25,000 per facility	HMGP, BRIC, Jurisdiction budget	Five years	Carried over due to lack of funding
Harvey County-13	Identify and prepare county building for usage as heat/cold shelters.	Extreme Temperatures	Facilities Director	Low	1, 2	\$2,000 per facility	BRIC, Jurisdiction budget	Five years	New
Harvey County-14	Continue to participate in, and enforce provisions of, NFIP.	Flood	NFIP Administrator	High	1, 2	Per property cost	Jurisdiction budget	On-going	On-going
Harvey County-15	Purchase and demolish flood prone properties	Flood	Emergency Manager, NFIP Administrator	High	1,2	Per property cost	FMA, HMGP, BRIC, Jurisdiction budget	Ten years	Carried over due to lack of funding

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Harvey County-16	Conduct a flood insurance awareness program	Flood	NFIP Administrator	High	1, 3	Staff Time	Jurisdiction budget	Five years	New
Harvey County-17	Construct rainwater retention/detention ponds at strategic locations. .	Flood	NFIP Administrator, Public Works Director	Medium	1, 2	Facility size dependent	HMGP, BRIC, Jurisdiction budget	Ten years	Carried over due to lack of funding
Harvey County-18	Procure permanent signage to warn of flood hazard areas.	Flood	NFIP Administrator, Emergency Manager	Medium	1, 2	Location dependent	HMGP, BRIC, Jurisdiction budget	Five years	Carried over due to lack of funding
Harvey County-19	Install surge protectors in all jurisdictional facilities.	Severe Weather	Facilities Director	Medium	1, 2	\$10,000 per location	HMGP, BRIC, Jurisdiction budget	Five years	New
Harvey County-20	Install hail resistant roofing on all jurisdictional facilities.	Severe Weather	Facilities Director	Medium	1, 2	\$50,000 per location	HMGP, BRIC, Jurisdiction budget	Five years	New
Harvey County-21	Construct community safe rooms throughout the county to required building standards	Severe Storms, Tornado	Emergency Manager	Medium	1, 2	\$1,000,000 per facility	HMGP, BRIC, Jurisdiction budget	Ten Years	Carried over due to lack of funding
Harvey County-22	Construct snow fences along major transportation routes.	Winter Storms	Public Works Director	Low	1, 2	\$25,000 - \$100,000 per location	HMGP, PDM, Jurisdiction budget	Ten Years	Carried over due to lack of funding
Harvey County-23	Insulate water lines in all jurisdictional facilities.	Winter Storms	Building Director	Low	1, 2	\$10,000 - \$50,000 per location	HMGP, BRIC, Jurisdiction budget	Five years	Carried over due to lack of funding
Harvey County-24	Increase public training on brush clearance to minimize fuel for wildland-urban interface fires.	Wildfire	Emergency Manager	Low	3	\$30 per student per training session	Kansas Forest Service and federal grants	Three to five years	Not started, lack of funding
Harvey County-25	Increase public and fire department training on wildland-urban interface fire prevention.	Wildfire	Emergency Manager	Low	3	\$30 per student per training session	Kansas Forest Service and federal grants	Three to five years	Not started, lack of funding
Harvey County-26	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Jurisdiction budget	Five years	New
Harvey County-27	Provide hazardous materials response training to first responders and emergency management staff.	Hazardous Materials Event	Emergency Manager	High	1, 2	\$500 per trainee	HMGP, Jurisdiction budget	As required	New
Harvey County-28	Identify and map all structurally deficient bridges.	Infrastructure Failure	Public Works Director	Medium	1, 2	\$1,000,000 per facility	HMGP, BRIC, Jurisdiction budget	Ten years	Carried over due to lack of funding
Harvey County-29	Conduct active shooter drills and exercises for all county personnel.	Terrorism	Sheriff	Low	1,2	Data size dependent	Jurisdiction budget	Five Years	New
Harvey County-30	Purchase and install new epidemiological tracking software.	Transmissible Disease	Health Department Director	High	1,2	\$500 per trainee	HMGP, Jurisdiction budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Burton-1	Purchase and install critical facility backup generators	All hazards	Burton Administration	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Burton-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Burton Administration	High	1, 2	\$50,000 annually	HMGP, Local Budgets	As required	New
Burton-3	Institute a tree trimming program near utility lines.	All hazards	Burton Administration	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
Burton-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Burton-5	Conduct a personal water use education program.	Drought	Burton Administration	Low	3	Staff time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Burton-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Burton Administration	Low	3	Staff time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Burton-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperature	Facilities Director	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Burton-8	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff time	Local budgets	Continuous	On-going
Burton-9	Construct rainwater retention/detention ponds at strategic locations.	Flood	Burton Administration	Low	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Burton-10	Clean and repair drainage ditches to maintain capacity.	Flood	Burton Administration	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Burton-11	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Facilities Director	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Burton-12	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Burton Administration	Low	4	Staff Time	Local budgets	Five years	New
Burton-13	Conduct community saferooms in select jurisdictional buildings	Tornado	Burton Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten Years	Carried over due to lack of funding
Burton-14	Create defensible space buffers at all critical facilities	Wildfire	CFD #5 Chief	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Burton-15	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Burton-16	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	CFD #5 Chief	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Halstead-1	Purchase and install critical facility backup generators.	All hazards	Halstead Administration	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Halstead-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Halstead Administration	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Halstead-3	Institute a tree trimming program near utility lines.	All hazards	Halstead Administration	Medium	1, 2	\$50,000	HMGP, Local budgets	As required	New
Halstead-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Halstead Administration	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Halstead-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead-6	Conduct a personal water use education program.	Drought	Halstead Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Halstead-7	Conduct public education campaign on home seismic retrofits.	Earthquake	Halstead Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Halstead-8	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Facilities Director	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Halstead-9	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Halstead-10	Construct rainwater retention/detention ponds at strategic locations.	Flood	Halstead Administration	Low	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Halstead-11	Clean and repair drainage ditches to maintain capacity.	Flood	Halstead Administration	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead-12	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Facilities Director	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Halstead-13	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Halstead Administration	Low	4	Staff Time	Local budgets	Five years	New
Halstead-14	Construct community saferooms in select jurisdictional buildings.	Tornado	Halstead Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead-15	Create defensible space buffers at all critical facilities	Wildfire	Halstead Fire	High	1, 2	Facility size dependent	HMGP, Local budgets	As required	Carried over due to lack of funding
Halstead-16	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Halstead-17	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	Halstead Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Hesston-1	Purchase and install critical facility backup generators.	All hazards	Hesston Administration	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Hesston-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Hesston Administration	High	1, 2,	\$50,000 annually	HMGP, Local budgets	As required	New
Hesston-3	Institute a tree trimming program near utility lines.	All hazards	Hesston Administration	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
Hesston-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Hesston Administration	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Hesston-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Hesston-6	Conduct a personal water use education program. .	Drought	Hesston Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Hesston-7	Conduct public education campaign on home seismic retrofits.	Earthquake	Hesston Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Hesston-8	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Facilities Director	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Hesston-9	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Hesston-10	Construct rainwater retention/detention ponds at strategic locations.	Flood	Hesston Administration	Low	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Hesston-11	Clean and repair drainage ditches to maintain capacity.	Flood	Hesston Administration	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Hesston-12	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Facilities Director	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Hesston-13	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Hesston Administration	Low	4	Staff Time	Local budgets	Five years	New
Hesston-14	Construct community saferooms in select jurisdictional buildings.	Tornado	Hesston Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Hesston-15	Create defensible space buffers at all critical facilities	Wildfire	Hesston Fire	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Hesston-16	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Hesston-17	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	Hesston Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Newton-1	Purchase and install critical facility backup generators.	All hazards	Newton Administration	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Newton-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Newton Administration	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Newton-3	Institute a tree trimming program near utility lines.	All hazards	Newton Administration	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
Newton-4	Develop Fire/EMS Station 4 in N. area Newton	All hazards	Newton Fire Chief	Medium		\$15,000,000	BRIC, Local budgets	Five years	New
Newton-5	Relocate Fire/EMS Station 2 and make Emergency Services Center	All hazards	Newton Fire Chief	Medium		\$20,000,000	BRIC, Local budgets	5-7 years	New
Newton-6	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Newton Administration	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Newton-7	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton-8	Conduct a personal water use education program. .	Drought	Newton Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Newton-9	Conduct public education campaign on home seismic retrofits.	Earthquake	Newton Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Newton-10	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Facilities Director	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Newton-11	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Newton-12	Construct rainwater retention/detention ponds at strategic locations.	Flood	Newton Administration	Low	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Newton-13	Clean and repair drainage ditches to maintain capacity.	Flood	Newton Administration	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton-14	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Facilities Director	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Newton-15	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Newton Administration	Low	4	Staff Time	Local budgets	Five years	New
Newton-16	Construct community saferooms in select jurisdictional buildings.	Tornado	Newton Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton-17	Create defensible space buffers at all critical facilities	Wildfire	Newton Fire	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Newton-18	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Newton-19	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	Newton Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New
North Newton-1	Purchase and install critical facility backup generators.	All hazards	Public Works Director	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	New
North Newton-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	North Newton Administration	-	-	-	-	-	Complete
North Newton-3	Institute a tree trimming program near utility lines.	All hazards	North Newton Administration in conjunction with Evergy	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
North Newton-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	New
North Newton-5	Conduct a personal water use education program.	Drought	North Newton Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	New
North Newton-6	Conduct public education campaign on home seismic retrofits.	Earthquake	North Newton Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	New
North Newton-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	North Newton Administration	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	New
North Newton-8	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
North Newton-9	Construct rainwater retention/detention ponds at strategic locations.	Flood	North Newton Administration	Medium	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	New
North Newton-10	Clean and repair drainage ditches, including Kidron Creek, to maintain capacity.	Flood	Public Works Director	Medium	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
North Newton-11	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	North Newton Administration	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
North Newton-12	Conduct public education program for driving in winter conditions.	Severe Winter Weather	North Newton Administration	Low	4	Staff Time	Local budgets	Five years	New
North Newton-13	Construct community saferooms in select jurisdictional buildings.	Tornado	North Newton Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
North Newton-14	Create defensible space buffers at all critical facilities	Wildfire	Public Works Director	Medium	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
North Newton-15	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Chief of Police and IT Director	Medium	1, 2	Data size dependent	Local budgets	Five years	New
North Newton-16	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	North Newton and Newton Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New
Sedgwick-1	Purchase and install critical facility backup generators.	All hazards	-	-	-	-	-	-	Complete
Sedgwick-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Sedgwick Administration	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Sedgwick-3	Institute a tree trimming program near utility lines.	All hazards	Sedgwick Administration	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
Sedgwick-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Sedgwick Administration	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Sedgwick-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Sedgwick-6	Conduct a personal water use education program.	Drought	Sedgwick Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Sedgwick-7	Conduct public education campaign on home seismic retrofits.	Earthquake	Sedgwick Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Sedgwick-8	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Sedgwick Administration	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Sedgwick-9	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Sedgwick-10	Construct rainwater retention/detention ponds at strategic locations.	Flood	-	-	1, 2	-	-	-	Complete
Sedgwick-11	Clean and repair drainage ditches to maintain capacity	Flood	Public Works Director	Medium	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Sedgwick-12	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Sedgwick Administration	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Sedgwick-13	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Sedgwick Administration	Low	4	Staff Time	Local budgets	Five years	New
Sedgwick-14	Construct community saferooms in select jurisdictional buildings.	Tornado	Sedgwick Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Sedgwick-15	Create defensible space buffers at all critical facilities	Wildfire	Public Works Director	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Sedgwick-16	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Sedgwick-17	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	Sedgwick Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New
Walton-1	Purchase and install critical facility backup generators.	All hazards	Walton Administration	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Walton-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Walton Administration	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Walton-3	Institute a tree trimming program near utility lines.	All hazards	Walton Administration	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	New
Walton-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Walton Administration	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Walton-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Facilities Director	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton-6	Conduct a personal water use education program.	Drought	Walton Administration	Low	3	Staff Time	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of staff
Walton-7	Conduct public education campaign on home seismic retrofits.	Earthquake	Walton Administration	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Walton-8	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Walton Administration	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Walton-9	Continue to participate meet requirements of the NFIP.	Flood	NFIP Coordinator	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Walton-10	Construct rainwater retention/detention ponds at strategic locations.	Flood	Walton Administration	Low	1, 2	Location and size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Walton-11	Clean and repair drainage ditches to maintain capacity	Flood	Walton Administration	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton-12	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Facilities Director	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Walton-13	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Walton Administration	Low	4	Staff Time	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Walton-14	Construct community saferooms in select jurisdictional buildings.	Tornado	Walton Administration	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton-15	Create defensible space buffers at all critical facilities	Wildfire	Walton Fire	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Walton-16	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	IT Director	Low	1, 2	Data size dependent	Local budgets	Five years	New
Walton-17	Provide hazardous materials response training to local first responders.	Hazardous Materials Event	Walton Fire	High	1, 2	\$500 per trainee	HMGP, Local budgets	As required	New
Alta Township-1	Purchase and install critical facility backup generators.	All hazards	Alta Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Alta Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Alta Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Alta Township-3	Institute a tree trimming program near utility lines.	All hazards	Alta Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Alta Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Alta Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Alta Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Alta Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Alta Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Alta Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Alta Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Alta Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Alta Township-8	Continue to participate meet requirements of the NFIP.	Flood	Alta Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Alta Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Alta Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Alta Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Alta Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Alta Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Alta Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Alta Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Alta Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Alta Township-13	Create defensible space buffers at all critical facilities	Wildfire	Alta Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Alta Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Alta Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New
Burton Township-1	Purchase and install critical facility backup generators.	All hazards	Burton Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Burton Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Burton Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Burton Township-3	Institute a tree trimming program near utility lines.	All hazards	Burton Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Burton Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Burton Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Burton Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Burton Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Burton Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Burton Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Burton Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Burton Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Burton Township-8	Continue to participate meet requirements of the NFIP.	Flood	Burton Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Burton Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Burton Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Burton Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Burton Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Burton Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Burton Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Burton Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Burton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Burton Township-13	Create defensible space buffers at all critical facilities	Wildfire	Burton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Burton Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Burton Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Darlington Township-1	Purchase and install critical facility backup generators.	All hazards	Darlington Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Darlington Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Darlington Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Darlington Township-3	Institute a tree trimming program near utility lines.	All hazards	Darlington Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Darlington Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Darlington Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Darlington Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Darlington Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Darlington Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Darlington Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Darlington Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Darlington Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Darlington Township-8	Continue to participate meet requirements of the NFIP.	Flood	Darlington Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Darlington Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Darlington Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Darlington Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Burton Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Darlington Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Darlington Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Darlington Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Darlington Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Darlington Township-13	Create defensible space buffers at all critical facilities	Wildfire	Darlington Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Darlington Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Darlington Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Emma Township-1	Purchase and install critical facility backup generators.	All hazards	Emma Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Emma Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Emma Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Emma Township-3	Institute a tree trimming program near utility lines.	All hazards	Emma Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Emma Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Emma Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Emma Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Emma Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Emma Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Emma Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Emma Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Emma Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Emma Township-8	Continue to participate meet requirements of the NFIP.	Flood	Emma Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Emma Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Emma Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Emma Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Emma Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Emma Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Emma Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Emma Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Emma Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Emma Township-13	Create defensible space buffers at all critical facilities	Wildfire	Emma Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Emma Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Emma Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Halstead Township-1	Purchase and install critical facility backup generators.	All hazards	Halstead Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Halstead Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Halstead Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Halstead Township-3	Institute a tree trimming program near utility lines.	All hazards	Halstead Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Halstead Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Halstead Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Halstead Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Halstead Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Halstead Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Halstead Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Halstead Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Halstead Township-8	Continue to participate meet requirements of the NFIP.	Flood	Halstead Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Halstead Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Halstead Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Halstead Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Halstead Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Halstead Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Halstead Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Halstead Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Halstead Township-13	Create defensible space buffers at all critical facilities	Wildfire	Halstead Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Halstead Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Halstead Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Highland Township-1	Purchase and install critical facility backup generators.	All hazards	Highland Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Highland Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Highland Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Highland Township-3	Institute a tree trimming program near utility lines.	All hazards	Highland Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Highland Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Highland Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Highland Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Highland Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Highland Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Highland Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Highland Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Highland Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Highland Township-8	Continue to participate meet requirements of the NFIP.	Flood	Highland Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Highland Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Highland Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Highland Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Highland Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Highland Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Highland Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Highland Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Highland Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Highland Township-13	Create defensible space buffers at all critical facilities	Wildfire	Highland Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Highland Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Highland Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Lake Township-1	Purchase and install critical facility backup generators.	All hazards	Lake Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Lake Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Lake Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Lake Township-3	Institute a tree trimming program near utility lines.	All hazards	Lake Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Lake Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Lake Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Lake Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Lake Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lake Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Lake Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Lake Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Lake Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Lake Township-8	Continue to participate meet requirements of the NFIP.	Flood	Lake Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Lake Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Lake Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lake Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Lake Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Lake Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Lake Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Lake Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Lake Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lake Township-13	Create defensible space buffers at all critical facilities	Wildfire	Lake Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Lake Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Lake Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Lakin Township-1	Purchase and install critical facility backup generators.	All hazards	Lakin Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Lakin Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Lakin Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Lakin Township-3	Institute a tree trimming program near utility lines.	All hazards	Lakin Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Lakin Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Lakin Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Lakin Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Lakin Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lakin Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Lakin Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Lakin Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Lakin Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Lakin Township-8	Continue to participate meet requirements of the NFIP.	Flood	Lakin Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Lakin Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Lakin Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lakin Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Lakin Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Lakin Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Lakin Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Lakin Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Lakin Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Lakin Township-13	Create defensible space buffers at all critical facilities	Wildfire	Lakin Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Lakin Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Lakin Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Macon Township-1	Purchase and install critical facility backup generators.	All hazards	Macon Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Macon Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Macon Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Macon Township-3	Institute a tree trimming program near utility lines.	All hazards	Macon Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Macon Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Macon Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Macon Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Macon Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Macon Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Macon Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Macon Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Macon Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Macon Township-8	Continue to participate meet requirements of the NFIP.	Flood	Macon Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Macon Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Macon Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Macon Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Macon Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Macon Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Macon Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Macon Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Macon Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Macon Township-13	Create defensible space buffers at all critical facilities	Wildfire	Macon Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Macon Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Macon Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Newton Township-1	Purchase and install critical facility backup generators.	All hazards	Newton Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Newton Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Newton Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Newton Township-3	Institute a tree trimming program near utility lines.	All hazards	Newton Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Newton Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Newton Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Newton Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Newton Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Newton Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Newton Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Newton Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Newton Township-8	Continue to participate meet requirements of the NFIP.	Flood	Newton Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Newton Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Newton Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Newton Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Newton Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Newton Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Newton Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Newton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Newton Township-13	Create defensible space buffers at all critical facilities	Wildfire	Newton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Newton Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Newton Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Pleasant Township-1	Purchase and install critical facility backup generators.	All hazards	Pleasant Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Pleasant Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Pleasant Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Pleasant Township-3	Institute a tree trimming program near utility lines.	All hazards	Pleasant Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Pleasant Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Pleasant Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Pleasant Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Pleasant Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Pleasant Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Pleasant Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Pleasant Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Pleasant Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Pleasant Township-8	Continue to participate meet requirements of the NFIP.	Flood	Pleasant Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Pleasant Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Pleasant Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Pleasant Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Pleasant Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Pleasant Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Pleasant Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Pleasant Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Pleasant Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Pleasant Township-13	Create defensible space buffers at all critical facilities	Wildfire	Pleasant Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Pleasant Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Pleasant Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Sedgwick Township-1	Purchase and install critical facility backup generators.	All hazards	Sedgwick Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Sedgwick Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Sedgwick Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Sedgwick Township-3	Institute a tree trimming program near utility lines.	All hazards	Sedgwick Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Sedgwick Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Sedgwick Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Sedgwick Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Sedgwick Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Sedgwick Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Sedgwick Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Sedgwick Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Sedgwick Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Sedgwick Township-8	Continue to participate meet requirements of the NFIP.	Flood	Sedgwick Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Sedgwick Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Sedgwick Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Sedgwick Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Sedgwick Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Sedgwick Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Sedgwick Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Sedgwick Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Sedgwick Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Sedgwick Township-13	Create defensible space buffers at all critical facilities	Wildfire	Sedgwick Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Sedgwick Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Sedgwick Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Walton Township-1	Purchase and install critical facility backup generators.	All hazards	Walton Board Chair	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Local budgets	Five years	Carried over due to lack of funding
Walton Township-2	Upgrade warning siren system to expand coverage and capabilities.	All hazards	Walton Board Chair	High	1, 2	\$50,000 annually	HMGP, Local budgets	As required	New
Walton Township-3	Institute a tree trimming program near utility lines.	All hazards	Walton Board Chair	Medium	1, 2	\$50,000	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Walton Township-4	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam/ Levee Failure	Walton Board Chair	Medium	1, 2, 4	\$5,000 per location	HMGP, Local budgets	Five years	New
Walton Township-5	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Walton Board Chair	Medium	1, 2	\$5,000 - \$20,000 per facility	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton Township-6	Conduct public education campaign on home seismic retrofits.	Earthquake	Walton Board Chair	Low	3	Staff Time and \$3,000	HMGP, Local budgets	Five years	Carried over due to lack of staff
Walton Township-7	Identify and prepare local facilities to serve as heating/cooling centers.	Extreme Temperatures	Walton Board Chair	Medium	1, 2	\$3,000 per facility	HMGP, Local budgets	Five years	Carried over due to lack of staff
Walton Township-8	Continue to participate meet requirements of the NFIP.	Flood	Walton Board Chair	High	1, 2	Staff Time	Local budgets	Continuous	On-going
Walton Township-9	Clean and repair drainage ditches to maintain capacity	Flood	Walton Board Chair	Low	1, 2	Location, length, and size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton Township-10	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Walton Board Chair	Low	1, 2	\$50,000 per location	Facility size dependent	Five years	New
Walton Township-11	Conduct public education program for driving in winter conditions.	Severe Winter Weather	Walton Board Chair	Low	4	Staff Time	Local budgets	Five years	New
Walton Township-12	Construct community saferooms in select jurisdictional buildings.	Tornado	Walton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	Ten years	Carried over due to lack of funding
Walton Township-13	Create defensible space buffers at all critical facilities	Wildfire	Walton Board Chair	High	1, 2	Facility size dependent	HMGP, BRIC, Local budgets	As required	Carried over due to lack of funding
Walton Township-14	Purchase cloud storage backup for all jurisdictional electronic records.	Cybersecurity Incident	Walton Board Chair	Low	1, 2	Data size dependent	Local budgets	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
USD #369-1	Purchase and install critical facility backup generators.	All hazards	Superintendent	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
USD #369-2	Construct safe rooms in all school buildings to required standards	All hazards	Superintendent	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
USD #369-3	Conduct hazard mitigation education programs for students	All hazards	Superintendent	Medium	1, 2, 3	\$2,000	School Budget	As required	New
USD #369-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Superintendent	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
USD #369-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	Superintendent	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
USD #369-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures, Severe Winter Weather	Superintendent	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
USD #369-7	Construct rainwater gardens adjacent to paved areas	Flood	Superintendent	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
USD #369-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Superintendent	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
USD #369-9	Conduct regular staff and student active shooter trainings.	Terrorism	Superintendent	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
USD #373-1	Purchase and install critical facility backup generators.	All hazards	Superintendent	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
USD #373-2	Construct safe rooms in all school buildings to required standards	All hazards	Superintendent	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
USD #373-3	Conduct hazard mitigation education programs for students	All hazards	Superintendent	Medium	1, 2, 3	\$2,000	School Budget	As required	New
USD #373-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Superintendent	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
USD #373-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	Superintendent	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
USD #373-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures, Severe Winter Weather	Superintendent	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
USD #373-7	Construct rainwater gardens adjacent to paved areas	Flood	Superintendent	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
USD #373-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Superintendent	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
USD #373-9	Conduct regular staff and student active shooter trainings.	Terrorism	Superintendent	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
USD #439-1	Purchase and install critical facility backup generators.	All hazards	Superintendent	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
USD #439-2	Construct safe rooms in all school buildings to required standards	All hazards	Superintendent	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
USD #439-3	Conduct hazard mitigation education programs for students	All hazards	Superintendent	Medium	1, 2, 3	\$2,000	School Budget	As required	New
USD #439-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Superintendent	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
USD #439-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	Superintendent	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
USD #439-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures, Severe Winter Weather	Superintendent	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
USD #439-7	Construct rainwater gardens adjacent to paved areas	Flood	Superintendent	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
USD #439-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Superintendent	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
USD #439-9	Conduct regular staff and student active shooter trainings.	Terrorism	Superintendent	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
USD #440-1	Purchase and install critical facility backup generators.	All hazards	Superintendent	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
USD #440-2	Construct safe rooms in all school buildings to required standards	All hazards	Superintendent	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
USD #440-3	Conduct hazard mitigation education programs for students	All hazards	Superintendent	Medium	1, 2, 3	\$2,000	School Budget	As required	New
USD #440-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Superintendent	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
USD #440-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	Superintendent	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
USD #440-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures , Severe Winter Weather	Superintendent	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
USD #440-7	Construct rainwater gardens adjacent to paved areas	Flood	Superintendent	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
USD #440-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Superintendent	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
USD #440-9	Conduct regular staff and student active shooter trainings.	Terrorism	Superintendent	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
USD #460-1	Purchase and install critical facility backup generators.	All hazards	Superintendent	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
USD #460-2	Construct safe rooms in all school buildings to required standards	All hazards	Superintendent	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
USD #460-3	Conduct hazard mitigation education programs for students	All hazards	Superintendent	Medium	1, 2, 3	\$2,000	School Budget	As required	New
USD #460-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	Superintendent	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
USD #460-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	Superintendent	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
USD #460-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures, Severe Winter Weather	Superintendent	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
USD #460-7	Construct rainwater gardens adjacent to paved areas	Flood	Superintendent	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
USD #460-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	Superintendent	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
USD #460-9	Conduct regular staff and student active shooter trainings.	Terrorism	Superintendent	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Hesston College-1	Purchase and install critical facility backup generators.	All hazards	College President	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, School budgets	Five years	Carried over due to lack of funding
Hesston College-2	Construct safe rooms in all school buildings to required standards	All hazards	College President	High	1, 2	\$1,000,000 per location	HMGP, BRIC, School budgets	Ten years	New
Hesston College-3	Conduct hazard mitigation education programs for students	All hazards	College President	Medium	1, 2, 3	\$2,000	School Budget	As required	New
Hesston College-4	Conduct a xeriscaping program for all jurisdictional owned facilities	Drought	College President	Low	1, 2	\$10,000 per location	HMGP, School Budget	Ten years	New
Hesston College-5	Retrofit school facilities to meet minimum seismic construction standards	Earthquake	College President	Low	1, 2	\$30,000 per facility	HMGP, BRIC, School budgets	Five years	New
Hesston College-6	Conduct an extreme temperature awareness seminar to educate on risks and mitigation methods	Extreme Temperatures, Severe Winter Weather	College President	Medium	1, 2	\$500	HMGP, Jurisdiction budget	Five years	New
Hesston College-7	Construct rainwater gardens adjacent to paved areas	Flood	College President	Low	1, 2	Location and size dependent	HMGP, BRIC, School Budget	As required	New
Hesston College-8	Install hail and fire-resistant roofing on all jurisdictional facilities.	Severe Weather, Wildfires	College President	Low	1, 2	\$100,000 per location	HMGP, BRIC, School Budget	Five years	New
Hesston College-9	Conduct regular staff and student active shooter trainings.	Terrorism	College President	High	1, 2, 3	Location and size dependent	HMGP, School Budget	As required	New
Ark Valley Electric Cooperative -1	Purchase and install critical facility backup generators.	All hazards	Director of Operations	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, System budget	Five years	Carried over due to lack of funding
Ark Valley Electric Cooperative -2	Shorten distance between utility poles.	All hazards	Director of Operations	Medium	1, 2	Distance and specification dependent	HMGP, System budget	Five years	New
Butler REC-1	Purchase and install critical facility backup generators.	All hazards	Director of Operations	High	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, System budget	Five years	Carried over due to lack of funding
Butler REC-2	Shorten distance between utility poles.	All hazards	Director of Operations	Medium	1, 2	Distance and specification dependent	HMGP, System budget	Five years	New

Figure 12.4: Region G Hazard Mitigation Actions (cont.)

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Current Status
Flint Hills REC-1	Purchase and install critical facility backup generators.	All hazards	Director of Operations	Medium	1, 2	\$10,000 - \$50,000 per facility	HMGP, BRIC, System budget	Five years	Carried over due to lack of funding
Flint Hills REC-2	Replace Copper Weld line construction with current line construction.	All hazards	Director of Operations	High	1, 2	Distance and specification dependent	HMGP, System budget	Five years	New
Flint Hills REC-3	Replace aging substations that are 40 to 60 years old.	All hazards	Director of Operations	High	1, 2	\$2 Million	HMGP, BRIC, System budget	Five years	New
Flint Hills REC-4	Purchase portable substation	All hazards	Director of Operations	High	1, 2	\$2 Million	HMGP, BRIC, System budget	Five years	New
Burrton CFD #5-1	Purchase and install facility backup generators.	All hazards	Fire Chief	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Fire budgets	Five years	Carried over due to lack of funding
Burrton CFD #5-2	Reduce hazardous fuels in prioritized wildfire risk areas.	Wildfire	Fire Chief	Medium	1, 2	\$105 an acre	Federal WUI grant dollars, Fire budget	On going	Carried over due to lack of funding
Burrton CFD #5-3	Conduct Wildland Urban Interface mitigation and response training for firefighters.	Wildfire	Fire Chief	Medium	1, 2, 3	\$30 per student per training	Federal WUI grant dollars, Fire budget	On going	New
Harvey County RFD #1-1	Purchase and install facility backup generators.	All hazards	Fire Chief	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, Fire budgets	Five years	Carried over due to lack of funding
Harvey County RFD #1-2	Reduce hazardous fuels in prioritized wildfire risk areas.	Wildfire	Fire Chief	Medium	1, 2	\$105 an acre	Federal WUI grant dollars, Fire budget	On going	Carried over due to lack of funding
Harvey County RFD #1-3	Conduct Wildland Urban Interface mitigation and response training for firefighters.	Wildfire	Fire Chief	Medium	1, 2, 3	\$30 per student per training	Federal WUI grant dollars, Fire budget	On going	New
Rural Water District #1-1	Purchase and install facility backup generators.	All hazards	Director of Operations	High	1, 2	\$25,000 - \$50,000 per facility	HMGP, BRIC, System budgets	Five years	Carried over due to lack of funding
Rural Water District #1-2	Replace water lines at critical locations throughout service area.	Drought	Director of Operations	Medium	1, 2	Project size and location dependent	HMGP, BRIC, System budget	On going	New
Little Arkansas River Drainage District-1	Conduct riverbank stabilization projects, especially at bridge abutments.	All hazards	Operations Manager	High	1, 2	\$120,000 per project	HMGP, Local budget	Five years	New
Sand Creek Watershed-1	Conduct riverbank stabilization projects, especially at bridge abutments.	All hazards	Operations Manager	High	1, 2	\$120,000 per project	HMGP, Local budget	Five years	New

Source: 2024 Hazard Mitigation Plan

Note: This table was recreated from the 2024 Hazard Mitigation Plan

All communities are exposed to some level of natural and technological hazards. Harvey County develops a hazard mitigation plan every 5 years in partnership with the Kansas Division of Emergency Management (KDEM) and other counties in the South-Central region. The 2024 Plan contains the following goals (Section 6.2, page 313):

Reduce the risk to people and property from identified hazards in the 2024 Plan.

Work to protect all vulnerable populations, structures, and critical facilities from the impacts of the identified hazards.

Improve public outreach initiatives to include education, awareness, and partnerships with all entities in order to enhance the understanding of identified hazards and hazard mitigation opportunities.

Enhance communication and coordination among all agencies and between agencies and the public.

The 2024 Region G Hazard Mitigation Plan is found at harveycounty.com/images/emerg%20mgt/Region%20G%202024%20Hazard%20Mitigation%20Plan.pdf.



Chapter 13

Natural Resources and the Environment

The Environment

Formulating a truly valid and “comprehensive” plan for future development in Harvey County requires an evaluation of the environmental and man-made conditions currently existing in order to determine the impacts these factors may have on future land uses in the county.

The following topics will be covered in this chapter:

- Climate
- Wetlands
- Soil Types
- Capability Grouping
- Soil Suitability and Limitations
- Prime Farmland
- Hydric Soils
- Groundwater
- Surface Water
- Flooding Hazards

The large maps for this section are group together at the end of the chapter.

Climate

Harvey County has a continental climate characterized by:

- Large day-to-day annual ranges of temperature
- Low to moderate humidity

- A high percentage of days with sunshine
- Moderate and irregular precipitation
- A maximum of rainfall during the warm season
- Fronts and low-pressure storm centers, which frequently traverse the area, produce a variety of weather

Typically, precipitation in Kansas is caused by:

- A collision of warm, moist air from the Gulf of Mexico with cold, dry air from northern latitudes
- A higher frequency of the flow of Gulf air over the eastern part of Kansas than over the western part results in a variation of rainfall across the state
- Annual precipitation in Harvey County, which averages 29.74 (1961-2022) inches, is intermediate between the light rainfall in semiarid southwestern Kansas and the heavier precipitation in the extreme southeastern part of the State
- The bulk of the precipitation falls during the growing season of April through October
- Winters are dry; only 10 percent of the annual precipitation falls between December through February
- January, which averages 0.3 inches, is the only month with a normal precipitation of less than 1 inch

The precipitation comes in the following ways:

- Showers and thunderstorms account for much of the precipitation with an average of 55 days having thunderstorms
- About one-half of these occur during the peak rainfall period of May through July
- Snowfall in some years can average 16 inches per year while some winter seasons have little snow
- More than 25 inches of snow is uncommon during winter
- The heaviest snowfall of record is 47.5 inches from November 1959 to March 1960

Temperatures due to the continental climate results in fairly wide daily and annual temperature ranges:

- Average monthly temperature vary from 31.0 F in January to 79.9 in July
- Temperature extremes for Newton have ranged from -28 to 117
- The average freeze-free period is six months in length and extends from April 20 to October 23

The prevailing wind is southerly; however, surface wind records are not available for Harvey County, but records at Wichita indicate:

- Winds are generally light to moderate in all seasons with average hourly velocity is 13 to 14 miles per hour
- Average monthly velocities are lowest from midsummer to early fall and gradually increase to a maximum in spring

With the exception of deficient rainfall, very high temperatures, or both, climatic conditions in Harvey County are generally favorable for growing crops. The percentage of possible sunshine, the long growing season, and the seasonal distribution of precipitation all contribute to a favorable climate for farming.

Physiography, Drainage, and Water Supply

Harvey County lies within the Great Bend Sand Plains and Bluestem Hills resource area of the Land Resource Region H - Central Great Plains Winter Wheat and Range resource region. The landscape is nearly level to gently rolling or sloping plain. However, slopes are somewhat steeper along the major drainageways and around the sandhills in the area north of Burrton.

According to the U.S. Geological Survey, the highest elevation in Harvey County, is 1,631 feet, while the lowest is 1,273 feet.

Most of the county is drained by the Little Arkansas River. It enters Harvey County about 5 1/2 miles south of the northwest corner and flows into Sedgwick County near the city of Sedgwick. Its tributaries are Kisiwa Creek, Blaze Fork Creek, Turkey Creek, Black Kettle Creek, Emma Creek, Sand Creek, Jester Creek, and Gooseberry Creek.

An area from Burrton north to the Little Arkansas River does not have an established drainage pattern. Although some soils are steep, sandy and absorb the fallen precipitation.

In addition, most of the area south of Kisiwa Creek lacks a well-defined drainage pattern. This is due primarily to the grade being nearly level and the number of intermittent lakes scattered throughout this area.

Groundwater supply and quality vary greatly within the county. The eastern part of the county has minimal groundwater, and it is typically of poor quality. The western part of the county has a large supply of good quality water in the Equus beds. The area around Burrton has water of poor quality.

A major amount of the Wichita water supply comes from wells in the southwestern portion of Harvey County. In addition to Wichita, McPherson is constructing a line into this area to supplement their water needs, primarily coming from the northwest part of Harvey County.

A large part of the irrigation water supply comes from the Equus beds. A few irrigators take water from Sand Creek and the Little Arkansas River. Irrigation systems are typically gravity and sprinkler types.

Wildlife

There are no critical habitats for threatened and endangered species nor species in need of conservation.

Source: Kansas Department of Wildlife & Parks

Wetlands

Wetlands are areas where water covers the soil or is present either at or near the surface of the soil all year or for varying periods during the year, including during the growing season. A map showing the location of wetlands in Harvey County can be found at the end of this Chapter.

The following are impacts of wetlands:

- Water saturation (hydrology) largely determines the soil development and the types of plant and animal communities living in and on the soil
- Wetlands may support both aquatic and terrestrial species
- The prolonged presence of water creates conditions favoring the growth of specially adapted plants (hydrophytes)
- Promotes the development of characteristic wetland (hydric) soils

Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. Two general categories of wetlands are recognized:

- Coastal or tidal wetlands (not present in the interior United States)
- Inland or non-tidal wetlands

Inland Wetlands

Inland wetlands found in Harvey County are most common in floodplains along waterways and other streams (riparian wetlands), in the southwest part of the county; however, they are found in other locations, such as:

- Isolated depressions surrounded by dry land (for example, basins, and "potholes") along the margins of lakes and ponds
- Low-lying areas where the groundwater intercepts the soil surface or where precipitation sufficiently saturates the soil

Inland wetlands also include marshes and wet meadows dominated by herbaceous plants, swamps dominated by shrubs, and wooded swamps dominated by trees.

Many of these wetlands are seasonal (dry one or more seasons every year) and are dependent upon the quantity of water present and the timing of its presence to determine the functions of a wetland and its role in the environment. Wetlands can appear dry, at times, for significant parts of the year. The federal government protects wetlands through regulations like Section 404 of the Clean Water Act (CWA).

Partnerships to manage whole watersheds have developed among federal, state, tribal, and local governments, nonprofit organizations, and private landowners. The goal of these partnerships is to

implement comprehensive, integrated watershed protection approaches. A watershed approach recognizes the inter-connection of water, land, and wetlands resources and results in more complete solutions addressing more of the factors causing wetland degradation.

The federal government achieves the restoration of former or degraded wetlands under the CWA program as well as through watershed protection initiatives, including:

- Together, partners can share limited resources to find the best solutions to protect and restore America's natural resources
- While regulation, economic incentives, and acquisition programs are important, they alone cannot protect the majority of our remaining wetlands
- Education of the public and efforts in conjunction with states, local governments, and private citizens can help protect wetlands and increase appreciation of the function and values of wetlands
- The rate of wetlands loss has been slowing. Approximately 75 percent of wetlands are privately owned, so individual landowners are critical in protecting these areas

Wetlands play an important role in the ecology of Harvey County. Wetlands are home to many species of wildlife, many of which live only in wetland areas. Wetlands provide an important service to nearby areas by holding and retaining floodwaters. Floodwaters are slowly released as surface water, or are used to recharge groundwater supplies. Wetlands help regulate stream flows during dry periods. The U.S. Fish and Wildlife Service (FWS) has produced information on the characteristics, extent, and status of the nation's wetlands and deep-water habitats, called the National Wetlands Inventory (NWI).

Wetlands are categorized in several classifications, each more detailed and specific than the previous:

- The NWI uses five systems; marine, estuarine, riverine, lacustrine, and palustrine
- Within each system, there are subsystems, classes, subclasses, and dominance types to describe different wetland characteristics
- The system classification refers to wetlands sharing similar hydrologic, geomorphologic, chemical, or biological factors

The following are definitions and examples of three of the five systems used to describe wetlands. The marine and estuarine wetland systems are located in and near the open ocean; therefore, they do not occur in Kansas.

Harvey County experiences each of the other three wetland systems.

- The majority of the wetlands in the county occur mostly along the rivers and as meadow areas
- There are smaller wetland pockets scattered around Harvey County
- Figures 13.1, 13.2, and 13.3 depict common examples of the riverine, lacustrine, and palustrine wetlands, respectively
- These figures were produced by the United States Fish and Wildlife Service, and are taken from their 1979 publication entitled "Classification of Wetlands and Deepwater Habitats of the United States", some enhancement was completed in order to place accents on key areas
- Figure 13.4 (at the end of the chapter) shows the occurrence of wetlands in Harvey County

Riverine Wetlands

The riverine wetlands shown in Figure 13.1 includes all wetlands occurring in channels, with two exceptions:

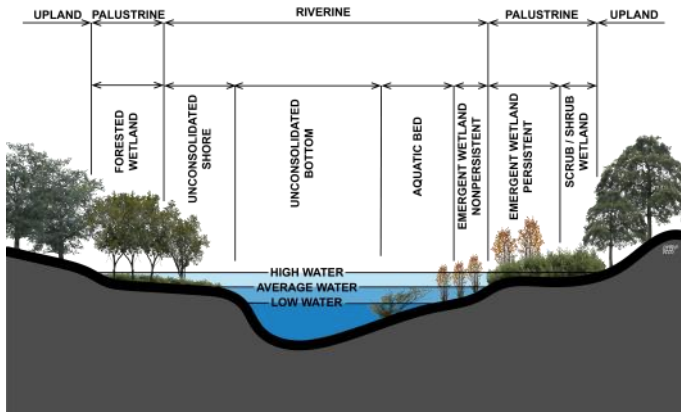
- Wetlands dominated by trees, shrubs, persistent emergent, emergent mosses, or lichens
- Habitats with water containing ocean derived salts in excess of 0.5%

A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water. Therefore, water is usually, but not always, flowing in the riverine system.

Springs discharging into a channel are also part of the riverine system. Uplands and palustrine wetlands may occur in the channel, but are not included in the riverine system.

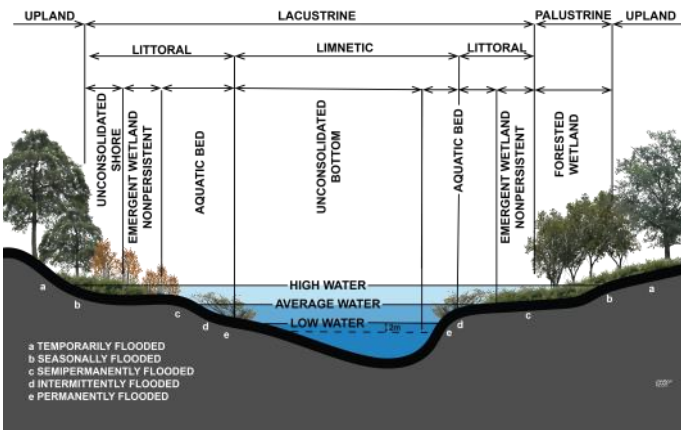
Palustrine moss-lichen wetlands, emergent wetlands, Scrub-Shrub Wetlands, and forested wetlands may occur adjacent to the riverine system, often in a floodplain.

Figure 13.1: Riverine Wetlands



Source: National Wetlands Inventory

Figure 13.2: Lacustrine Wetlands



Source: National Wetlands Inventory

Lacustrine Wetlands

The lacustrine system includes all wetlands with the following characteristics:

- Situated in a topographic depression or a dammed river channel
- Lacking trees, shrubs, persistent emergents, emergent moss or lichens with greater than 30% area coverage
- Total area typically exceed 20 acres
- Similar wetland areas totaling less than 20 acres are also included in the lacustrine system
- If an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 6.6 feet (2 meters) at low water
- The lacustrine system includes permanently flooded lakes and reservoirs, intermittent lakes, and tidal lakes with ocean-derived salinities below 0.5% (not typical in Kansas)
- Typically, there are extensive areas of deep water and considerable wave action
- Islands of palustrine wetlands may lie within the

boundaries of the lacustrine system

Palustrine Wetlands

The palustrine system includes all non-tidal wetlands dominated by:

- Trees, shrubs, persistent emergent, emergent mosses or lichens
- All wetlands occurring in tidal areas where salinity due to ocean-derived salts is below 0.5% (not typical in Kansas)
- Wetlands lacking such vegetation, but with an area less than 20 acres lacking active wave-formed or bedrock shoreline features. It also must have a water depth less than 6.6 feet (2m) at low water in the deepest part and salinity due to ocean derived salts less than .5 percent (not typical in Kansas) area less than 20 acres

The palustrine system was developed to group the vegetated wetlands traditionally called by such names as marsh, swamp, bog, fen, and prairie, which are found throughout the United States. It also includes the small, shallow, permanent, or intermittent water bodies often called ponds. These wetlands may be situated shoreward of lakes, river channels, or estuaries; on river floodplains; in isolated catchments; or on slopes. They may also occur as islands in lakes or rivers.

Sandhills Soils

A portion of western Harvey County features the sand hills. The sand hills have a depth of sand varying from 10 to 40 feet deep and is stabilized by the prairie grasses found covering the area. The dunes were formed by windblown sand deposits from the Arkansas River at the end of the last glacial period. Due to their formation and erodibility they are not conducive to development, especially commercial renewable energy projects or large scale industrial development.

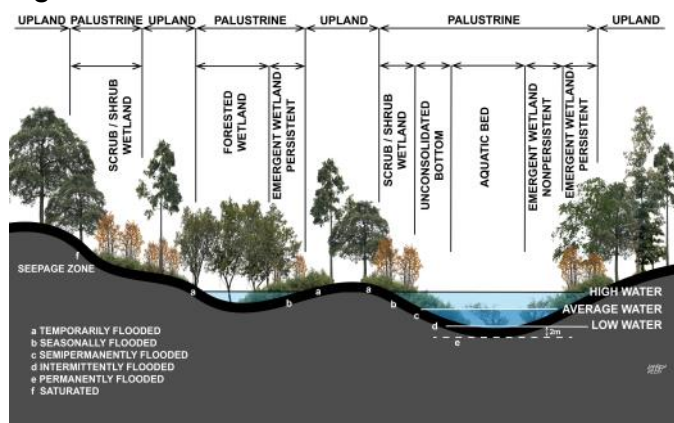
Soils Classifications

Soil types provide for a meaningful understanding and guide to limiting specific uses within the county.

Soil Type Descriptions

The following soil descriptions found on Figure 13.6 and in Figure 13.7 (located at the end of this chapter) were taken from the USDA. The descriptions include where the soil type occurs, the principal uses of the soil, the principal crops, and native vegetation.

Figure 13.3: Palustrine Wetlands



Source: National Wetlands Inventory

Figure 13.5: Sand Dune Location



Source: Kansas Geological Society

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A **complex** consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An **association** is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and

Figure 13.6: Soil Types present in Harvey County

Symbol	Map Unit Name	Non-irrigated Capability Class	Irrigated Capability Class and Subclass	Acres in AOI	% of AOI
9970	Aquolls	-	-	322.2	0.1%
5720	Blazefork silty clay loam, rarely flooded	2, s	2, s	160.5	0.0%
9976	Borrow pits	-	-	73.1	0.0%
5728	Buhler-Blazefork silty clay loams, rarely flooded	2, w	2, w	4,660.0	1.3%
5870	Carway and Carbika soils, 0 to 1 percent slopes	2, w	2, w	41.5	0.0%
5871	Carway-Dillhut-Solvay complex, 0 to 2 percent slopes	2, e	2, e	3,545.4	1.0%
3710	Cass fine sandy loam, rarely flooded	2, e	2, e	37.5	0.0%
5873	Clark clay loam, 1 to 3 percent slopes	3, e	3, e	411.6	0.1%
4540	Clime silty clay loam, 1 to 3 percent slopes	3, e	3, e	282.1	0.1%
4555	Clime silty clay loam, 3 to 7 percent slopes	3, e	3, e	149.3	0.0%
4560	Clime silty clay loam, 7 to 15 percent slopes	6, e	-, -	2,754.0	0.8%
4565	Clime silty clay, 1 to 3 percent slopes	3, e	3, e	5,324.0	1.5%
4570	Clime silty clay, 3 to 7 percent slopes	3, e	3, e	4,875.3	1.4%
4575	Clime silty clay, 3 to 7 percent slopes, eroded	3, e	3, e	2,105.9	0.6%
4585	Clime-Hobbs complex, 0 to 20 percent slopes	6, e	-, -	5,357.2	1.5%
3800	Crete silt loam, 0 to 1 percent slopes, loess plains and breaks	2, s	2, s	14,331.4	4.1%
3801	Crete silt loam, 1 to 3 percent slopes, loess plains and breaks	2, e	2, e	9,305.0	2.7%
5730	Darlow-Elmer complex, 0 to 2 percent slopes	4, s	4, s	106.6	0.0%
3725	Detroit silty clay loam, rarely flooded	1, -	1, -	11,768.7	3.4%
5881	Dillhut fine sand, 1 to 3 percent slopes	3, e	3, e	42.4	0.0%
5883	Dillhut-Solvay complex, 0 to 3 percent slopes	2, e	2, e	3,687.1	1.1%
6051	Elandco silt loam, frequently flooded	5, e	-, -	1.8	0.0%
6052	Elandco silt loam, occasionally flooded	2, w	2, w	134.8	0.0%
6244	Elandco silt loam, rarely flooded	1, w	1, -	1,175.6	0.3%
5886	Farnum and Funmar loams, 0 to 1 percent slopes	2, c	1, -	8,305.7	2.4%
5887	Farnum and Funmar loams, 1 to 3 percent slopes	2, c	1, -	1,753.1	0.5%
5892	Farnum loam, 0 to 1 percent slopes	1, -	1, -	1,818.3	0.5%
5893	Farnum loam, 1 to 3 percent slopes	2, c	1, -	18,166.6	5.2%
5894	Farnum loam, 3 to 6 percent slopes	3, e	1, -	1,060.3	0.3%
9982	Fluvents, frequently flooded	-, w	-	4,316.5	1.2%
3842	Geary silt loam, 0 to 1 percent slopes	1, -	1, -	961.1	0.3%
3843	Geary silt loam, 1 to 3 percent slopes	2, e	2, e	6,182.7	1.8%
3844	Geary silt loam, 3 to 7 percent slopes	3, e	3, s	2,300.1	0.7%
3857	Goessel silty clay, 0 to 1 percent slopes	2, s	2, s	10,833.6	3.1%
3858	Goessel silty clay, 1 to 3 percent slopes	3, e	3, e	2,033.9	0.6%
9983	Gravel pits and quarries	-	-	112.4	0.0%
5905	Hayes-Solvay loamy fine sands, 0 to 5 percent slopes	3, e	3, e	1,366.9	0.4%
3561	Hobbs silt loam, occasionally flooded	2, w	2, w	14,578.5	4.2%
4671	Irwin silty clay loam, 1 to 3 percent slopes	3, s	3, s	22,974.0	6.6%
4673	Irwin silty clay loam, 3 to 7 percent slopes	4, e	4, e	2,164.0	0.6%
4674	Irwin silty clay loam, 3 to 7 percent slopes, eroded	4, e	4, e	372.9	0.1%
5550	Imano clay loam, occasionally flooded	3, w	3, w	366.5	0.1%
5324	Kaski loam, occasionally flooded	2, w	2, w	938.7	0.3%
5562	Kaskan silty clay loam, frequently flooded, channeled	5, w	-, -	1.8	0.0%
5751	Kisiwa loam, 0 to 1 percent slopes	4, s	4, s	49.7	0.0%
3890	Ladysmith silty clay loam, 0 to 1 percent slopes	2, s	2, s	46,819.2	13.5%
3891	Ladysmith silty clay loam, 1 to 3 percent slopes	3, s	3, s	34,495.7	10.0%
5907	Langdon fine sand, 0 to 15 percent slopes	6, e	-, -	4.1	0.0%
5800	Mahone loamy fine sand, rarely flooded	2, w	2, w	8.9	0.0%
5896	Nalim-Shellabarger sandy loams, 0 to 1 percent slopes	2, e	2, e	3,678.7	1.1%
5910	Naron fine sandy loam, 1 to 3 percent slopes	2, e	2, e	2,474.1	0.7%
5822	Nickerson-Punkin fine sandy loams, 0 to 2 percent slopes	2, e	2, e	4.3	0.0%

Figure 13.6: Soil Types present in Harvey County (cont.)

Symbol	Map Unit Name	Non-irrigated Capability Class	Irrigated Capability Class and Subclass	Acres in AOI	% of AOI
5928	Pratt loamy fine sand, 1 to 5 percent slopes	3, e	2, e	3,159.8	0.9%
5941	Pratt-Tivoli loamy fine sands, 5 to 15 percent slopes	6, e	-, -	3,387.2	1.0%
5942	Pratt-Turon fine sands, 1 to 5 percent slopes	3, e	2, e	40.1	0.0%
5831	Punkin silt loam, 0 to 1 percent slopes	3, s	3, s	14,416.9	4.2%
5832	Punkin-Taver complex, 0 to 1 percent slopes	3, s	3, s	5,848.4	1.7%
3911	Rosehill silty clay, 1 to 3 percent slopes	3, e	3, e	16,728.7	4.8%
3912	Rosehill silty clay, 3 to 6 percent slopes	4, e	4, e	4,899.2	1.4%
5943	Saltcreek and Naron fine sandy loams, 0 to 1 percent slopes	2, c	1, -	5,820.8	1.7%
5944	Saltcreek and Naron fine sandy loams, 1 to 3 percent slopes	2, e	1, -	2,977.1	0.9%
3921	Smolan silty clay loam, 1 to 3 percent slopes	2, e	2, e	9,998.2	2.9%
5961	Solvay loamy fine sand, 0 to 2 percent slopes	2, e	2, e	11,468.0	3.3%
5970	Taver loam, 0 to 1 percent slopes	2, s	2, s	504.9	0.1%
5971	Tivin fine sand, 10 to 30 percent slopes	6, e	-, -	1,066.0	0.3%
5973	Tivin-Dillhut fine sands, 0 to 15 percent slopes	6, e	-, e	5,114.6	1.5%
2266	Tobin silt loam, occasionally flooded	2, w	2, w	1,301.9	0.4%
5977	Vanoss silt loam, 1 to 3 percent slopes	2, e	2, e	19.0	0.0%
5844	Warnut fine sandy loam, 0 to 1 percent slopes	2, w	2, w	21.4	0.0%
9999	Water	-	-	444.2	0.1%
3491	Wells loam, 1 to 3 percent slopes	2, e	2, e	67.9	0.0%
3492	Wells loam, 3 to 7 percent slopes	3, e	3, e	12.5	0.0%
5675	Willowbrook fine sandy loam, occasionally flooded	2, w	2, w	4.3	0.0%

Source: USDA Soil Survey

relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An **undifferentiated** group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit

because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.



Example of the Kansas Sand Hill Dunes
Source: Kansas Geological Society

Aquolls

Aquolls are the wet Mollisols. They are most extensive in glaciated areas of the Midwestern States, mainly Iowa, Minnesota, North Dakota, and Indiana. Most have supported vegetation of grasses, sedges, and forbs, but some supported forest vegetation. Most have been artificially drained, and are used as cropland.

Blazefork silty clay loam, rarely flooded

The Blazefork series consists of very deep, moderately well drained, slowly permeable soils that formed in alluvium. Blazefork soils are on floodplains in the Central Kansas Sandstone Hills.

Borrow pits

A borrow pit is a term used in construction for a hole, pit or excavation dug for the purposes of removing gravel, clay and sand used in a construction project such as when building an overpass or embankment.

Buhler-Blazefork silty clay loams, rarely flooded.

The Buhler series consists of very deep, somewhat poorly drained, very slowly permeable, sodic soils formed in alluvium on floodplains in river valleys of the Great Bend Sand Plains. Nearly all areas are cultivated. Principal crops are wheat, grain sorghum, soybeans, and alfalfa. Native vegetation was tall grasses with some deciduous trees.

Carway and Carbika soils, 0 to 1 percent slopes; Carway-Dillhut-Solvay complex, 0 to 2 percent slopes

The Carway series consists of very deep, somewhat poorly drained, moderate over very slowly permeable soils. They are formed in loamy eolian sediments over a buried alluvial soil. These soils occur in interdunal depressions on paleo-terraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops.

The Carbika series consists of very deep, poorly drained, very slowly permeable soils. They are formed in loamy eolian sediments over alluvium. These soils occur in interdunal depressions on paleo-terraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops.

The Dillhut series consists of very deep, moderately well drained, soils that formed in sandy eolian

deposits over a buried alluvial soil. Dillhut soils are on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Most areas are in native range. Native vegetation is dominated by sand bluestem, indiagrass, and little bluestem.

Cass fine sandy loam, rarely flooded

The Cass series consists of deep, well drained soils. Formed in alluvium on floodplains in Central Nebraska Loess Hills. Most areas are cultivated, and much of it is irrigated. The main crops are corn, alfalfa, and sorghum. The native vegetation is tall prairie grasses and deciduous trees along streams.

Clark clay loam, 1 to 3 percent slopes

The Clark series consists of very deep, well drained soils formed in alluvium. Clark soils are on paleoterraces on river valleys in the Great Bend Sand Plains. Most areas are cultivated. Principal crops are wheat, sorghum, and alfalfa. Native vegetation is tall prairie grasses.

Clime silty clay loam, 1 to 3 percent slopes; Clime silty clay loam, 3 to 7 percent slopes; Clime silty clay loam, 7 to 15 percent slopes; Clime silty clay, 1 to 3 percent slopes; Clime silty clay, 3 to 7 percent slopes; Clime silty clay, 3 to 7 percent slopes, eroded; Clime-Hobbs complex, 0 to 20 percent slopes

The Clime series consists of moderately deep, well drained soils formed in residuum from shale. Clime soils are on side slopes on hillslopes on uplands in Bluestem Hills.

The Hobbs series consists of very deep, well drained soils formed in stratified, silty alluvium. These soils are on flood plains, foot slopes, and alluvial fans in river valleys of Central Loess Plains. Where the areas are sufficiently wide and flooding is not too severe, these soils are used for cultivated crops, both dryland and irrigated. The main crops are corn, soybeans, grain sorghum, and alfalfa. The native vegetation species are big bluestem, switchgrass, western wheatgrass, and little bluestem, with scattered deciduous trees.

Crete silt loam, 0 to 1 percent slopes, loess plains and breaks; Crete silt loam, 1 to 3 percent slopes, loess plains and breaks

The Crete series consists of very deep, moderately well drained soils formed in loess. Crete soils are on interfluves and hillslopes on loess uplands and loess-covered stream terraces on river valleys in Central Loess Plains. Most areas are cropped.

The main crops are corn, soybeans, sorghum and wheat.

Darlow-Elmer complex, 0 to 2 percent slopes

The Darlow series consists of very deep, somewhat poorly drained, very slowly permeable soils formed in loamy, calcareous alluvium on terraces in river valleys of the Great Bend Sand Plains. Nearly all areas are cultivated. Principal crops are wheat and grain sorghum. Native vegetation was mid and tall grasses.

The Elmer series consists of very deep, moderately well drained, slowly permeable soils formed in stratified calcareous loamy alluvium. These soils are on terraces in river valleys of the Great Bend Sand Plains. Almost all areas are used for cropland. Wheat, grain sorghum and alfalfa are the primary crops.

Detroit silty clay loam, rarely flooded

The Detroit series consists of very deep, moderately well drained soils formed in alluvium. Detroit soils are located on stream terraces along river valleys of the Central Kansas Sandstone Hills. Most of the soils are cultivated. Principal crops are wheat, alfalfa, and sorghums. Native vegetation was tall grasses with some deciduous trees.

Dillhut fine sand, 1 to 3 percent slopes; Dillhut-Solvay complex, 0 to 3 percent slopes

The Dillhut series consists of very deep, moderately well drained, soils formed in sandy eolian deposits over a buried alluvial soil. Dillhut soils are on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Most areas are in native range. Native vegetation is dominated by sand bluestem, indiagrass, and little bluestem.

The Solvay series consists of very deep, somewhat poorly drained, moderate or moderately slowly permeable soils. They are formed in eolian over alluvium. These soils occur in interdunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops. Some areas are used for pasture.

Elandco silt loam, frequently flooded; Elandco silt loam, occasionally flooded; Elandco silt loam, rarely flooded

The Elandco series comprises deep, well drained, moderately permeable soils on flood plains. These

soils formed in loamy alluvium. Dominantly used for improved pastures and pecan orchards. Some areas are cultivated to alfalfa, small grains, cotton, forage sorghums, and oats. Native vegetation is elm, hackberry and pecan trees, with little bluestem, switchgrass, indiagrass, perennial wildrye, and white tridens.

Farnum and Funmar loams, 0 to 1 percent slopes; Farnum and Funmar loams, 1 to 3 percent slopes; Farnum loam, 0 to 1 percent slopes; Farnum loam, 1 to 3 percent slopes; Farnum loam, 3 to 6 percent slopes

The Farnum series consists of very deep, well drained soils formed in loamy alluvium. Farnum soils are on paleoterraces in river valleys of the Great Bend Sand Plains. Most areas are cultivated. The major crops are winter wheat and grain sorghum.

The Funmar series consists of very deep, moderately well drained soils formed in loamy alluvium on paleoterraces in river valleys of the Great Bend Sand Plains. Most of the areas are cultivated. Principal crops are winter wheat and grain sorghum. Native vegetation is tall prairie grasses.

Fluvents, frequently flooded

Fluvents are the more or less freely drained Entisols formed in recent water-deposited sediments on flood plains, fans, and deltas along rivers and small streams throughout the country. Some of the largest areas are on the flood plains along the Mississippi River. Most Fluvents are frequently flooded, unless they are protected by dams or levees. Stratification of the materials is normal. Most Fluvents are used as rangeland, forest, pasture, or wildlife habitat. Some are used as cropland.

Geary silt loam, 0 to 1 percent slopes; Geary silt loam, 1 to 3 percent slopes; Geary silt loam, 3 to 7 percent slopes

The Geary series consists of very deep, well drained soils formed in loess. Geary soils are on hillslopes on uplands in the Central Kansas Sandstone Hills. Most areas are cultivated. The principal crops are wheat and grain sorghum. Native vegetation is tall and mid prairie grasses.

Goessel silty clay, 0 to 1 percent slopes; Goessel silty clay, 1 to 3 percent slopes

The Goessel series consists of very deep, moderately well drained soils formed in clayey alluvium over loamy alluvium. Goessel soils are on

paleoterraces on river valleys in Central Kansas Sandstone Hills. Most areas are cultivated. Principle crops are wheat and grain sorghum. Native vegetation is mid or tall grass prairie.

Hayes-Solvay loamy fine sands, 0 to 5 percent slopes

The Hayes series consists of very deep, well drained, moderately rapid over slowly permeable soils that formed in moderately coarse eolian deposits over a buried alluvial soil. These soils are on dunes on paleo-terraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; grain sorghum is the principal crop with lesser acreage of wheat and alfalfa.

The Solvay series consists of very deep, somewhat poorly drained, moderate or moderately slowly permeable soils. They are formed in eolian over alluvium. These soils occur in interdunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops. Some areas are used for pasture.

Hobbs silt loam, occasionally flooded

The Hobbs series consists of very deep, well drained soils that formed in stratified, silty alluvium. These soils are on flood plains, foot slopes, and alluvial fans in river valleys of Central Loess Plains. Where the areas are sufficiently wide and flooding is not too severe, these soils are used for cultivated crops, both dryland and irrigated. The main crops are corn, soybeans, grain sorghum, and alfalfa. The native vegetation species are big bluestem, switchgrass, western wheatgrass, and little bluestem, with scattered deciduous trees.

Imano clay loam, occasionally flooded

The Imano series consists of very deep, somewhat poorly drained, moderately slowly over rapidly permeable soils. They are formed in loamy sediments moderately deep over sandy alluvium. These soils are on flood plains in the Great Bend Sand Plains. Mostly used for cultivated crops. Winter wheat and grain sorghum are the principal crops. Native vegetation is mid and tall grasses.

Irwin silty clay loam, 1 to 3 percent slopes; Irwin silty clay loam, 3 to 7 percent slopes; Irwin silty clay loam, 3 to 7 percent slopes, eroded

The Irwin series consists of deep and very deep, moderately well drained formed in loess over colluvium over residuum weathered from shale.

Irwin soils are on hillslopes on uplands in the Central Kansas Sandstone Hills. About half is cultivated; wheat and sorghum are the principal crops. The remainder is used as rangeland. Native vegetation is mid or tall grass prairie.

Kaskan silty clay loam, frequently flooded, channeled

The Kaskan series consists of very deep, well drained soils formed in stratified loamy alluvium. Kaskan soils are on flood plains in river valleys of the Great Bend Sand Plains. Frequently flooded land is used for pasture and rarely flooded land is used for cultivated crops.

Kaski loam, occasionally flooded

The Kaski series consists of deep, well drained, moderately permeable soils formed in loamy alluvium. These soils are on flood plains in river valleys of the Great Bend Sand Plains.

Kisiwa loam, 0 to 1 percent slopes

The Kisiwa series consists of very deep, poorly drained, very slowly permeable soils. These nearly level soils formed in slight depressions in clayey or loamy, calcareous alluvium on terraces and on floodplains in river valleys of the Great Bend Sand Plains. Nearly all areas are cultivated. Principal crops are wheat and grain sorghum. Native vegetation was mid and tall grasses.

Ladysmith silty clay loam, 0 to 1 percent slopes; Ladysmith silty clay loam, 1 to 3 percent slopes

The Ladysmith series consists of very deep, somewhat poorly drained soils formed in residuum from interbedded limestone and shale. These soils occur on interfluves on uplands in the Central Kansas Sandstone Hills. Most soils are cultivated. Principal crops are wheat, sorghum, and alfalfa. Native vegetation is tall prairie grasses.

Langdon fine sand, 0 to 15 percent slopes

The Langdon series consists of very deep, somewhat excessively drained, rapidly permeable soils formed in sandy eolian sediments. These soils are on undulating to rolling dunes on paleo-terraces in river valleys of the Great Bend Sand Plains. Used mainly for grazing beef cattle. Native vegetation is sand bluestem, sand dropseed, and prairie sandreed.

Mahone loamy fine sand, rarely flooded

The Mahone series consists of very deep, well drained, moderately permeable soils formed in stratified loamy alluvium. These soils are on high flood plains in river valleys of the Great Bend Sand Plains. Most areas are used for cultivated crops such as wheat and grain sorghum. A few areas are in pasture.

Nalim-Shellabarger sandy loams, 0 to 1 percent slopes

The Nalim series consists of very deep, well drained soils on paleoterraces in river valleys formed in loamy alluvium in the Great Bend Sand Plains. Largely in cultivation; small grains and sorghums are the main crops. Originally the vegetation was tallgrass prairie dominated by big bluestem, indiangrass, and switchgrass.

Naron fine sandy loam, 1 to 3 percent slopes

The Naron series consists of very deep, well drained soils formed in loamy eolian sediments. These soils are on rolling small dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; wheat and sorghums are the principal crops. Native vegetation was tall prairie grasses.

Nickerson-Punkin fine sandy loams, 0 to 2 percent slopes

The Nickerson series consists of very deep, moderately well drained soils formed in old alluvium. These soils are on wind modified terraces in river valleys of the Great Bend Sand Plains. Most areas are cultivated. Principal crops are wheat, grain sorghum, and alfalfa. Native vegetation was tall and mid grasses.

The Punkin series consists of very deep, moderately well drained, very slowly permeable soils formed in calcareous, clayey alluvium. These soils are on paleo-terraces in river valleys of the Great Bend Sand Plains. Nearly all areas are cultivated. Principal crops are wheat and sorghum. Native vegetation was mid and tall grasses.

Pratt loamy fine sand, 1 to 5 percent slopes; Pratt-Tivoli loamy fine sands, 5 to 15 percent slopes; Pratt-Turon fine sands, 1 to 5 percent slopes

The Pratt series consists of very deep, well drained soils formed in sandy eolian deposits on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Gentler slopes are usually cultivated; grain sorghum is the principal crop with lesser

acreage of wheat and alfalfa. Steeper slopes are mostly in native range. Native vegetation is dominated by sand bluestem, indiangrass, and little bluestem.

The Tivoli series consists of very deep, excessively drained, rapidly permeable soils formed in sandy eolian sediments. These soils occur on undulating to hummocky sand dunes on stream terraces. Used mainly for grazing beef cattle. Native vegetation is sand bluestem, sand dropseed, and sand reedgrass. Sandsage brush and skunk brush are woody invaders.

The Turon series consists of very deep, well drained soils formed in eolian deposits over a buried alluvial soil. These soils are on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Gentler slopes are usually cultivated; grain sorghum is the principal crop with lesser acreage of wheat and alfalfa. Steeper slopes are in native range. Native vegetation is dominated by sand bluestem, indiangrass, and little bluestem.

Punkin silt loam, 0 to 1 percent slopes; Punkin-Taver complex, 0 to 1 percent slopes

The Punkin series consists of very deep, moderately well drained, very slowly permeable soils formed in calcareous, clayey alluvium. These soils are on paleoterraces in river valleys of the Great Bend Sand Plains. Nearly all areas are cultivated. Principal crops are wheat and sorghum. Native vegetation was mid and tall grasses.

Rosehill silty clay, 1 to 3 percent slopes; Rosehill silty clay, 3 to 6 percent slopes

The Rosehill series consists of moderately deep to clayey shales, well drained soils formed in clayey residuum weathered from shale. These soils are on uplands. The area is mainly cropland. Principal crops are wheat and sorghums. Some areas are in pasture and native range. The native vegetation was mid and tall grass prairie.

Saltcreek and Naron fine sandy loams, 0 to 1 percent slopes; Saltcreek and Naron fine sandy loams, 1 to 3 percent slopes

The Saltcreek series consists of very deep, well drained soils formed in eolian deposits over buried alluvium. These soils are on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; wheat and sorghums are the principal crops. Native vegetation was tall prairie grasses.

The Naron series consists of very deep, well drained soils formed in loamy eolian sediments. These soils are on rolling small dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; wheat and sorghums are the principal crops. Native vegetation was tall prairie grasses.

Smolan silty clay loam, 1 to 3 percent slopes

The Smolan series consists of very deep, well and moderately well drained soils formed from loess. Smolan soils are on paleoterraces on river valleys or on hillslopes on uplands in Central Kansas Sandstone Hills. Slopes of less than 6 percent are usually cultivated. Principal crops are wheat or sorghum. The steeper slopes and part of the gentler slopes are used for native range. Native vegetation is mid or tall grass prairie.

Solvay loamy fine sand, 0 to 2 percent slopes

The Solvay series consists of very deep, somewhat poorly drained, moderate or moderately slowly permeable soils. They are formed in eolian over alluvium. These soils occur in interdunes on paleoterraces in river valleys of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops. Some areas are used for pasture.

Taver loam, 0 to 1 percent slopes

The Taver series consists of very deep, moderately well drained soils on paleoterraces in river valleys formed in alluvium in the Great Bend Sand Plains. Most of these soils are used for small grains and sorghums. Native vegetation was little bluestem, big bluestem, indiagrass, and switchgrass.

Tivin fine sand, 10 to 30 percent slopes; Tivin-Dillhut fine sands, 0 to 15 percent slopes

The Tivin series consists of very deep, somewhat excessively drained, rapidly permeable soils formed in eolian deposits. These soils are on dunes on paleoterrace in river valleys of the Great Bend Sand Plains. Used mainly for grazing beef cattle. Native vegetation is sand bluestem, sand dropseed, and prairie sandreed.

The Dillhut series consists of very deep, moderately well drained, soils formed in sandy eolian deposits over a buried alluvial soil. Dillhut soils are on dunes on paleoterraces in river valleys of the Great Bend Sand Plains. Most areas are in native range. Native vegetation is dominated by sand bluestem, indiagrass, and little bluestem.

Tobin silt loam, occasionally flooded

The Tobin series consists of very deep, well drained soils formed in silty alluvium. Tobin soils are on flood plains on river valleys. Most areas are cultivated. Principal crops are wheat, grain sorghum, and alfalfa. Native vegetation is mid and tall grasses.

Vanoss silt loam, 1 to 3 percent slopes

The Vanoss series consists of very deep, well drained soils formed in loamy alluvium of Pleistocene age. These soils occur on treads of stream terraces in the Central Rolling Red Prairies. Mainly cultivated to cotton, alfalfa, grain sorghum, peanuts, tame pasture, and small grains. Native vegetation is tall grasses.

Warnut fine sandy loam, 0 to 1 percent slopes

The Warnut series consists of very deep, poorly drained, moderately permeable soils. They are formed in loamy alluvium. These soils occur in interdunal depressions on paleo-terraces of the Great Bend Sand Plains. Mostly cultivated; winter wheat and grain sorghum are the principal crops.

Wells loam, 1 to 3 percent slopes; Wells loam, 3 to 7 percent slopes

The Wells series consists of very deep, well drained soils that formed in residuum from noncalcareous sandstones and sandy shales modified by thin deposits of colluvium from sandstone and loess. Wells soils are on hillslopes on uplands in the Central Kansas Sandstone Hills. Most areas are in cropland. Principal crops are wheat or sorghum. Native vegetation is mid or tall grass prairie.

Willowbrook fine sandy loam, occasionally flooded

The Willowbrook series consists of very deep, somewhat poorly drained, moderately rapidly permeable soils on flood plains in river valleys of the Great Bend Sand Plains. Most of the acreage is cultivated. Wheat, grain sorghum, and alfalfa are the main crops. Native vegetation is tall prairie grasses.

Capability Grouping

Capability classes are groups of soils having the same relative degree of hazard or limitation. The risks of soil damage or limitation in use become progressively greater from class I to class VIII. The capability classes are useful as a means of introducing the map user to the more detailed information on the soil map. The classes show the location, amount, and general suitability of the soils

for agricultural use. Only information concerning general agricultural limitations in soil use are obtained at the capability class level.

- Class I soils have few limitations restricting their use
- Class II soils have moderate limitations reducing the choice of plants or requiring moderate conservation practices
- Class III soils have severe limitations reducing the choice of plants, or they require special conservation practices, or both
- Class IV soils have very severe limitations reducing the choice of plants, or they require very careful management, or both
- Class V soils are not likely to erode but have other limitations, impractical to remove, thus limiting their use
- Class VI soils have severe limitations which make them generally unsuitable for cultivation
- Class VII soils have very severe limitations which make them unsuitable for cultivation
- Class VIII soils and landforms have limitations which nearly preclude their use for commercial crop production

Capability subclasses are soil groups within one class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter "e" shows the main hazard is the risk of erosion unless close-growing plant cover is maintained; "w" shows water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); "s" shows the soil is limited mainly because it is shallow, droughty, or stony; and "c" used in only some parts of the United States, shows the chief limitation is climate due to very cold or very dry conditions.

Sources: Natural Resources Conservation Service; United States Department of Agriculture

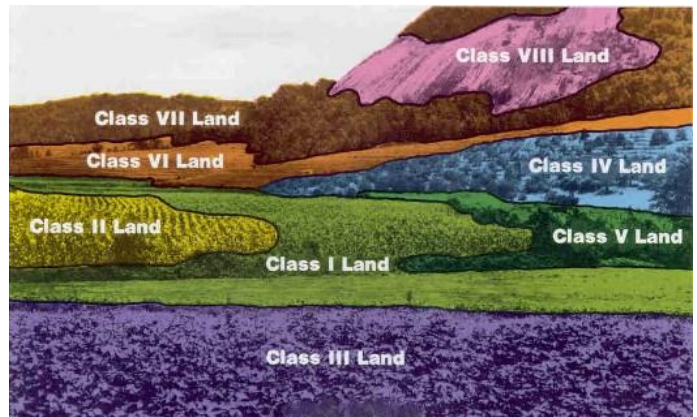
Prime Farmland and Land Use

Prime farmland is critical to the economic viability of a county similar to Harvey County, where agriculture is a large part of the local economy. The following paragraphs will focus on Prime Farmland, as well as Unique Farmland within the county.

Prime Farmland

Prime farmland is directly tied to the specific soils and their composition. Figure 13.9 contains each soil type and if said soil is prime farmland, farmland of statewide importance or not prime; plus, it indicates an approximate percentage of each

Figure 13.8 Capability Grouping Classes



Source: National Wetlands Inventory

Prime Farmland

According to USDA, Prime Farmland ...is land with the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It must also be available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

classification. The map in Figure 13.10 (located at the end of this chapter) identifies Prime Farmland, Prime Farmland if Drained, Farmland of Statewide Importance, and Not Prime Farmland.

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

facilitate the wise use of our nation's prime farmland.

Prime farmland soils are soils best suited to producing food, feed, forage, fiber, and oilseed crops. Such soils have properties favorable for the economic production of sustained high yields of crops. The soils need only to be treated and managed using acceptable farming methods. The moisture supply, of course, must be adequate, and the growing season has to be sufficiently long. Prime farmland soils produce the highest yields with minimal inputs of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be in use as cropland, pasture, or woodland, or they may be in other uses. They either are used for producing food or fiber or are available for these uses. Urban or built-up land and water areas cannot be considered prime farmland. Soils classified as prime farmland usually get an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable. The acidity or alkalinity level of the soils is acceptable. The soils have few or no rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods and are not subject to frequent flooding during the growing season. The slope ranges mainly from 0 to 6 percent.

Soils having a high water table, are subject to flooding, or are droughty may qualify as prime farmland soils if the limitations or hazards are overcome by drainage, flood control, or irrigation. Onsite evaluation is necessary to determine the effectiveness of corrective measures.

A recent trend in land use in some parts of the county has been the conversion of some prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are wet, more erodible, droughty, or difficult to cultivate and less productive than prime farmland. Soils determined to be prime farmland need to be protected throughout the rural areas of Kansas. These soils are typically the best crop producing lands.

Unique Farmland

Unique farmland is land other than prime farmland

used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be farmland of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be farmland of local importance for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Soil Suitability and Limitations

Limitations

These limitation interpretations are based on the engineering properties of soils, on test data for soils in the survey area and others nearby or adjoining, and on the experience of engineers and soil scientists familiar with the soils of Harvey County. Soil limitations are indicated by the ratings Not Limited, Somewhat Limited, and Very Limited. (Refer to Figures 13.10 through 13.13 at the end of this chapter). Not Limited (green) means soil properties

Figure 13.9: Soil Types by Prime Farmland Status

Symbol	Map Unit Name	Rating	Acres in AOI	% of AOI
9970	Aquolls	Not prime farmland	322.2	0.1%
5720	Blazefork silty clay loam, rarely flooded	All areas are prime farmland	160.5	0.0%
9976	Borrow pits	Not prime farmland	73.1	0.0%
5728	Buhler-Blazefork silty clay loams, rarely flooded	Farmland of statewide importance	4,660.0	1.3%
5870	Carway and Carbika soils, 0 to 1 percent slopes	Not prime farmland	41.5	0.0%
5871	Carway-Dillhut-Solvay complex, 0 to 2 percent slopes	Farmland of statewide importance	3,545.4	1.0%
3710	Cass fine sandy loam, rarely flooded	All areas are prime farmland	37.5	0.0%
5873	Clark clay loam, 1 to 3 percent slopes	All areas are prime farmland	411.6	0.1%
4540	Clime silty clay loam, 1 to 3 percent slopes	Farmland of statewide importance	282.1	0.1%
4555	Clime silty clay loam, 3 to 7 percent slopes	Farmland of statewide importance	149.3	0.0%
4560	Clime silty clay loam, 7 to 15 percent slopes	Not prime farmland	2,754.0	0.8%
4565	Clime silty clay, 1 to 3 percent slopes	Farmland of statewide importance	5,324.0	1.5%
4570	Clime silty clay, 3 to 7 percent slopes	Farmland of statewide importance	4,875.3	1.4%
4575	Clime silty clay, 3 to 7 percent slopes, eroded	Not prime farmland	2,105.9	0.6%
4585	Clime-Hobbs complex, 0 to 20 percent slopes	Not prime farmland	5,357.2	1.5%
3800	Crete silt loam, 0 to 1 percent slopes, loess plains and breaks	All areas are prime farmland	14,331.4	4.1%
3801	Crete silt loam, 1 to 3 percent slopes, loess plains and breaks	All areas are prime farmland	9,305.0	2.7%
5730	Darlow-Elmer complex, 0 to 2 percent slopes	Not prime farmland	106.6	0.0%
3725	Detroit silty clay loam, rarely flooded	All areas are prime farmland	11,768.7	3.4%
5881	Dillhut fine sand, 1 to 3 percent slopes	Farmland of statewide importance	42.4	0.0%
5883	Dillhut-Solvay complex, 0 to 3 percent slopes	Farmland of statewide importance	3,687.1	1.1%
6051	Elandco silt loam, frequently flooded	Not prime farmland	1.8	0.0%
6052	Elandco silt loam, occasionally flooded	All areas are prime farmland	134.8	0.0%
6244	Elandco silt loam, rarely flooded	All areas are prime farmland	1,175.6	0.3%
5886	Farnum and Funmar loams, 0 to 1 percent slopes	All areas are prime farmland	8,305.7	2.4%
5887	Farnum and Funmar loams, 1 to 3 percent slopes	All areas are prime farmland	1,753.1	0.5%
5892	Farnum loam, 0 to 1 percent slopes	All areas are prime farmland	1,818.3	0.5%
5893	Farnum loam, 1 to 3 percent slopes	All areas are prime farmland	18,166.6	5.2%
5894	Farnum loam, 3 to 6 percent slopes	All areas are prime farmland	1,060.3	0.3%
9982	Fluents, frequently flooded	Not prime farmland	4,316.5	1.2%
3842	Geary silt loam, 0 to 1 percent slopes	All areas are prime farmland	961.1	0.3%
3843	Geary silt loam, 1 to 3 percent slopes	All areas are prime farmland	6,182.7	1.8%
3844	Geary silt loam, 3 to 7 percent slopes	All areas are prime farmland	2,300.1	0.7%
3857	Goessel silty clay, 0 to 1 percent slopes	All areas are prime farmland	10,833.6	3.1%
3858	Goessel silty clay, 1 to 3 percent slopes	All areas are prime farmland	2,033.9	0.6%
9983	Gravel pits and quarries	Not prime farmland	112.4	0.0%
5905	Hayes-Solvay loamy fine sands, 0 to 5 percent slopes	Farmland of statewide importance	1,366.9	0.4%
3561	Hobbs silt loam, occasionally flooded	All areas are prime farmland	14,578.5	4.2%
4671	Irwin silty clay loam, 1 to 3 percent slopes	All areas are prime farmland	22,974.0	6.6%
4673	Irwin silty clay loam, 3 to 7 percent slopes	All areas are prime farmland	2,164.0	0.6%
4674	Irwin silty clay loam, 3 to 7 percent slopes, eroded	Farmland of statewide importance	372.9	0.1%
5550	Imano clay loam, occasionally flooded	All areas are prime farmland	366.5	0.1%
5324	Kaski loam, occasionally flooded	All areas are prime farmland	938.7	0.3%
5562	Kaskan silty clay loam, frequently flooded, channeled	Not prime farmland	1.8	0.0%
5751	Kisiwa loam, 0 to 1 percent slopes	Not prime farmland	49.7	0.0%
3890	Ladysmith silty clay loam, 0 to 1 percent slopes	All areas are prime farmland	46,819.2	13.5%
3891	Ladysmith silty clay loam, 1 to 3 percent slopes	All areas are prime farmland	34,495.7	10.0%
5907	Langdon fine sand, 0 to 15 percent slopes	Not prime farmland	4.1	0.0%
5800	Mahone loamy fine sand, rarely flooded	Farmland of statewide importance	8.9	0.0%
5896	Nalim-Shellabarger sandy loams, 0 to 1 percent slopes	All areas are prime farmland	3,678.7	1.1%
5910	Naron fine sandy loam, 1 to 3 percent slopes	All areas are prime farmland	2,474.1	0.7%
5822	Nickerson-Punkin fine sandy loams, 0 to 2 percent slopes	Farmland of statewide importance	4.3	0.0%

Figure 13.9: Soil Types by Prime Farmland Status (cont.)

Symbol	Map Unit Name	Rating	Acres in AOI	% of AOI
5928	Pratt loamy fine sand, 1 to 5 percent slopes	Farmland of Statewide Importance	3,159.8	0.9%
5941	Pratt-Tivoli loamy fine sands, 5 to 15 percent slopes	Not prime farmland	3,387.2	1.0%
5942	Pratt-Turon fine sands, 1 to 5 percent slopes	Farmland of Statewide Importance	40.1	0.0%
5831	Punkin silt loam, 0 to 1 percent slopes	Not prime farmland	14,416.9	4.2%
5832	Punkin-Taver complex, 0 to 1 percent slopes	Not prime farmland	5,848.4	1.7%
3911	Rosehill silty clay, 1 to 3 percent slopes	Farmland of Statewide Importance	16,728.7	4.8%
3912	Rosehill silty clay, 3 to 6 percent slopes	Farmland of Statewide Importance	4,899.2	1.4%
5943	Saltcreek and Naron fine sandy loams, 0 to 1 percent slopes	All areas are prime farmland	5,820.8	1.7%
5944	Saltcreek and Naron fine sandy loams, 1 to 3 percent slopes	All areas are prime farmland	2,977.1	0.9%
3921	Smolan silty clay loam, 1 to 3 percent slopes	All areas are prime farmland	9,998.2	2.9%
5961	Solvay loamy fine sand, 0 to 2 percent slopes	Farmland of Statewide Importance	11,468.0	3.3%
5970	Taver loam, 0 to 1 percent slopes	All areas are prime farmland	504.9	0.1%
5971	Tivin fine sand, 10 to 30 percent slopes	Not prime farmland	1,066.0	0.3%
5973	Tivin-Dillhut fine sands, 0 to 15 percent slopes	Farmland of Statewide Importance	5,114.6	1.5%
2266	Tobin silt loam, occasionally flooded	All areas are prime farmland	1,301.9	0.4%
5977	Vanoss silt loam, 1 to 3 percent slopes	All areas are prime farmland	19.0	0.0%
5844	Warnut fine sandy loam, 0 to 1 percent slopes	Farmland of Statewide Importance	21.4	0.0%
9999	Water	Not prime farmland	444.2	0.1%
3491	Wells loam, 1 to 3 percent slopes	All areas are prime farmland	67.9	0.0%
3492	Wells loam, 3 to 7 percent slopes	All areas are prime farmland	12.5	0.0%
5675	Willowbrook fine sandy loam, occasionally flooded	Farmland of Statewide Importance	4.3	0.0%
Total breakdown of Prime farmland status				
Farmland of Statewide Importance				19.3% +/-
All areas are prime farmland				92.2% +/-
Not prime farmland				11.5% +/-

Source: USDA Soil Survey

are generally favorable for the stated use, or in other words, limitations are minor and easily overcome. Somewhat Limited (yellow) means some soil properties are unfavorable but can be overcome or modified by special planning and design. Very Limited (red) means soil properties may be so unfavorable and difficult to correct or overcome as to require various degrees of soil reclamation, special designs, or intensive maintenance.

Figure 13.15 indicates each soil and identifies its suitability rating as well as the conditions creating the specific rating.

Ratings

Fundamental soil properties for all soils include:

- Sand (%)
- Silt (%)
- Clay (%)
- Horizon rock fragment content (%)
- Water transmission (hydraulic conductivity)
- Water storage (available water holding

- capacity)
- Organic matter (%)
- Bulk density
- pH
- Electrical conductivity
- Cation exchange capacity
- Shrink-swell
- Slope (%)
- Slope shape (gather or spread water)
- Stoniness
- Rainfall
- Growing season length (frost-free days)
- Water table
- Flooding
- Ponding
- Landscape position, and
- Soil parent material

Ratings, or interpretations, are based upon these soil properties.

Interpretations start with a need to predict how a land use will be affected by different soil and site properties

The relationships between the soil and site properties and the land use are deliberated by a team of experts and captured in a “criteria table” as a starting point.

Dwellings Without Basements

Slab on-grade construction or a dwelling without a basement can be determined by using Figure 13.15 to find the suitability by soil types and the specific conditions impacting the soil.

Very Limited Conditions

The majority of soils in Harvey County are considered very limited for a dwelling unit without a basement. There are eight major conditions impacting the soils (not all eight are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Shrink-Swell
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock
- Subsidence Risk

These conditions may or may not eliminate the ability of a land owner to build a slab-on-grade dwelling unit, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are 23 soils considered somewhat limited which is less of an issue when developing. The conditions that are creating the somewhat limited classification are:

- Depth to Saturated Bedrock
- Shrink-Swell
- Slope
- Depth to Soft Bedrock

Not Limited

There are 12 soil groups that do not pose limitations in Harvey County for dwellings without basements.

Dwellings With Basements

Figure 13.15 provides the suitability by soil types and the specific conditions impacting the soil.

Very Limited Conditions

The majority of soils in Harvey County are considered very limited for a dwelling unit with a basement. There are seven major conditions impacting the soils (not all seven are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Shrink-Swell
- Depth to Hard Bedrock
- Slope
- Subsidence Risk

These conditions may or may not eliminate the ability of a land owner to build a dwelling with a basement, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are twenty four soils considered somewhat limited which is less of an issue when developing. The conditions that are creating the somewhat limited classification are:

- Depth to Saturated Bedrock
- Ponding
- Shrink-Swell
- Slope
- Depth to Soft Bedrock

Not Limited

There are eight soil groups with no limitations in Harvey County for dwellings with basements.

Septic Tank and Absorption Fields

Figure 13.15 provides the suitability by soil types and the specific conditions impacting the soil.

Very Limited Conditions

The majority of soils in Harvey County are considered very limited for septic tanks and absorption fields. There are nine major conditions impacting the soils (not all nine are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock

Figure 13.15 Soil Symbol Suitability and Limitations

Soil Symbol/Soil Name	Dwellings without Basements		Dwellings with Basements		Septic Tank and Absorption Fields		Sewage Lagoons		Sanitary Landfill		Small Commercial Businesses	
	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions
5720 - Blazefork		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 10		1, 2		1, 2, 3, 14		1, 2, 3, 4
5728 - Buhler-Blazefork		1, 2, 3, 4, 13		1, 2, 3, 4, 13		1, 2, 9, 10		1, 2, 9		1, 2, 3, 9, 14		1, 2, 3, 4, 13
5870 - Carway and Carbika		2, 3, 4		2, 3, 4		2, 3, 9, 10		2, 3, 9		2, 3, 9, 14		2, 3, 4
5871 - Carway-Dillhut-Solvay		2, 3, 4		2, 3, 4		2, 3, 9, 10		2, 3, 9		2, 3, 9, 14		2, 3, 4
3710 - Cass		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 9, 10		1, 2, 3, 9		1, 2, 3, 9, 14		1, 2, 3, 4
5873 - Clark						2, 3, 9, 10		2, 3, 9		14		
4540 - Clime		4		4, 7		2, 3, 10		2, 3, 7		3, 5, 7, 14		4
4555 - Clime		2, 7		4, 7		2, 3, 5, 7, 10		2, 3, 5, 6, 7, 9		2, 3, 5, 7, 14		4, 6, 7
4560 - Clime		4, 6		4, 6, 7		2, 3, 5, 6, 7, 10		2, 3, 5, 6, 7		2, 3, 5, 6, 7, 14		2, 3, 4, 5, 6, 7
4565 - Clime		4		4, 7		2, 3, 5, 7, 10		2, 3, 6, 7		2, 3, 5, 17, 14		4
4570 - Clime		4		4, 7		2, 3, 5, 7, 10		5, 6, 9		2, 3, 5, 7, 14		4, 6
4575 - Clime		4		4, 7		2, 3, 5, 7, 10		2, 3, 6, 7		2, 3, 5, 7, 14		4, 6
4585 - Clime-Hobbs		4, 6		4, 6, 7		1, 2, 3, 5, 6, 7, 10		1, 2, 3, 7, 9		1, 2, 3, 5, 6, 7, 14		1, 4, 6
3800 - Crete		2, 3, 4		2, 3, 4		2, 3, 10		9		14		2, 3, 4
3801 - Crete		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 10		9		14		1, 2, 3, 4
5730 - Darlow-Elmer		4		4		2, 3, 10				14		4
3725 - Detroit		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 10		1, 9		1, 14		1, 2, 3, 4
5881 - Dillhut		2		2, 3, 4		2, 3, 8, 9, 10		2, 3, 9		2, 3, 9, 14		2
5883 - Dillhut-Solvay						2, 3, 8, 9, 10		2, 3, 9		2, 3, 9, 14		
6051 - Elandco		1, 2, 3, 4		1, 2, 3, 4		1, 3, 9, 10		1, 2, 3, 9		1, 2, 3, 9, 14		1, 2, 3, 4
6052 - Elandco		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 9, 10		1, 2, 3, 9		1, 2, 3, 9, 14		1, 2, 3, 4
6244 - Elandco		1, 2, 3, 4		1, 2, 3, 4		1, 10		1, 9		1, 14		1, 2, 3, 4
5886 - Farnum and Funmar		4		4		2, 3, 9, 10		9		14		4
5887 - Farnum and Funmar		4		4		2, 3, 9, 10		9		14		4
5892 - Farnum		4		4		2, 3, 9, 10		9		14		4
5893 - Farnum		4		4		2, 3, 9, 10		2, 9		2, 14		4, 6
5894 - Farnum		4		4		9, 10		2, 3, 9		14		4, 6
9982 - Fluvents, frequently flooded		1, 4, 6		1, 4, 5		1, 6, 10		1, 6, 9		1, 6, 14		1, 4, 6
3842 - Geary		4		4		2, 3, 10		2, 9		2, 14		4
3843 - Geary		4		2, 4		2, 3, 5, 7, 10		9		14		4
3844 - Geary		2, 4		2, 4		1, 2, 3, 5, 10		6, 9		14		4, 6, 7
3857 - Goessel		2, 3, 4		2, 3, 4		2, 3, 5, 10		2, 9		2, 14		2, 3, 4
3858 - Goessel		2, 3, 4		2, 3, 4		2, 3, 5, 10		2		2, 14		2, 3, 4
5905 - Hayes-Solvay						2, 3, 9, 10		2, 3, 6, 9		2, 3, 9, 14		
3561 - Hobbs		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 10		1, 2, 3, 9		1, 2, 3, 14		1, 2, 3, 4
4671 - Irwin		2, 3, 4, 5		2, 3, 4, 5		2, 3, 5, 7, 10				5, 7, 14		2, 3, 4, 5
4673 - Irwin		2, 3, 4		2, 3, 4		2, 3, 5, 7, 10		6		14		2, 3, 4, 6

Figure 13.15: Soil Symbol Suitability and Limitations, cont.

Soil Symbol/Soil Name	Dwellings without Basements		Dwellings with Basements		Septic Tank and Absorption Fields		Sewage Lagoons		Sanitary Landfill		Small Commercial Businesses	
	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions	Suitability	Conditions
4674 - Irwin	Red	2, 3, 4, 5	Red	2, 3, 4, 5	Red	2, 3, 5, 7, 10	Yellow	2, 5, 6	Yellow	2, 5, 7, 14	Red	2, 3, 4, 5, 6
5550 - Imano	Red	1, 2, 3, 4	Red	1, 2, 3, 4	Red	1, 2, 3, 8, 9, 10	Red	1, 2, 3, 9	Red	1, 2, 3, 9, 14	Red	1, 2, 3, 4
5324 - Kaski	Red	1, 2, 3, 4	Red	1, 2, 3, 4	Red	1, 2, 3, 9, 10	Red	1, 2, 3, 9	Red	1, 2, 3, 9, 14	Red	1, 2, 3, 4
5562 - Kaskan	Red	1, 2, 3, 4	Red	1, 2, 3, 4	Red	1, 2, 3, 9, 10	Red	1, 2, 3, 9	Red	1, 2, 3, 9, 14	Red	1, 2, 3, 4
5751 - Kisiwa	Red	2, 3, 4	Red	2, 3, 4	Red	2, 3, 9, 10	Red	2, 3, 9	Red	2, 3, 14	Red	2, 3, 4
3890 - Ladysmith	Red	2, 3, 4	Red	2, 3, 4	Red	2, 3, 5, 10	Yellow	2, 5	Yellow	2, 5, 7, 14	Red	2, 3, 4
3891 - Ladysmith	Red	2, 3, 4	Red	2, 3, 4, 5	Red	2, 3, 5, 10	Yellow	2, 5	Yellow	2, 14	Red	2, 3, 4
5907 - Langdon	Green		Green		Red	2, 3, 6, 8, 9, 10	Red	2, 3, 6, 9	Red	2, 3, 6, 9, 14	Red	2, 3, 6
5800 - Mahone	Red	1, 2	Red	1, 2	Red	1, 2, 8, 9, 10	Red	1, 2, 9	Red	1, 2, 9, 14	Red	1, 2
5896 - Nalim-Shellabarger	Yellow	4	Green		Red	2, 3, 9, 10	Red	2, 3, 9	Yellow	14	Yellow	4
5910 - Naron	Green		Green		Red	2, 3, 8, 9, 10	Red	2, 3, 6, 9	Yellow	14	Green	
5822 - Nickerson-Punkin	Green		Yellow	2, 4	Red	2, 9, 10	Yellow	2, 9	Red	2, 9, 14	Green	
5928 - Pratt	Green		Green		Red	2, 3, 6, 8, 9, 10	Red	2, 3, 6, 9	Red	2, 3, 6, 9, 14	Green	
5941 - Pratt-Tivoli	Yellow	6	Yellow	6	Red	2, 6, 8, 9, 10	Red	2, 6, 9	Red	2, 3, 6, 9, 14	Red	2, 3, 6
5942 - Pratt-Turon	Green		Green		Red	2, 3, 8, 9, 10	Red	2, 3, 6, 9	Red	2, 3, 9, 14	Green	
5831 - Punkin	Red	2, 3, 4	Red	2, 3, 4	Red	2, 3, 9, 10	Green		Yellow	14	Red	2, 3, 4
5832 - Punkin-Taver	Red	2, 3, 4	Red	2, 3, 4	Red	2, 3, 9, 10	Green		Yellow	14	Red	2, 3, 4
3911 - Rosehill	Yellow	2, 3, 4	Red	2, 3, 4	Red	2, 3, 5, 7, 10	Yellow	2, 3, 7	Red	2, 3, 5, 7, 14	Red	2, 3, 4
3912 - Rosehill	Red	2, 3, 4, 5	Red	2, 3, 4	Red	2, 3, 5, 7, 10	Red	2, 3, 5, 6, 7	Red	2, 3, 5, 7, 14	Red	2, 3, 4, 5, 6
5943 - Saltcreek and Naron	Green		Yellow	4	Red	3, 9, 10	Yellow	9	Yellow	14	Green	
5944 - Saltcreek and Naron	Green		Yellow	4	Red	3, 9, 10	Red	2, 3, 9	Yellow	14	Green	
3921 - Smolan	Red	1, 2, 3, 4	Red	2, 3, 4	Red	1, 2, 3, 5, 7, 10	Green		Yellow	14	Red	1, 2, 3, 4
5961 - Solvay	Green		Yellow	2	Red	2, 3, 9, 10	Red	2, 3, 6, 9	Red	2, 3, 9, 14	Green	
5970 - Taver	Red	2, 3, 5	Red	2, 3, 4	Red	2, 3, 10	Green		Yellow	14	Red	2, 3, 4, 6
5971 - Tivin	Red	2, 6	Red	2, 6	Red	2, 6, 8, 9, 10	Red	2, 6, 9	Red	2, 6, 9	Red	2, 6
5973 - Tivin-Dillhut	Green		Yellow	2, 6	Red	2, 3, 6, 8, 9, 10	Red	2, 3, 6, 9	Red	2, 3, 6, 9, 14	Green	
2266 - Tobin	Red	1, 2, 3, 4	Red	1, 2, 3, 4	Red	1, 2, 3, 10	Red	1, 2, 3, 9	Red	1, 2, 14	Red	1, 2, 3, 4
5977 - Vanoss	Yellow	4	Yellow	4	Yellow	10	Yellow	9	Yellow	14	Yellow	4
5844 - Walnut	Red	2, 3	Red	2, 3, 4	Red	2, 3, 9, 10	Red	2, 3, 9	Red	2, 3, 9, 14	Red	2, 3
3491 - Wells	Yellow	4	Yellow	2, 3	Yellow	10	Yellow	9	Red	14	Yellow	4
3492 - Wells	Yellow	4	Yellow	2, 4	Yellow	10	Yellow	6, 9	Red	14	Yellow	4, 6
5675 - Willowbrook	Red	1, 2, 3, 4	Red	1, 2	Red	1, 2, 8, 9, 10	Red	1, 2, 9	Red	1, 2, 9, 14	Red	1, 2

Source: USDA Soil Survey

Legend

Red: Very Limited
 Yellow: Somewhat Limited
 Green: Not Limited

Numbering System

- 1: Flooded
- 2: Depth to Saturated Bedrock
- 3: Ponding
- 4: Shrink-Swell
- 5: Depth to Hard Bedrock
- 6: Slope
- 7: Depth to Soft Bedrock

8: Filtering Capacity

- 9: Seepage
- 10: Slow Water Movement
- 11: Depth top Bedrock
- 12: Large Stones
- 13: Subsidence Risk
- 14: Dusty

- Filtering Capacity
- Seepage
- Slow Water Movement

These conditions may or may not eliminate the ability of a land owner to build a septic tank or absorption field, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are four soils considered somewhat limited which is less of an issue when developing. The conditions that are creating the somewhat limited classification are:

- Flooded
- Slow Water Movement

Not Limited

There are no soil groups identified not posing limitations in Harvey County for septic tank and absorption fields.

Sewage Lagoons

Figure 13.11 (located at the end of this chapter) shows the soil suitability conditions for constructing sewage lagoons. In addition, Figure 13.17 provides the suitability by soil types and the specific conditions impacting the soil.

Very Limited Conditions

Based on Figure 13.11, the majority of soils in Harvey County are considered very limited for sewage lagoons. There are seven major conditions impacting the soils (not all nine are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock
- Seepage

These conditions may or may not eliminate the ability of a land owner to build a sewage lagoon, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are 26 soils considered somewhat limited which is less of an

issue when developing. The conditions are creating the somewhat limited classification are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock
- Seepage

Not Limited

There are six soil groups not posing limitations in Harvey County for sewage lagoons.

Sanitary Landfills

Soil suitability for Sanitary Landfills are limited in Harvey County as shown on Figure 13.12.

Very Limited Conditions

The majority of soils in Harvey County are considered very limited for sanitary landfills. There are eight major conditions impacting the soils (not all eight are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock
- Seepage
- Dusty

These conditions may or may not eliminate the ability of a land owner to build a sanitary landfill, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are 29 soils considered somewhat limited which is less of an issue when developing. These conditions are creating the somewhat limited classification are:

- Flooded
- Depth to Saturated Bedrock
- Depth to Hard Bedrock
- Depth to Soft Bedrock
- Dusty

Not Limited

There are no soil groups not posing limitations in Harvey County for sanitary landfills.

Small Commercial Businesses

Very Limited Conditions

The majority of soils in Harvey County are considered very limited for small commercial businesses. There are eight major conditions impacting the soils (not all eight are present in any one soil type). The conditions present in the different soils are:

- Flooded
- Depth to Saturated Bedrock
- Ponding
- Shrink-Swell
- Depth to Hard Bedrock
- Slope
- Depth to Soft Bedrock
- Subsidence Risk

These conditions may or may not eliminate the ability of a land owner to build a small commercial business, but specific conditions will need to be engineered to overcome potential problems in the future.

Somewhat Limited Conditions

Besides the severe soils, there are 19 soils considered somewhat limited which is less of an issue when developing. The conditions that are creating the somewhat limited classification are:

- Depth to Saturated Bedrock
- Shrink-Swell
- Slope
- Depth to Soft Bedrock

Not Limited

There are 11 soil groups not posing limitations in Harvey County for small commercial businesses.

Soil and Water Classifications

Groundwater

Groundwater refers to water found beneath the surface, smaller pockets of water, and aquifers (the Equus Beds). Groundwater, specifically the Equus Beds, is where the residents of Harvey County, both city and rural, get their potable water for everyday living as well as the irrigation water for crops.

The ability to find water meeting these specific needs is critical to the placement of certain uses. These specific needs include water quantity, water quality, and water pressure. Groundwater flows west to southeast within the county.

Use of Groundwater

Groundwater use in the county comes in three forms; domestic (Individual wells), livestock supply and public water supply. Each use is important to the overall viability of Harvey County. Surface water is expensive to treat, so the uses within the county rely on groundwater, specifically the Equus Beds.

Domestic and Livestock Supplies

Domestic and most livestock water supplies are obtained through the use of small diameter wells. Most of these wells are:

- Drilled only a few feet below the top of the water table
- Are low production wells, and
- Equipped with electric powered jet or submersible pumps
- The water yield of this type of well is usually no more than five gallons of water per minute. See Figures 13.13 and 13.14 (located at the end of this chapter) for the location of water wells, as well as the gallons per minute (GPM) and by uses.

Equus Beds

The Equus Beds, part of Groundwater Management District 2 (GMD2), is the source of water for all uses in the county (including the RWD's). Regulating this water can be a sensitive topic but development impacting the Equus Beds include heavy industrial uses and confined feeding operations. The Equus Beds are the source of water for Harvey County's residents and up to 500,000 more (Wichita area). The use of this water source has been facing pressure and will continue to see pressure into the future.

The Equus Beds contain a high quantity of water and the recharge rate is positive. Despite this, utility costs remain high.

The quality of the water is of a higher concern. Natural contamination from nitrates and arsenic has increasingly been found in the water supply in recent years. Also, a legacy salt plume from the 1930's exists due to oil pumping. This salt plume is migrating at a foot per day or a section per decade.

Regulating commercial renewable energy projects in this area is of the utmost importance, as any major disturbance could further the salt plume's movement. Remediation of this salt plume must be a major action of the future; "pump and dump" or desalination is not possible due to lack of funding.

Water is pumped into the Arbuckle formation currently.

The City of Wichita has posed a considerable threat to the water supply in Harvey County, and will continue to do so into the future. As a major metro, there will be constant pressure on water supply as growth occurs. Harvey County is primarily agricultural in nature, water use pressure from the city is a major concern for the county and its citizens. The Wichita Recharge Program is another issue and point of contention between the county and Wichita.

The Wichita Recharge Program has had two phases, starting in the 1990's. Water overflow from the Little Arkansas river is treated and then injected into the Equus Beds directly. Wichita gets "recharge credits" for injection. However, Wichita has been arguing they should still receive credit for taking overflow and using it directly for users in Wichita. The city has wanted to withdraw credits at a lower rate than allowed by the agreement.

GMD2

GMD2 is a source of education on protection of this precious resource, being good stewards of the land, and proper water management. The District manages 100 monitoring wells to stay prepared for any future challenge. See Figure 13.16 (located at the end of this chapter) for a map of where the Equus Beds protection area is located in the county. As previously discussed, the topography of the county where the Equus Beds lie, particularly in the sandhills, is not conducive to heavy development.

Wellhead Protection

A Wellhead Protection Area is a delineated area indicating where a water source is located, as well as the area of travel for a specific well or well field. A wellhead protection area is important from the aspect when correctly implemented, the area will aid in protecting the water supply of a domestic well providing potable water to a community. Wellhead Protection laws are currently applied in Harvey County.

In Kansas, the goal of the Kansas Department of Health's Wellhead Protection Program "...is to protect the land and groundwater surrounding public drinking water supply wells from contamination". Within the program there are six steps to developing a wellhead protection area, which are:

1. Appoint Local Wellhead Protection Committee
2. Obtain Wellhead Protection Area Delineation
3. Conduct Pollutant Source Inventory
4. Develop Management Strategies
5. Conduct a Local Public Meeting on Wellhead Protection Plan
6. Implement Actions of Wellhead Protection

Surface Water

Surface water applies to any water running across a surface eventually running into a minor drainage area, eventually ending up in a major waterway such as the Sand Creek, Turkey Creek, Little Arkansas River, etc. However, a certain portion of surface water can and is absorbed by the soil in order to support plant life including corn, wheat, and grass lawns.

Harvey County lies within the Lower Arkansas Basin. This basin can be broken down further into sub-basins. The sub-basins include the Gar-Peace, Cow, Little Arkansas, Middle Arkansas - Slate, North Fork Ninnescah, Kaw, Upper Salt Fork Arkansas, Medicine, and Chikiaskia sub basins.

Surface water is monitored by the GMD2. Surface water is not the source of water in the county, as previously discussed.

Source: <https://www.kdhe.ks.gov/1504/Lower-Arkansas-River-Basin>

Hydric Soils

Hydric soils are formed under conditions of saturation, flooding, or ponding. The process has to occur long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils along with hydrophytic vegetation and wetland hydrology are used to define wetlands.

Source: USDA/NRCS, Fall 1996

Flooding Hazards

Flooding is the temporary covering of the soil surface by flowing water from any source, such as streams and rivers overflowing their banks, runoff from adjacent or surrounding slopes, or a combination of different sources. During a flooding event there three components making up the flooded area.

The areas on Figure 13.20 (located at the end of this chapter) are defined as such:

- **Floodway** which is the channel of a watercourse and those portions of the adjoining floodplains which are required to carry and

discharge the 100-year flood with no significant increase in the base flood elevation.

- **Floodplain** which is the low land near a watercourse which has been or may be covered by water from flood of 100-year frequency, as established by engineering practices of the U.S. Army Corps of Engineers. It shall also mean that a flood of this magnitude may have a 1 percent chance of occurring in any given year.
- **Floodway Fringe** which is the portion of a floodplain that is inundated by floodwaters but is not within a defined floodway. Floodway fringes serve as temporary storage for floodwaters.

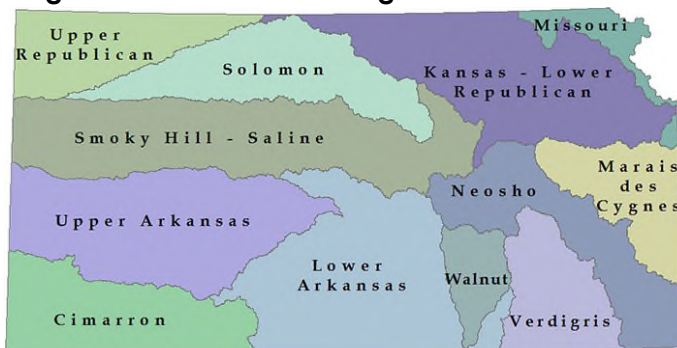
The floodplain also includes the floodway and the flood fringe, which are areas covered by the flood, but which do not experience a strong current.

The floodplain area of greatest significance in terms of state and federal regulation is the 100 year floodplain. This area is defined by the ground elevation in relation to the water elevation experienced during a 100 year flood event. The 100 year floodplain is calculated to be the elevation level of flood water expected to be equaled or exceeded every 100 years on average. In other and more accurate words, the 100 year flood is a 1% flood, meaning it defines a flood having a 1% chance of being equaled or exceeded in any single year.

Preserving the floodplain and floodway are critical to limiting the level of property damage occurring as well as the level of damage to life of the occupants of the area. Land when not flooded seems to be harmless, but control needs to take place for those rare times when it threatens life and property.

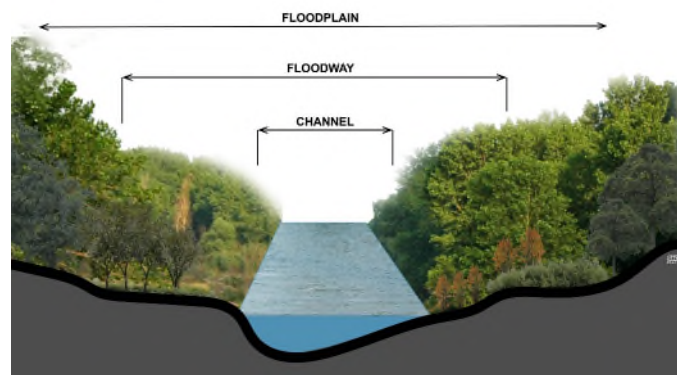
In recent years there have been numerous flooding occurrences in the Midwest. These events have included the Platte River, the Republican River, the Missouri River, and the Mississippi River, as well as their tributaries. Each of these events have caused significant damage to life and property. In order to protect an individuals property there are specific rules and guidelines needing to be followed. On some occasions these guidelines work and others may not; most guidelines are developed for 100 year flooding events. When the 100 year floodplain guidelines do not work, they are typically referred to as a 500 year event for lack of a better term. However, in some cases, due to mother nature and

Figure 13.18: Kansas Drainage Basins



Source: Kansas Department of Agriculture, Division of Conservation

Figure 13.19: Flood Plain Cross Section



Source: National Wetlands Inventory

increases in development runoff, the area needed to handle the floodway and floodplain (100 year event) have increased due to the amount and speed the water is reaching the streams and rivers.

Natural Resources and the Environment (NRE) Goals and Action Items

The following goals were split by type between water, soil, and the floodplain.

NRE Goal NRE-1:

Both surface water and groundwater in Harvey County will be protected from depletion and contamination.

Action Items

1. Encourage the preservation of environmentally sensitive areas such as wetlands and waterways (streams, ponds, lakes, rivers, etc.) by following all guidelines.
2. Protect all water supplies and the Equus Beds



On top - a home north of Quincy, Illinois within the 100- year floodplain. The river is between 1 and 2- miles away. On the bottom, the same house during the floods.

Source: Marvin Planning Consultants

from development activities affecting the quality of water.

3. Development must demonstrate a positive or, at least, a neutral impact on groundwater, especially the Equus Beds.
4. Discourage heavy land use development within the floodplains and the sandhills of the county.
5. The county will support soil and water conservation efforts to aid in erosion, sediment, and run-off control, particularly in the sandhills.
6. Continue to mitigate agricultural runoff and the legacy salt plume contamination.
7. The county will support remediation of the legacy salt plume in the county.
8. Coordinate with and support GMD#2 and other water districts, so high water quality will be maintained in the county.
9. Harvey County should require the protection of riparian vegetation from damage resulting from development.
10. Water erosion control structures, including riprap and fill, should be reviewed by appropriate authorities to ensure all are necessary and are designed to minimize adverse impacts on water currents, erosion, and accretion patterns.
11. Prepare the county, with help from GMD#2, to withstand increasing water usage and development pressure from Wichita and other

surrounding counties.

NRE Goal NRE-2:

Protection of specific soils in regard to the suitability of certain uses is critical to the preservation of these soils.

Action Items

1. Discourage conversion of designated prime agricultural land and soils to non-agricultural uses by targeting less productive agricultural soils for urban or non-farm uses.
2. Encourage the preservation of environmentally sensitive areas such as the sandhills and wooded areas.
3. Harvey County should discourage heavy land use development within the sandhills of the county.
4. Harvey County should encourage the control and mitigation of cedars, Bradford pears, blackberries and other potential invasive species.

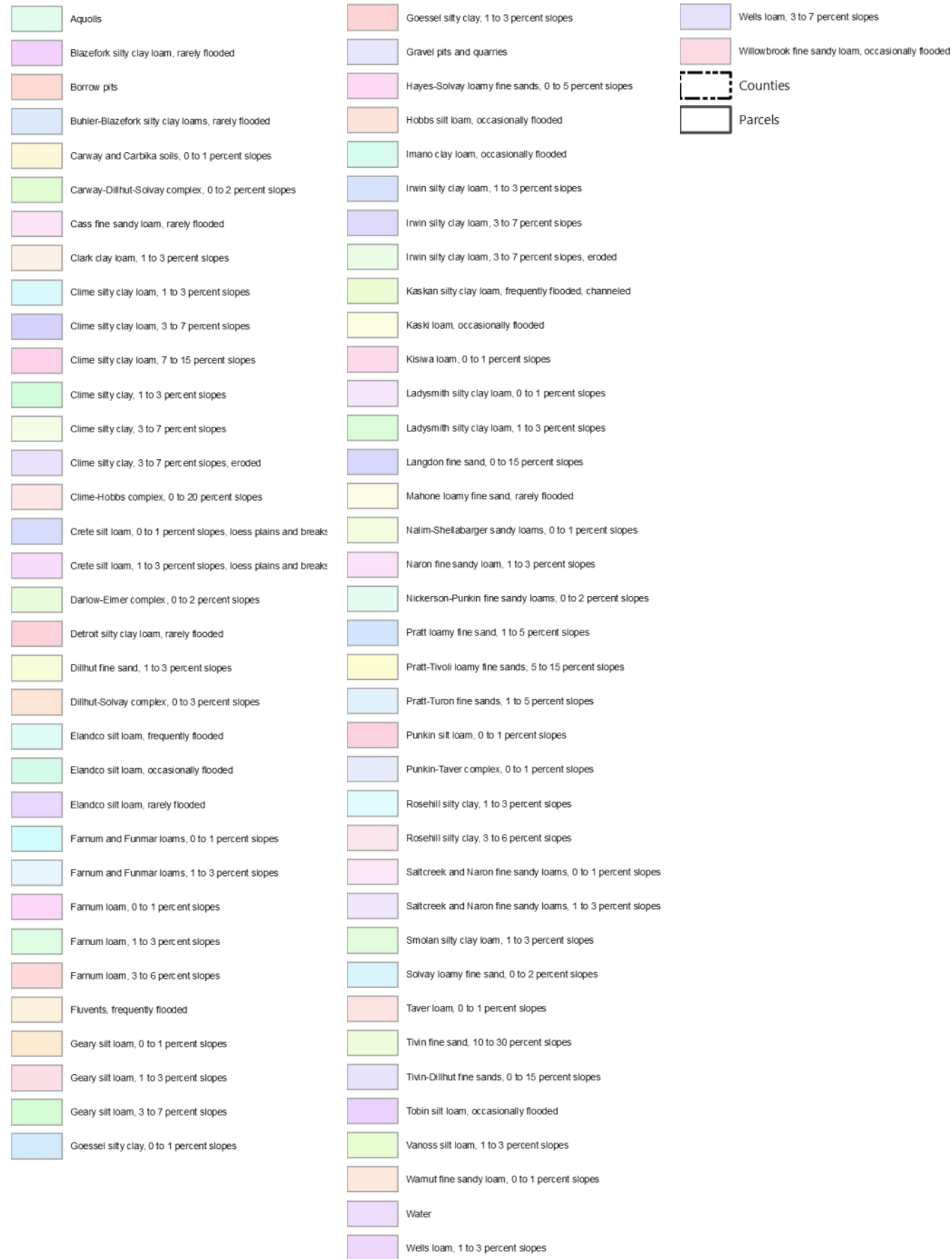
NRE Goal NRE-3:

Prevent loss of life and/or property by continuing to control development in the county's floodplain.

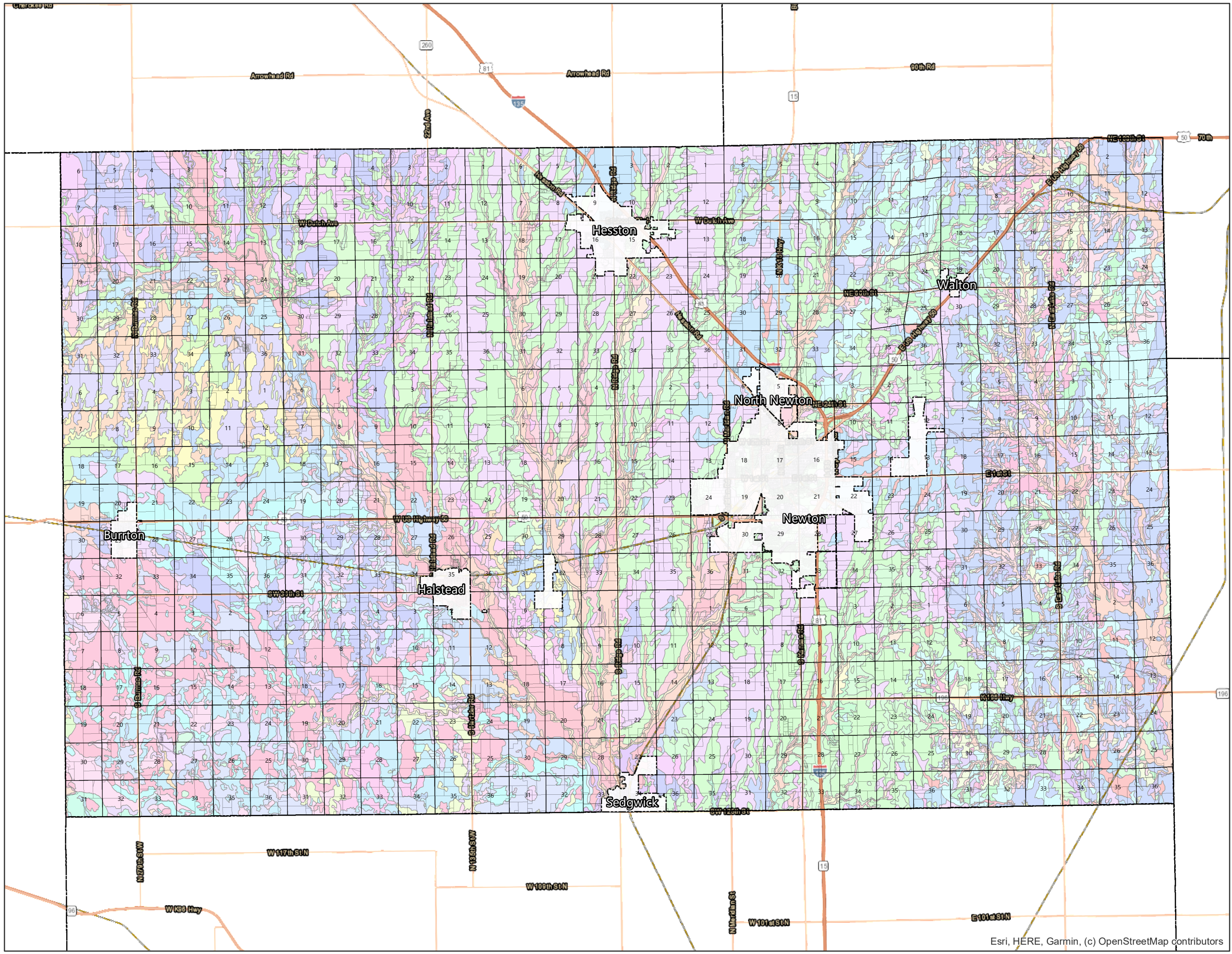
Action Items

1. Continue participation in the FEMA National Flood Insurance Program to prevent flood-caused loss of life and property.
2. Harvey County should discourage heavy land use development within the floodplains of the county.
3. Encourage the preservation of environmentally sensitive areas associated with floodplains such as wetlands and waterways (streams, ponds, lakes, rivers, etc.).

Legend for Figure 13.7 General Soils Map



HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIGURE 13.7 - GENERAL
 SOILS

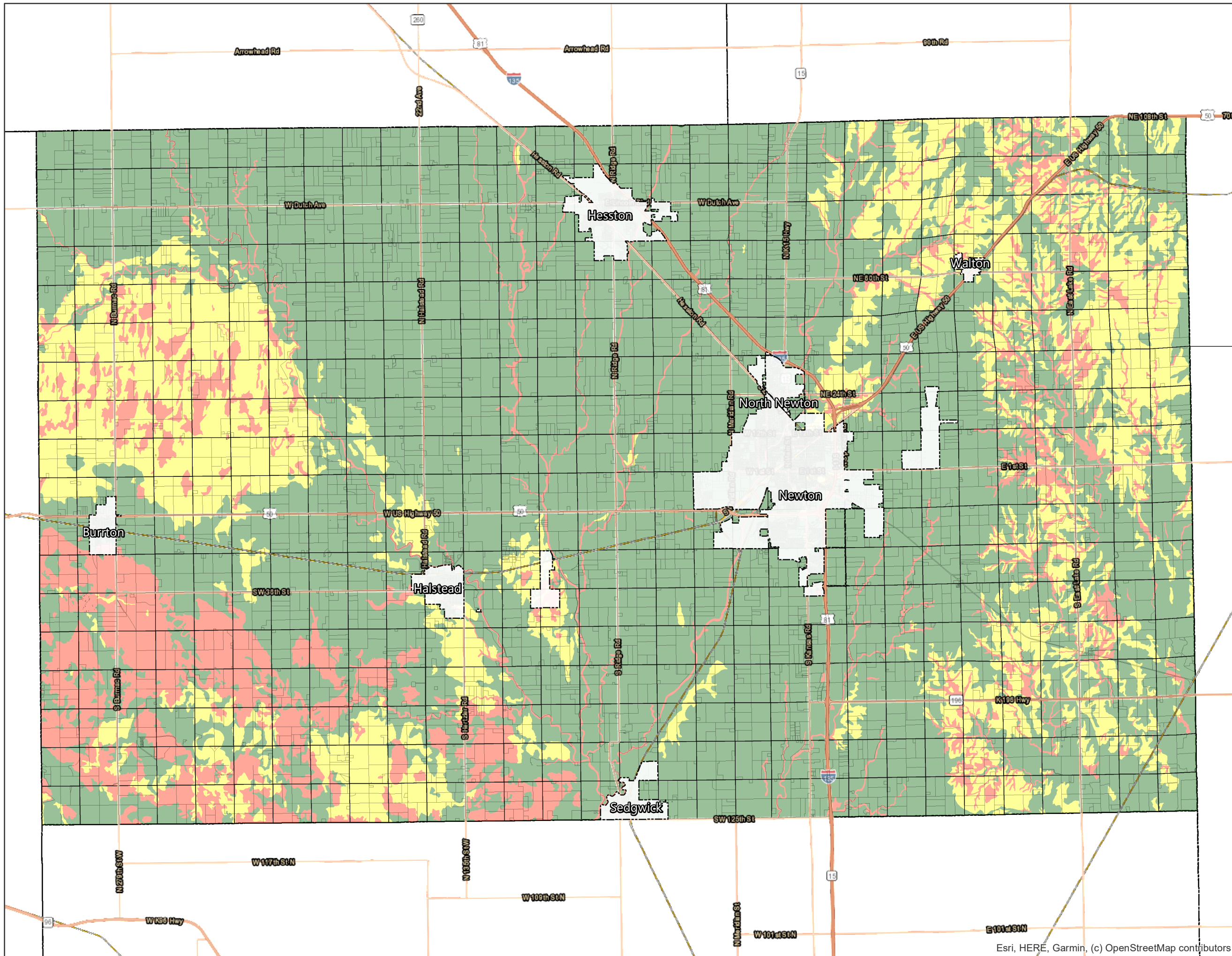







MPC
 MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23

0 1 2 4 Miles

HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 13.10 - PRIME FARMLAND

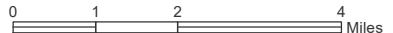


- LEGEND**
-  Municipal Boundary
 -  Parcels
 -  All areas are prime farmland
 -  Farmland of statewide importance
 -  Not prime farmland

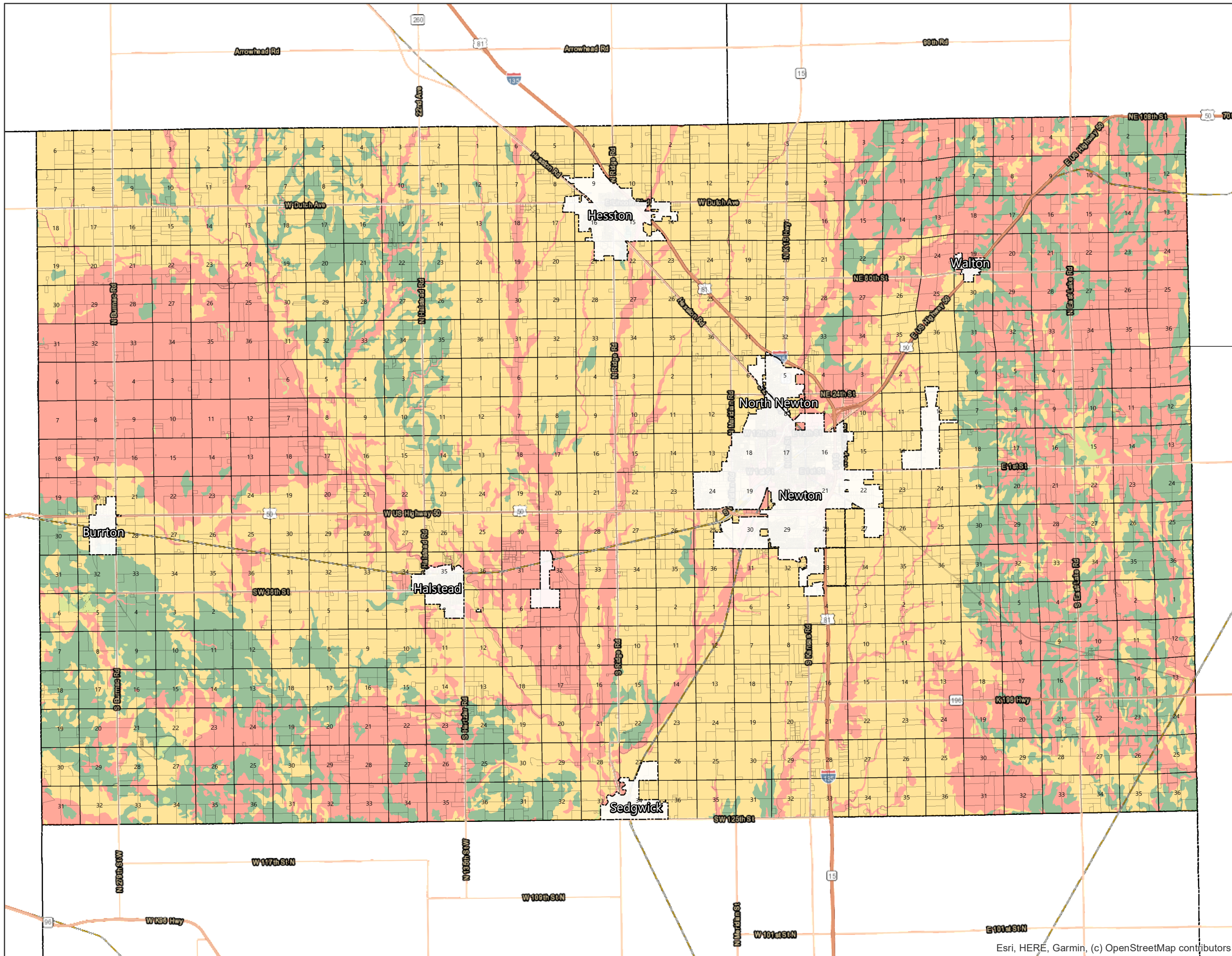








MPC
MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIGURE 13.11 - SEWAGE
 LAGOON

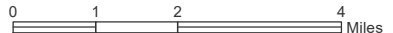


- Legend**
-  Municipal Boundary
 -  Parcels
 -  Not limited
 -  Not rated
 -  Somewhat limited
 -  Very limited

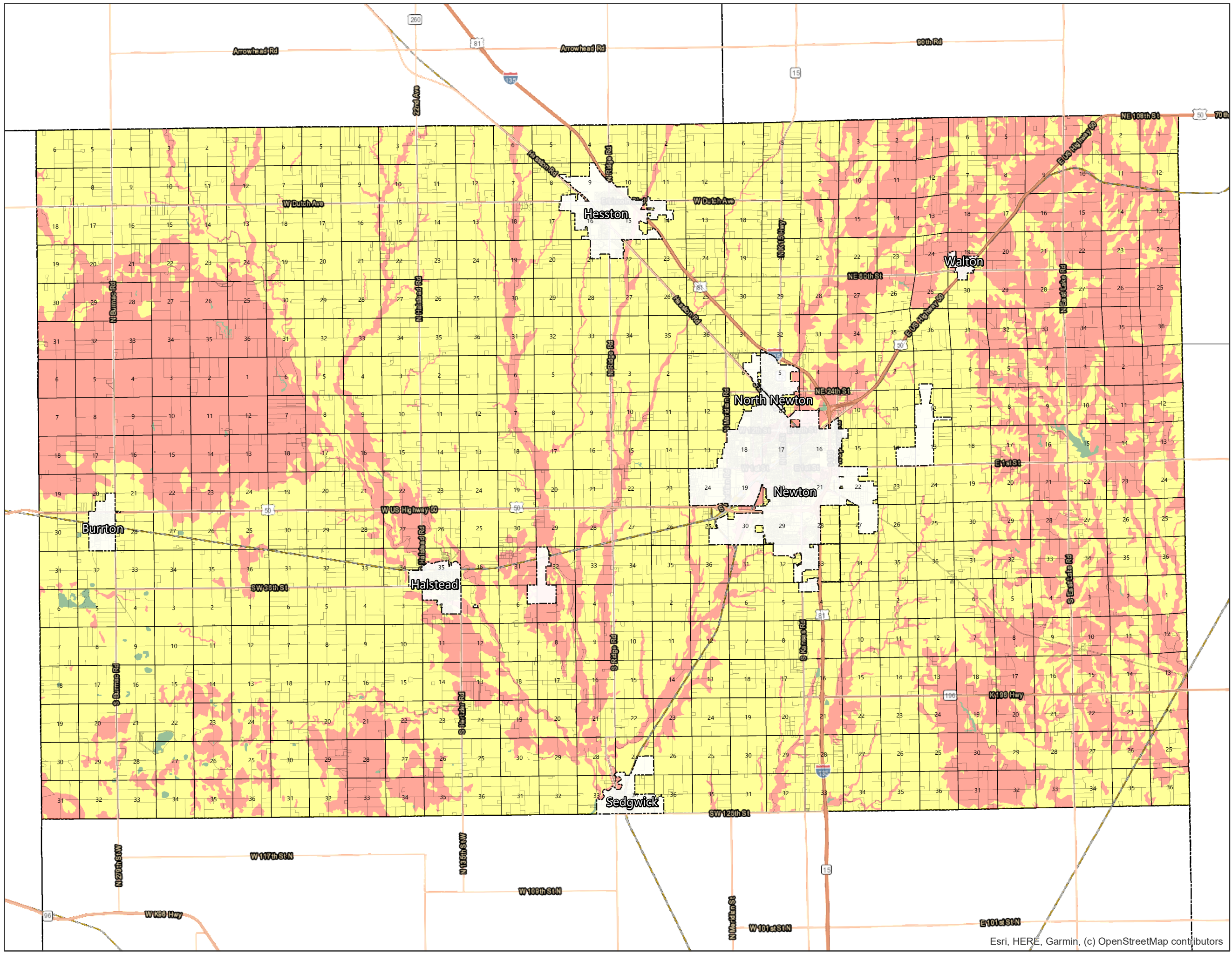







MPC
 MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



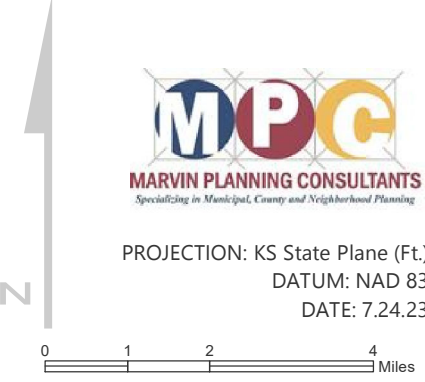
HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 13.12 - SANITARY
LANDFILL



- Legend**
-  Municipal Boundary
 -  Parcels
 -  Not rated
 -  Somewhat limited
 -  Very limited

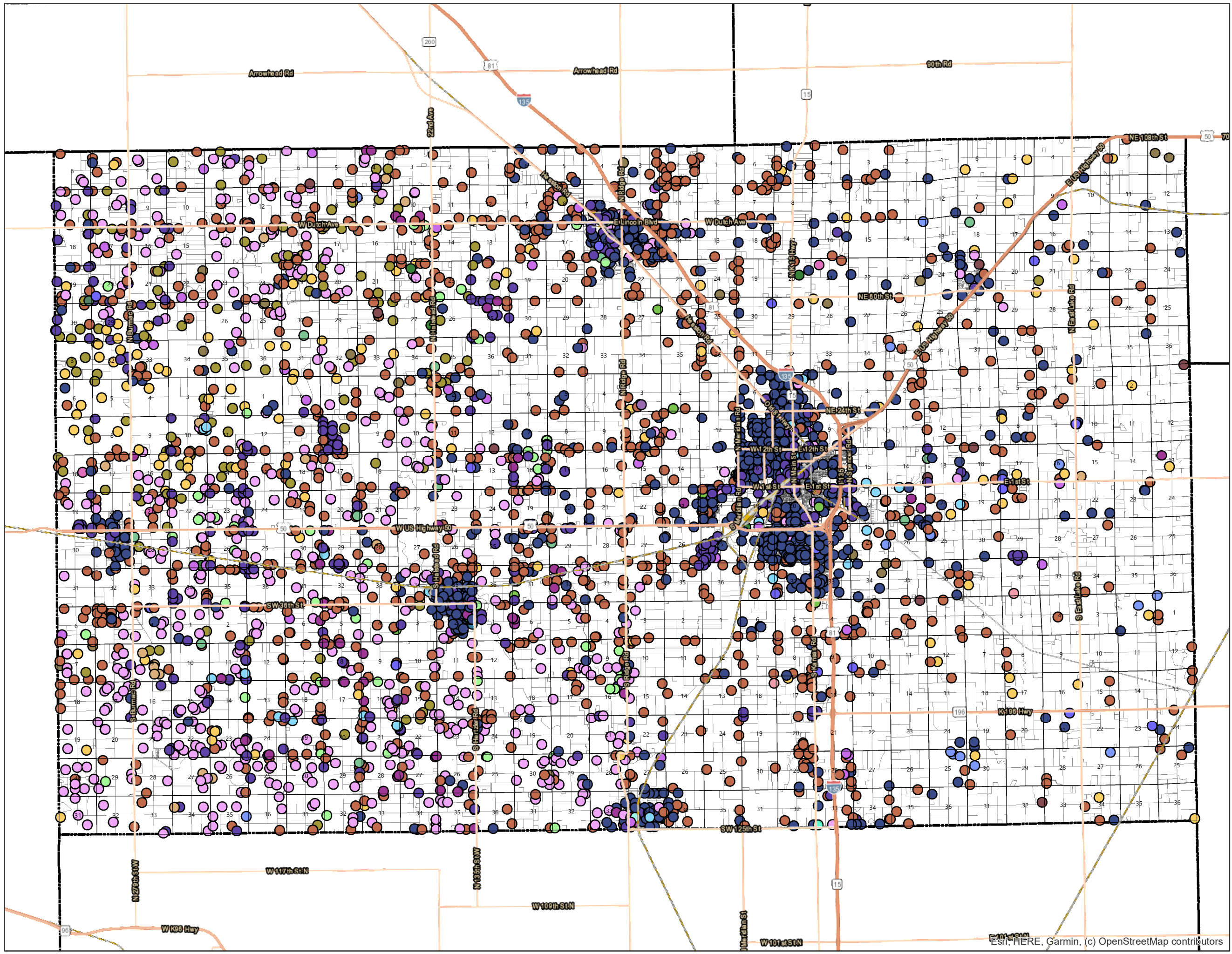


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



Esri, HERE, Garmin, (c) OpenStreetMap contributors

HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIGURE 13.13 - WELL USES

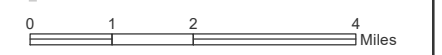


LEGEND

- (unstated)/abandoned
- Air Conditioning
- Dewatering
- Domestic
- Domestic, Lawn and Garden
- Domestic, Livestock
- Environmental Remediation, Air Sparge
- Environmental Remediation, Injection
- Environmental Remediation, Recovery
- Environmental Remediation, Soil Vapor Extraction
- Feedlot
- Feedlot/Livestock/Windmill
- Geothermal, Closed Loop, Horizontal
- Geothermal, Closed Loop, Vertical
- Geothermal, Open Loop, Inj. of Water
- Geothermal, Open Loop, Surface Discharge
- Heat Pump (Closed Loop/Disposal), Geothermal
- Industrial
- Injection well/air sparge (AS)/shallow
- Irrigation
- Monitoring well/observation/piezometer
- Oil Field Water Supply
- Other
- Pond/Swimming Pool/Recreation
- Public Water Supply
- Recharge Well
- Recovery/Soil Vapor Extraction/Soil Vent
- Test Hole, Cased
- Test hole/well

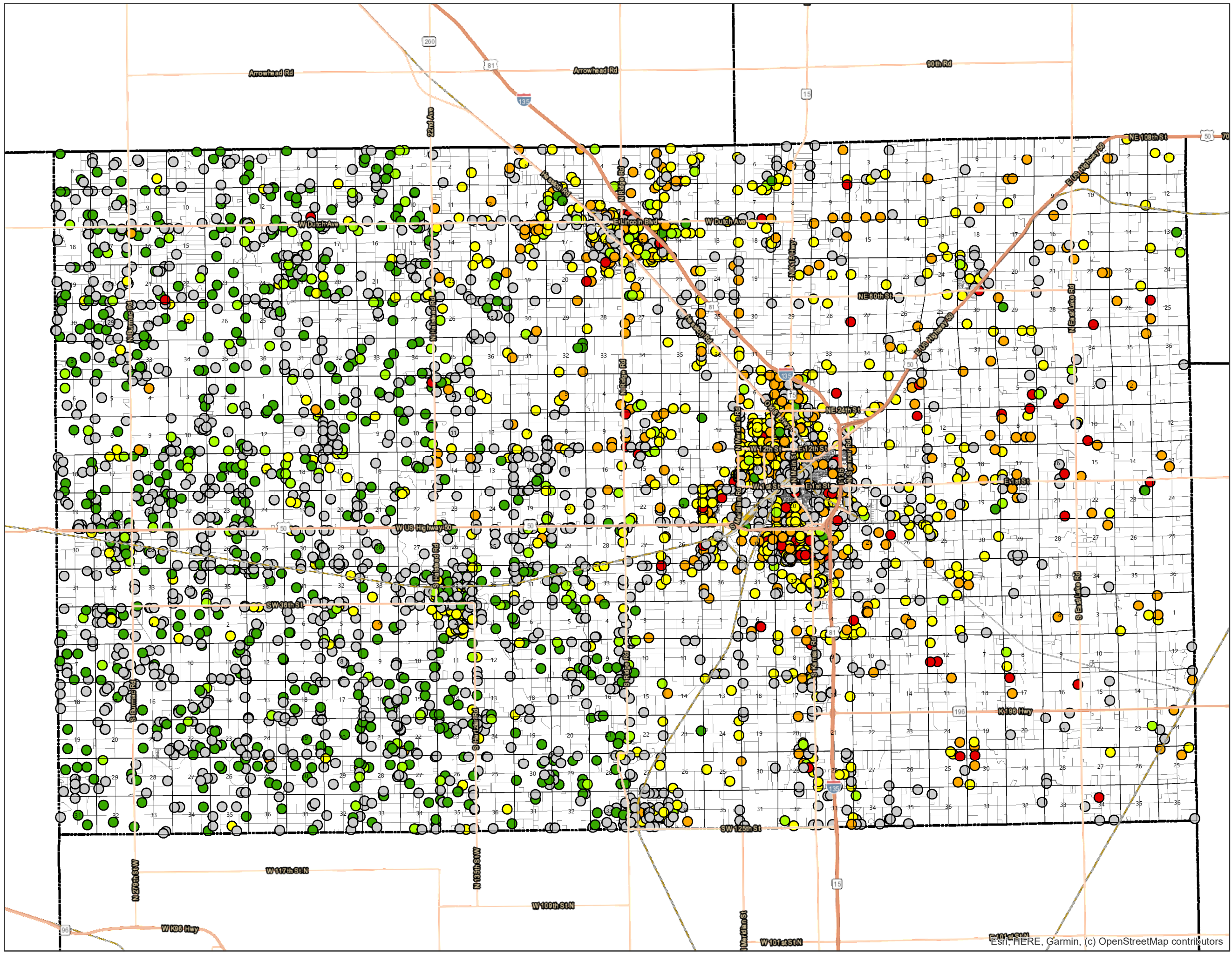


PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23



Esri, HERE, Garmin, (c) OpenStreetMap contributors

HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIGURE 13.14 - WELLS
 GALLONS PER MINUTE



LEGEND

- NA
- <5
- 6 to 15
- 16 to 30
- 31 to 50
- 50+



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23

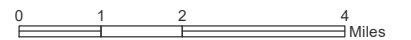
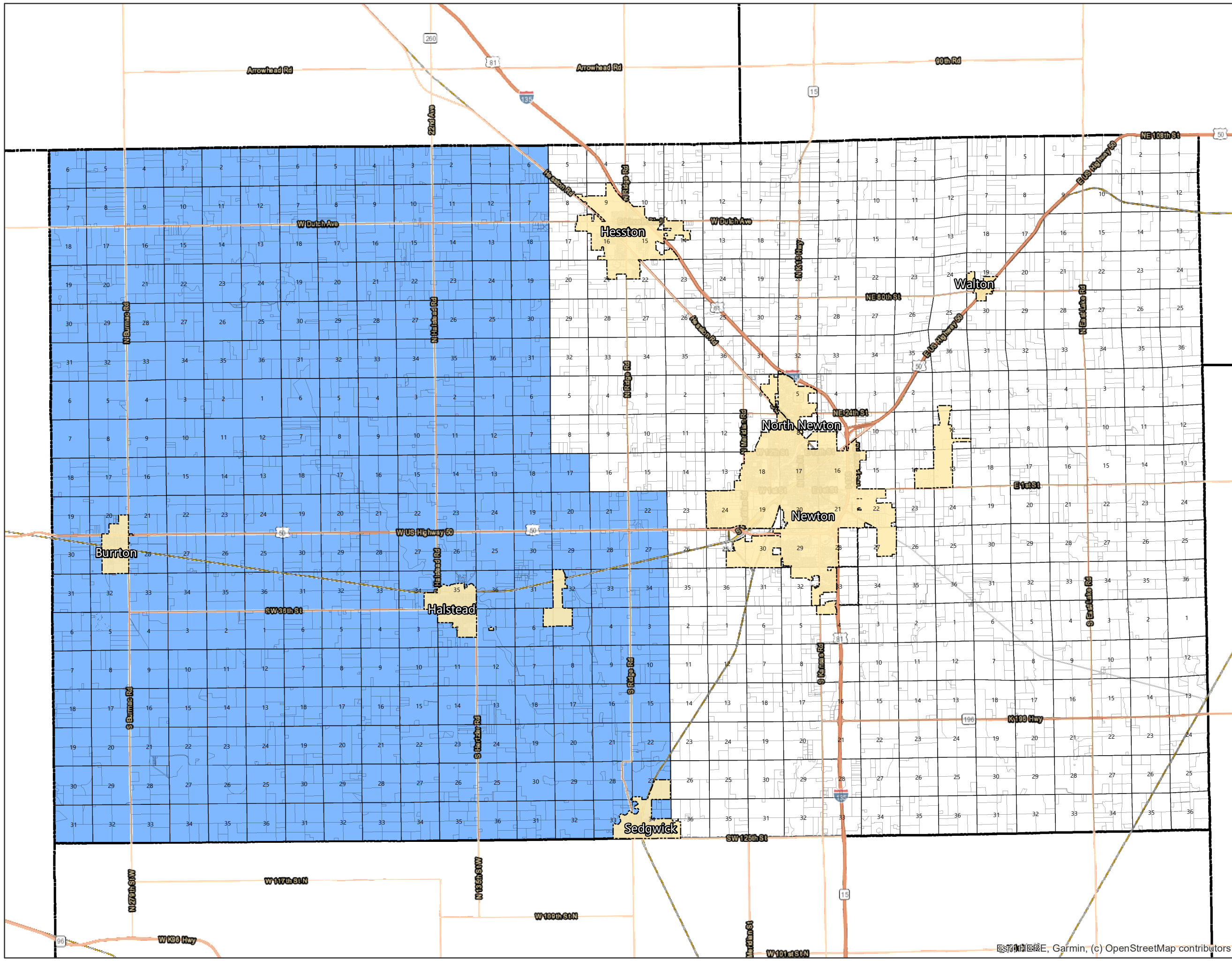


FIGURE 13.16 - EQUUS BEDS
AQUIFER OVERLAY DISTRICT
- GMD #2 MANAGEMENT
AREA

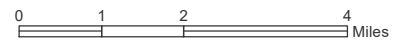


LEGEND

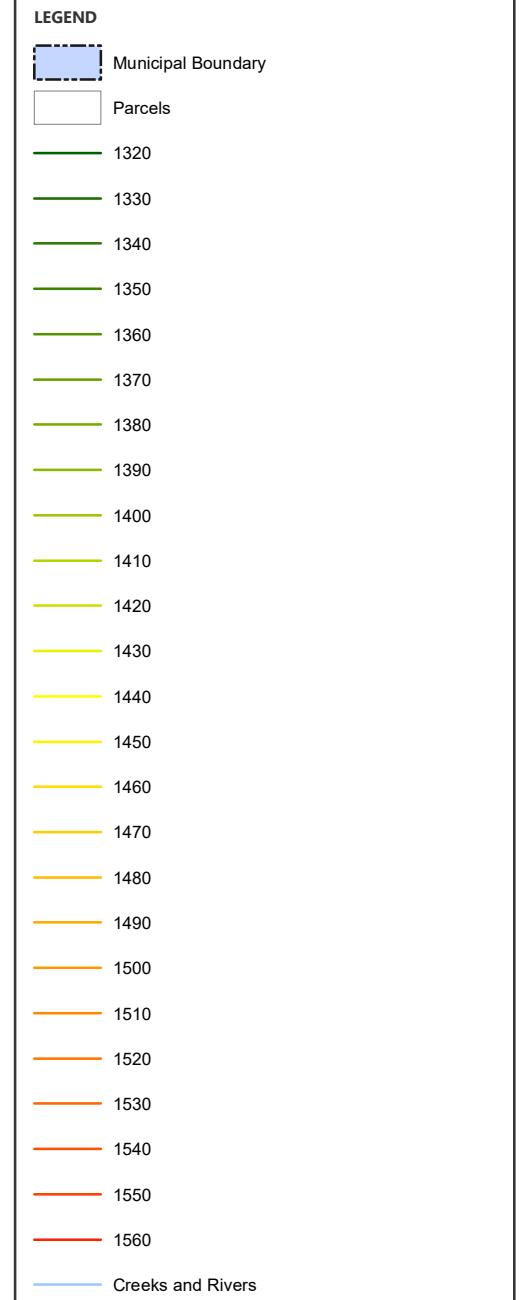
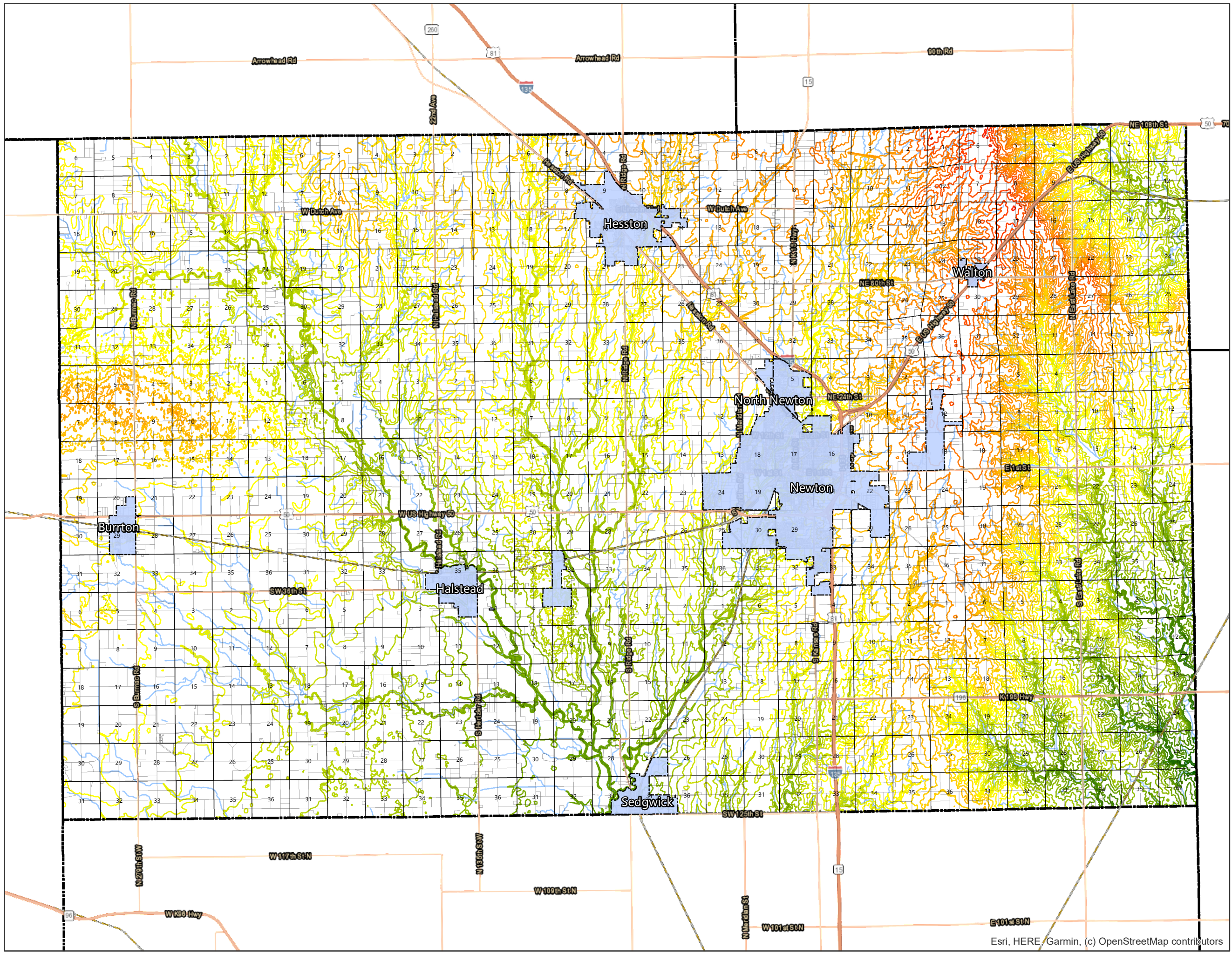
- Municipal Boundary
- Parcels
- Sections
- Counties
- GMD2




PROJECTION: KS State Plane (Ft.)
DATUM: NAD 83
DATE: 7.24.23


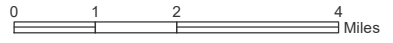


HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
 FIGURE 13.17 -
 TOPOGRAPHY



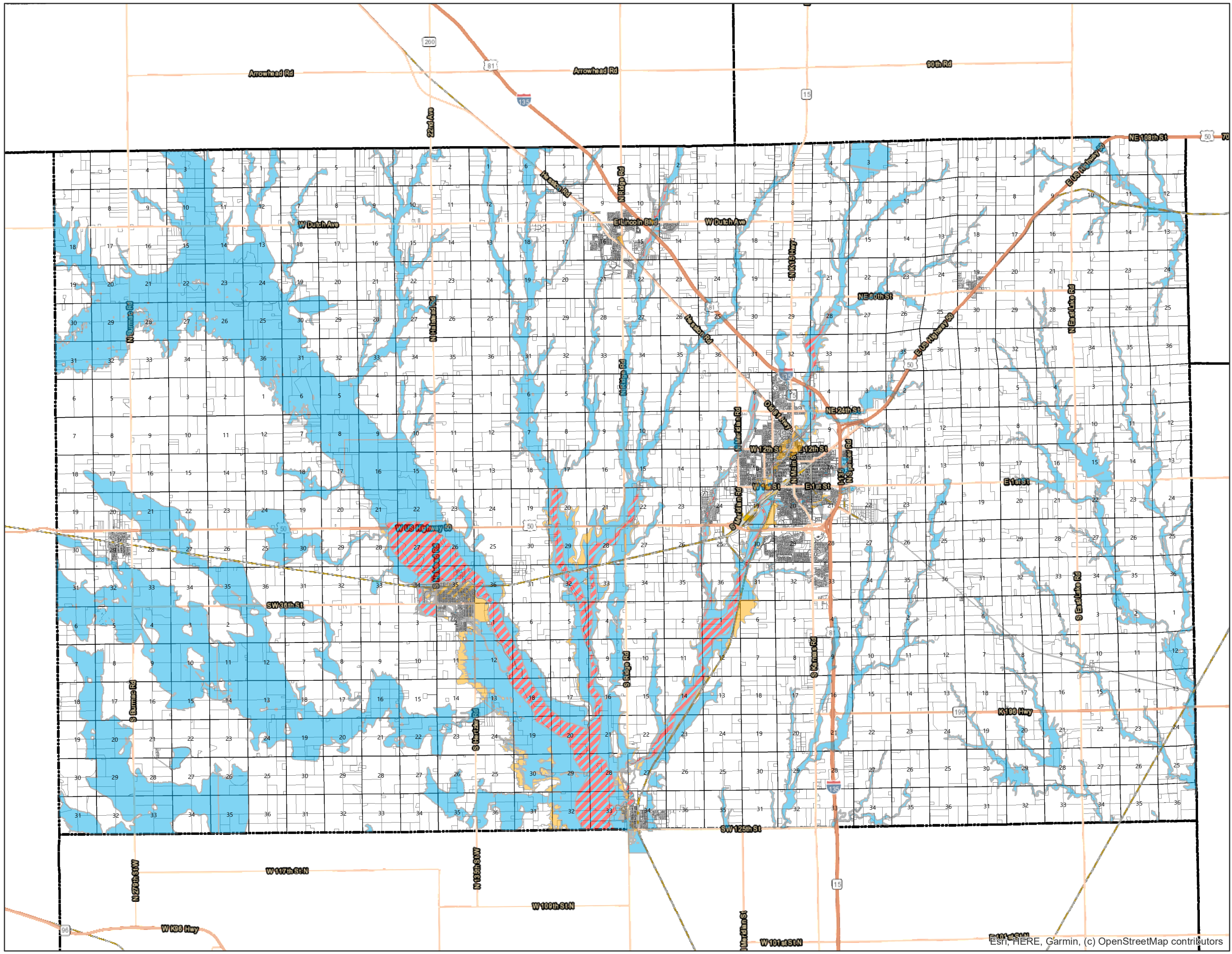

MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning

PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.24.23

Esri, HERE, Garmin, (c) OpenStreetMap contributors

HARVEY COUNTY, KANSAS
 COMPREHENSIVE PLAN
 FIG 13.20 - FLOODPLAIN



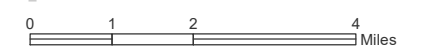
LEGEND

Flood Zone

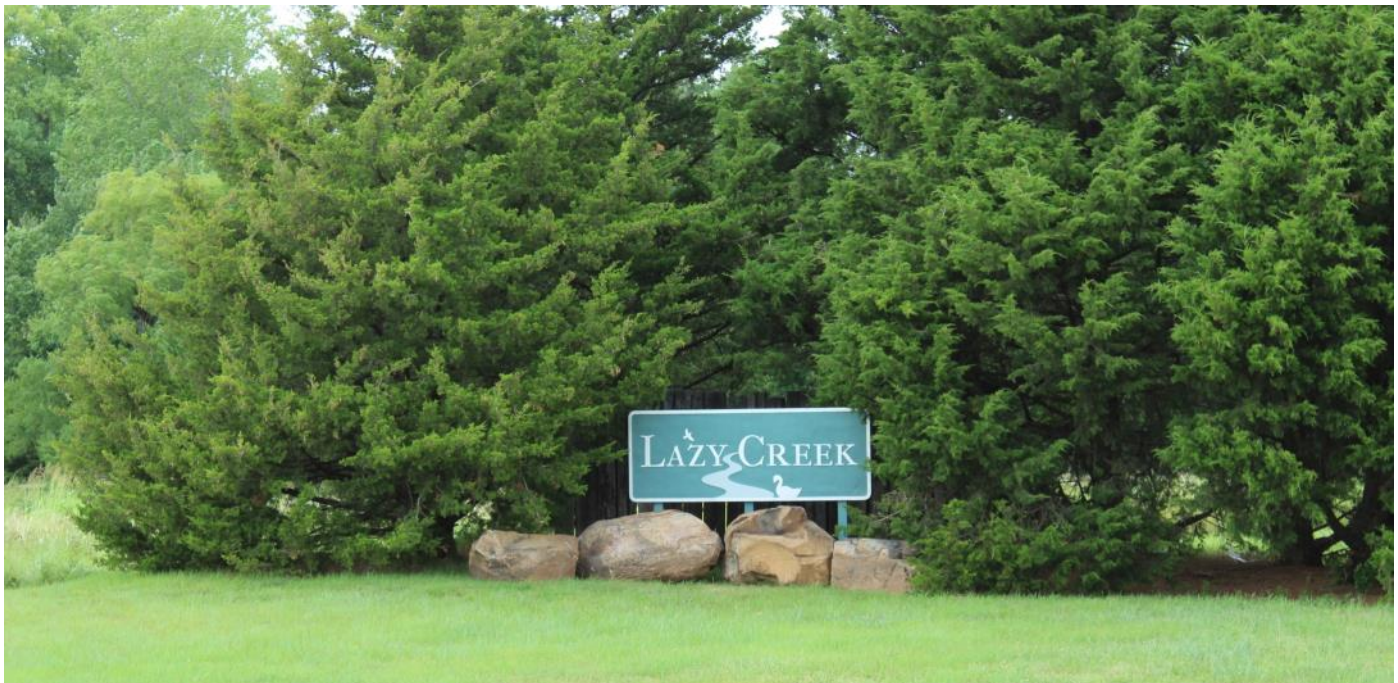
- Zone AE
- 0.2% Annual Chance Flood Hazard
- Area with Reduced Risk
- Floodway



PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 9.6.24



Esri, HERE, Garmin, (c) OpenStreetMap contributors



Chapter 14 Land Use

Land Use

The Harvey County Land Use Chapter provides a general guide to land use which in turn directly impacts future uses and zoning criteria. The land uses are intended to be a guide while minimizing incompatibilities with existing land uses.

The Harvey County Land Use Chapter provides the basis for the formulation of land use and the zoning regulations. It is imperative to formulate a plan tailored to the needs, desires, and environmental limitations of the planning area. The chapter should promote improvements in all the components of the local economy.

Land Use Elements

The elements of the Land Use Chapter include:

- Existing Land Use
- Future Land Use

Effective evaluations and decisions regarding development decisions require a substantial amount of information to be utilized.

Existing Land Use

The term “Existing Land Use” refers to the current uses in place within a building or on a specific parcel of land. The number and type of uses constantly change within a county, and produce a

number of impacts either benefiting or detracting from their surrounding areas. Therefore, the short and long-term success and sustainability of the county is directly contingent upon available resources utilized given the constraints the county faces during the course of the planning period.

Overall, development patterns in and around Harvey County have been influenced by topography, water and waterways, soils, and manmade features such as I-135, US Highway 50, and several hard-surfaced county roads. These transportation systems will continue to influence development patterns throughout the course of the planning period.

Existing Land Use Categories

The utilization of land is best described in specific categories with broad descriptions where numerous businesses, institutions, and structures can be grouped. All of the existing land uses within Harvey County can be found on Figure 14.1 (located at the end of this chapter).

For the purposes of the comprehensive plan, the following land use classifications are used:

- Agricultural
- Farm Homesite
- Residential
- Commercial/Industrial

- Not for Profit
- Exempt
- Utility
- Vacant

The previously listed land use categories may be generally defined in the following manner.

Agricultural

Row crop, alfalfa, pastureland and all grain crops are considered agriculture land uses. **Harvey County is an agricultural based county and this is verified on the existing land use map (Figure 14.1 located at the end of this chapter).**

Farm Homesite and Residential

This category includes residential dwellings either as a farmstead, acreage or residential developments located within the county. These uses are distributed throughout the County.

Commercial/Industrial

Commercial uses consist of convenience stores; feed, seed, automobile and machinery sales; petroleum sales, etc. Commercial uses tend to be located near urban areas or in proximity to major highways for accessibility.

Industrial uses include all enterprises engaged in the processing, manufacturing, compounding, assembly, packaging, treatment or fabrication of materials and products from prepared materials or from raw materials without noticeable noise, odor, vibration, or air pollution effects across property lines.

Not for Profit

Religious organizations or other organizations such as a donation center.

Exempt

Typically this includes all governmental uses.

Utilities

Public or private utility company or land owned or operated by a private or public utility.

Vacant

Land lacking a current use.

Overall Existing Land Uses

The existing land use map, Figure 14.1 (located at the end of this chapter) indicates a mixture of the

different uses specified. However, agricultural uses are predominate throughout the entire county, even with the growth pressures on the south due to Wichita.

County Land Use Management Policy (CLUMP)

Purpose of CLUMP

The purpose of the CLUMP system is to develop a broad policy acknowledging existing land use patterns, existing and future market demands, and manages these in relation to one another. CLUMP establishes a long-range management policy providing guidance for future development.

CLUMP Process

This specific CLUMP was devised to identify and examine existing development trends within counties facing urban growth pressure. The CLUMP process includes a review of two critical elements of the existing land use fabric within the County; which are:

1. Existing Land Use patterns and locations (see Figure 14.1 located at the end of this chapter)
2. Areas where development will likely move towards during the planning period

CLUMP balances the demand for urban and non-urban development with the preservation and conservation of agriculture and the fiscal responsibilities to provide services either at the County or the municipal level. CLUMP utilizes certain principles found within the "Smart Growth" movement. According to the Urban Land Institute's (ULI) publication Smart Growth: Myth or Fact, a major myth is "Smart growth is a code word for no growth". However, as the ULI points out, a major fact is "Smart growth recognizes growth and development are both inevitable and beneficial".

"The goal of smart growth is not "no growth" or even slow growth. Rather, the goal is sensible growth that balances our need for jobs and economic development with our desire to save our natural environment"

- Parris Glendening, former Governor, State of Maryland

The development of CLUMP was premised on the belief of development pressures and demands exist and the best approach is to acknowledge and accommodate these pressures through diligent planning.

These pressures must be managed and channeled to areas in the process of developing, or areas capable of accommodating this development over the long term.

The CLUMP Concept

The CLUMP concept centers on three policy areas. These areas are:

- Rural Preservation
- Rural Transition
- Urban Fringe

These three policy areas are indicated on Figure 14.2 (located at the end of this chapter) of this document. These areas generally identify different levels of development based upon proximity to existing urban centers or smaller developments; proximity to major transportation routes; existing land use densities; and potential land uses to be allowed in the future. The intent is to concentrate each of the different policy considerations into

areas based upon these factors.

Intense development (major commercial centers, densely populated subdivisions, etc.) should be encouraged to locate within or adjacent to the existing communities of Harvey County.

The goal of the CLUMP concept is to manage growth and development within the unincorporated areas of Harvey County using a well-considered management approach.

Agricultural Policy Area

The Agricultural policy area is intended to accommodate the following policies:

- The conservation and preservation of agricultural uses
- Low density residential development, primarily farmsteads and residences connected to an existing farming operation

Agricultural Preservation Area

Agricultural Preservation Area is where agriculture and rural densities prevail. This area of the county is where farmland and open space is protected from scattered or higher density housing or urban type activities. Agricultural related or support business may be located in this area. No industrial businesses should be located in the Rural Preservation Area.

The Agricultural Preservation Area also protects the environmentally sensitive areas of Harvey County such as the Equus Beds Aquifer and the Sand Hills.

Examples of intended land use include:

- Farm and agricultural uses.
- Low density housing.
- Parks & Recreation
- Conservation and Open Space

Rural Transition Area

Rural Transition is land that is adjacent to the urban fringe and is intended to accommodate limited subdivisions and residential housing. This area is also ideal for light commercial or agricultural support businesses. The Rural Transition area is not intended to be served by municipal infrastructure.

Examples of intended land use include:

- Platted Subdivision with lots that support wells and private sewer systems.
- Single Family Housing parcels.
- Light Commercial if conforming water and sewer system is approved.
- Agricultural related businesses if conforming water and sewer is approved.

Urban Fringe Area

Urban Fringe is land located around a city that is expected or being planned to accommodate eventual urban growth and development. The Urban Fringe is land a municipality plans to annex or directly control to promote urban housing, commerce or industry.

- Examples of intended land use include:
- Commercial Business
- Industrial
- Platted Subdivisions
- Parks & Recreation

The Agricultural policy area covers the majority of Harvey County.

The proposed land uses for the Agricultural policy areas are:

- Agriculture
- Mixture of Agriculture and agri-businesses
- Acreage lots, not developments
- Sand Hills Overlay
- Equus Beds Overlay
- Historical
- Parks and Recreation

Rural Transition Policy Area

The Rural Transition Policy Area is intended to accommodate the following policies:

- Higher density development than allowed in the agricultural areas
- Residential acreages
- Along major transportation routes within the county
- Potential growth areas adjacent to the smaller communities

The proposed land uses for the Rural Transition policy areas are:

- Agriculture
- Low Density Residential
- Equus Beds Overlay
- Mixture of Agriculture and agri-businesses
- Historical
- Parks and Recreation

Urban Fringe Policy Area

The Urban Fringe policy area is intended to accommodate the following policies:

- More dense development including residential and commercial
- Residential uses could reach densities typically seen in urban areas provided centralized water and sewer are provided within the development
- Major areas along highways are intended to aid in the strengthening of the economic base of Harvey County

The proposed land uses for the Urban Fringe policy areas are:

- Residential Estates
- Urban Density Residential
- Agri-businesses
- Commercial and industrial if water is available
- Parks and Recreation

CLUMP Summary

When making future land use and zoning decisions, the policy requires only the identified use types to be located within any policy area. Each area should allow for ample land use opportunities allowing for a controlled growth policy. All future development of these types should be located in the designated areas in order to minimize future sprawl and haphazard development.

Physical Character of Harvey County

One of the most critical factors, concerning land use development in any area is the physical characteristics of the area. The physical character of Harvey County has different environmentally sensitive landscapes, including but not limited to:

- Sand Hills
- Equus Beds
- Cropland
- Wetlands
- Lower Arkansas basin
- Sand Creek
- Rolling hills

Future Land Use Plan

The following common principles and land use concepts have been formed to guide future development and redevelopment activities within Harvey County's planning and zoning jurisdiction. The plan is based upon existing conditions and projected future conditions for the county.

The Land Use Plan also assists in determining the type, direction and timing of future growth and development activities. The criteria used in this Plan reflect several elements, including:

- The current use of land within and around the county
- The desired types of growth, including location of growth
- Balancing preservation of agricultural land and future development
- Physical characteristics, opportunities and constraints of future growth areas
- Current population and economic trends affecting the county

Efficient allocation of land recognizes the forces of the private market and the limitations budgets. This Plan acknowledges these factors play an important role in the growth and development of Harvey County. The future land use plan is intended to be a general guide to future land uses balancing

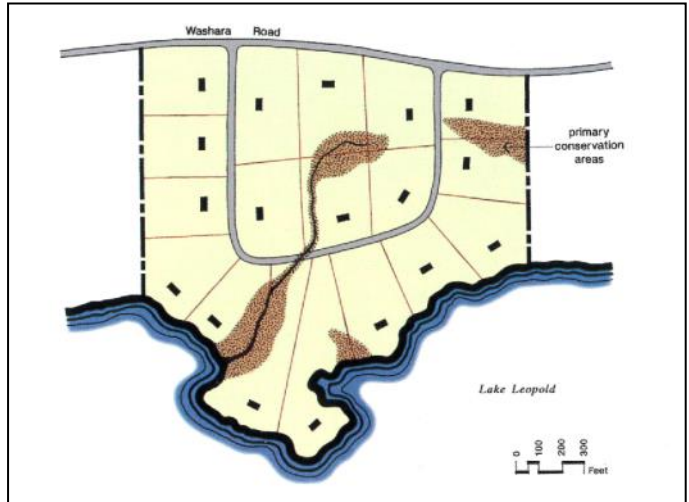
private sector development (the critical growth element in any county) with the concerns, interests, and demands of the overall local economy. The future policies within this plan will be critical to directing growth in the county for the next 10 to 20 years.

Conservation Subdivisions

The graphic to the right represents a standard subdivision and how it can be redrawn into a conservation subdivision. The primary usage of this technique in Harvey County is so a developer can maintain a specific density of building lots while protecting key environmental elements on the property. Some of these environmental elements include:

- Wetlands
- Steep slopes
- Floodplains
- Streams
- Natural prairie

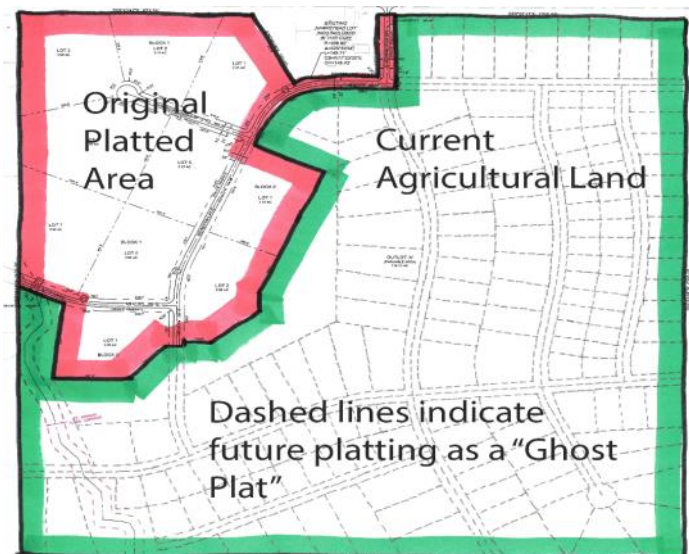
In addition, the developer and county can negotiate the lot sizes through a plan unit development (PUD) concept. In most cases the sensitive areas are placed in some type of conservation easement or held within a homeowners association. The protected areas, in a majority of cases, are placed into a common area to be shared by all the residents; this in turn increases the overall value of the lots.



Source: Envisioning Better Communities; 2010 by Randall Arendt

“Ghost Platting”

Ghost platting is a subdivision technique used within close proximity to a community’s jurisdiction. The process requires a developer desiring to plat larger than normal urban lots to also file a “Ghost Plat” indicating where future lots might be located if the city reaches the subdivision, and where future lot lines will be, as well as, where future utility easements and streets will be located. Once the approved, a property owner is only allowed to build on one of the future building sites identified, in order to not build over future easements or streets.



Graphic by MPC
 Courtesy of the Lincoln/Lancaster Planning Department
 Original Plat by Olsson Associates

Agricultural

General Purpose

Agricultural land is the predominant land use in Harvey County and many people earn their living directly or indirectly from farming. In addition to the economic importance of preserving farmland, and the environmental services performed by this natural resource, there is also the value of open space to be considered. To summarize, agricultural land and rural scenic resources are important to Harvey County for the following reasons:

1. The economic contribution of farming and agri-businesses to the local economy
2. The quality of life is enhanced when farmland, open space, and natural resources are preserved
3. The current and future need for governmental services is reduced when non-agricultural land uses are prevented from encroaching rural areas
4. The scenic value and rural character of the county is preserved

Compatible uses

1. Crop production, including grazing lands
2. Livestock operations for all types of animals
3. Private and commercial grain storage
4. Oil and gas production
5. Manure/fertilizer applications
6. Single acreage developments
7. Public recreational, wildlife, and historical areas
8. Religious uses and structures
9. Educational uses and structures

Compatible uses allowed subject to conditional review and approval

1. Renewable energy equipment
2. Agri-Tourism activities such as: hunting preserves, event venues, short-term rentals, fishing, vineyards etc.
3. Agriculture-related support commercial businesses

Incompatible Uses

1. Large scale residential developments including mobile home parks
2. Mobile homes and recreational vehicles (RV) as a single-family dwelling
3. Urban commercial and industrial uses and developments
4. Utility scale renewable energy equipment

Potential issues to consider

1. Rural Water availability and connections
2. Transportation routes (designation, condition, etc.)
3. Slopes
4. Existing and/or proposed sanitary system
5. Sand Hill soil composition and fire hazards
6. Equus Beds
7. Proximity to existing livestock facilities
8. Topography
9. Natural amenities such as trees, ponds, and streams
10. Site drainage





11. Flooding hazards
12. Groundwater availability and Potable well locations
13. Groundwater contamination
14. Wetlands

Special policies

1. Residential lot sizes may vary depending upon the type of sanitary system installed and the source of potable water.
2. Residential densities within this land use category should be no more than one dwelling units per quarter-quarter section.
3. Cluster developments, where allowed, should be considered and used whenever soils, topography, natural amenities warrant.
4. Farms and woodland should be recognized as an integral part of the planning area's open space system and should be conserved/preserved.
5. Site should be designed to conserve unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains and wetlands, by setting them aside from development.
6. The planning commission should require buffers and/or open space between agricultural uses and commercial and industrial developments to minimize negative impacts.
7. Proposed uses should be compatible with adjacent uses.

Residential Development (Rural Transition)

General Purpose

Rural Residential

This land use is intended to provide for residential development adjacent to and in close proximity to the municipalities and highways where conditions prove favorable. Industrial, commercial, or livestock operations of any size would not be permitted and buffers in the residential land use area would be critical. Lot size requirements would be based upon the capacity of the area to provide potable water and to properly handle sanitary waste systems. However, it is intended that densely developed areas would be connected to a rural water district.

Urban Residential

This land use is intended to provide for residential development with densities similar to those found in incorporated communities. These areas will need to be connected to either a community water and/or sanitary system or rural water district. The location of these developments should be located within the more urbanizing area of Harvey County and not within the Agricultural Preservation areas. This type of development should have immediate access to major highways or paved county roads.

Compatible uses

1. Residential uses
2. Acreages and associated accessory uses
3. Religious uses and structures
4. Educational uses and structures
5. Community/Recreational Center/Recreational facilities

Incompatible Uses

1. Livestock operations
2. Large commercial developments
3. Mobile homes or recreational vehicles as a single-family dwelling unless located within a mobile home or RV park

Potential issues to consider

1. Rural Water availability and connections
2. Existing road conditions
3. Floodplain and flooding hazard
4. Transportation routes (designation, condition, etc.)
5. Slopes
6. Groundwater availability
7. Groundwater contamination
8. Proximity to existing livestock facilities
9. Wetlands
10. Depth to groundwater
11. Topography
12. Natural amenities such as trees, ponds, and streams
13. Site drainage
14. Existing and/or proposed sanitary system
15. Potable well locations

Special policies

1. Residential lot sizes may vary depending upon the type of sanitary system installed and the source of potable water.
2. Residential developments within one-mile of an incorporated community should be required to comply with the Build-through ("Ghost Platting") concept.
3. Density of lots could be similar to an adjacent community unless the development is on individual septic and water, then the minimum sanitary standards would apply.
4. Cluster developments should be considered and required in this land use area.
5. Road conditions leading to the proposed development and their carrying capability
6. Rural Subdivisions shall not be allowed to locate in the agricultural preservation area and shall be directed toward the appropriate rural residential development area. If possible they shall seek annexation from city and connect to municipal water and sewer service.
7. The development should incorporate the natural environment, including existing slopes, existing trees, existing waterways, etc. into the overall design.
8. Where possible all roads should be paved for urban residential development.

Sand Hills Overlay District

General Purpose

This land use district is shown in the northwest portion of the county in the area referred to as the Sand Hills. The Sand Hills Overlay District has the environmental objective of protecting water supplies and wetlands in the Equus Beds and the special soil types of the area through a limited number of permitted uses.

The overlay was created to protect the area and restrict development in the area as it is prone to wild fires. Preserving water quality and minimizing intensive development are the leading priorities in considering any type of land use.

Geography

The exact boundaries of this district is Dutch Avenue to Highway 50 north to south and from Woodberry to Golden Prairie east to west.

Compatible Uses

1. Agricultural uses
2. Residential uses
3. Recreational uses

Compatible uses allowed subject to conditional review and approval

1. Agri-Tourism activities such as: hunting preserves, fishing, vineyards etc

Incompatible Uses

1. Fire hazards
2. Renewable energy

Special Considerations for this Overlay

1. Any land use in this are should consider fire mitigation when determining if development is appropriate.
2. Renewable Energy projects should be prohibited in the Sand Hills Overlay district.
3. The Sand Hills Overlay District should be limited to agricultural, residential and recreational land use.



Example of the Kansas Sand Hill Dunes
Source: Kansas Geological Society

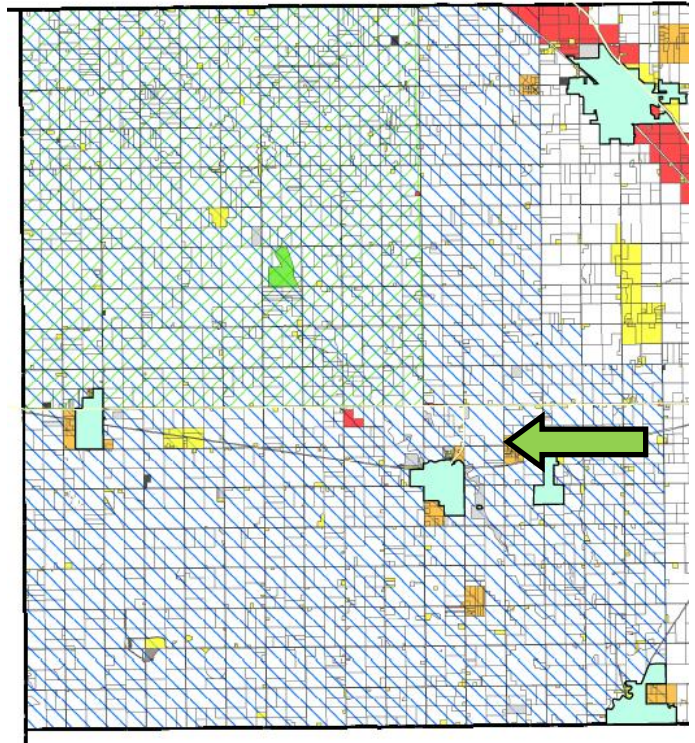
Equus Beds Overlay District

General Purpose

The Equus Beds Aquifer is a source of water for multiple users including Harvey County municipalities, rural water districts, farmers, and the City of Wichita and McPherson. Groundwater supply and the quality of water have been important regional and state planning issues in Harvey County for several decades. The county recognizes the importance of the Equus Beds as a natural resource and intends to play a leadership role in protecting and preserving the quality and quantity of the groundwater. The county works with the Equus Beds Groundwater Management District No. 2, the State of Kansas, and private landowners, but it has limited regulatory authority to address issues of non-point pollution and water consumption. The principal planning concept advanced in this plan is to prevent inappropriate land uses from locating in areas where they may pose an environmental risk to the Equus Beds. County planners should work with Equus Beds Groundwater Management District No. 2 and the Natural Resource Conservation Service to adopt measures that identify and protect especially sensitive groundwater areas within the county.

- Unenclosed storage of road salt
- Storage and primary electrical battery processing and reprocessing
- Chemical or biological laboratories

Equus Beds Overlay (blue hatch)



Special Considerations for this Overlay

1. Prohibiting construction of septic tanks and lateral systems in areas where depth to water is shallow.
2. Requiring new housing developments of a specific density threshold to have a public sewerage system. This policy will help reduce infiltration of wastewater into the aquifer.
3. Require new housing in urban fringe areas to be connected to municipal water and sewerage system.
4. Prohibited Uses should be:
 - Sanitary landfill
 - Solid waste transfer facility
 - Waste disposal (e.g., septic tank sludge disposal), except the spreading of solid and liquid animal waste
 - Hazardous waste treatment
 - Storage and disposal facilities
 - Disposal of snow containing de-icing chemicals
 - Injection well (unless approved by GWD #2)
 - Underground storage tanks for petroleum products or other hazardous materials
 - Junk or salvage yard
 - Manufacture of a hazardous substance

Land Use Goals and Action Items

A. General Land Use Goal

Future growth and development in Harvey County should ensure compatible uses are located together.

Action Items:

1. Continue to preserve and support agriculture land uses in all forms.
2. Private property rights should be protected by the county.
3. New residential development within Harvey County should be focused on the cities of the county; except for those directly related to agriculture.
4. Existing natural resources in Harvey County, including soils, rivers, geology, and groundwater should be considered for new development proposals.
5. The regions containing the sandhills and Equus Beds should be heavily protected from incompatible land uses.
6. Any future growth and development in rural Harvey County should work toward compact patterns of land uses.
7. Harvey County should consider limiting future development to identified areas along the major highways spanning the county, especially along the I-135 corridor.
8. The Harvey County Land Use Plan should be designed to expedite the review and approval process where possible.
9. The Land Use Plan should be designed to prevent irresponsible development on any parcel of land in the county.
10. All land uses and structures should be carefully reviewed for compliance with the duly adopted floodplain and floodway regulations in Harvey County.
11. Prohibit spot or island zoning.

B. Agricultural Land Use

Action Items:

1. Livestock production and agricultural production should be protected from the establishment of conflicting uses such as acreages and encroachment of residential development.
2. Harvey County should work in conjunction with the State of Kansas to locate new confined feeding operations in areas where their impact on neighboring land uses will be minimal.
3. Harvey County should minimize encroachment

of non-agricultural uses into areas designated as "Prime Farmland"; except for areas designated Urban Fringe and Rural Transition.

4. Protect the quality of groundwater and surface water in agricultural areas of Harvey County.

C. Rural Residential/Urban Residential Land Use

Action Items:

1. Residential subdivisions should be located next to or near the cities within Harvey County and not encroach upon agricultural uses.
2. Residential developments should be separated from more intensive uses, such as agriculture, industrial, and commercial development, by the use of setbacks, buffer zones, or impact easements.
3. Encourage low non-farm densities in prime farmland areas and other agricultural districts by:
 - a. Providing residential lot size requirements
 - b. Maximum densities
 - c. Separation distances between residential and agricultural uses
4. New residential developments should include a subdivision agreement, which provides for the maintenance of common areas, easements, groundwater, use of plant materials and drainage.
5. All proposed rural area developments should be based on reasonable expectations and no large-scale development should be approved without:
 - α. The submission and approval of a layout and design concept, with provision for the staging and servicing of all phases of the development
 - β. The approval of all federal and state agencies relative in any applicable health, safety and environmental controls
 - χ. An adequate demonstration of the financial capacity (escrows, performance bonds, etc.) and responsibility of the applicants to complete the development and provide for operation and maintenance services.
 - δ. Should be appropriately, if not uniquely, suited to the area or site proposed for development
 - ε. Should not be located in any natural hazard area, such as a floodplain (unless a sandpit development mitigating the circumstances) or area of geologic hazard, steep slope, severe drainage problems or soil limitations for building or sub-surface sewage disposal, if relevant

- φ. Should be furnished with adequate access – when possible a minimum of two entrances and exits
- 6. Harvey County should review and accommodate, wherever possible, any new or alternative development concepts or proposals, provided such concepts or proposals are consistent with and do not compromise in any way the established disposition of land uses on the Land Use Map or the goals and policies of the Plan.

D. Commercial and Industrial Land Use

Action Items:

1. Commercial and industrial development should be discouraged or not allowed in the agricultural preservation area.
2. Commercial or industrial development will seek to connect with municipal water and sewer services, seek annexation and zoning approval from the bordering municipality.
3. Commercial or industrial uses may be allowed in the I-135 corridor rural transition area if:
 - a. Sewage and water needs can be met.
 - b. Roads providing access to the site are capable of handling the additional traffic without causing congestion or undue deterioration. Hard surfaced access and parking will be provided on the site
 - c. Vehicular turning movements onto the site will not cause a significant reduction in highway capacity or represent a traffic safety hazard
 - d. A source of potable water is available in sufficient quantity to meet usage requirements and, preferably, meet fire-fighting requirements. The county planning staff should coordinate development review and approval with the affected rural water district, if applicable
 - e. Development proposals will be accompanied by certification of adequate water availability
 - f. All water supply water provisions, whether private or public, will meet the standards of the Kansas Department of Health and Environment
4. The county planning commission will require buffers and/or open space between agricultural uses and commercial or industrial developments to minimize the negative impacts of one use on the other.
 - α. All surface disposal lagoons will be located and designed to preserve a high visual

- quality.
- β. All sewage systems will be designed to meet Kansas Department of Health and Environment standards for collection and disposal of sanitary waste.
- 5. Access from individual parcels, tracts or lots to "Old 81" or Kansas Ave and other area travelways should be prohibited. The intent is to cluster commercial and/or industrial uses using internal circulation.
- 6. Special provisions for decorative screening, including architectural and/or landscape features, should be required for residential subdivisions adjacent to a public road or where commercial or industrial development will abut a residential area.

E. Rural Subdivisions

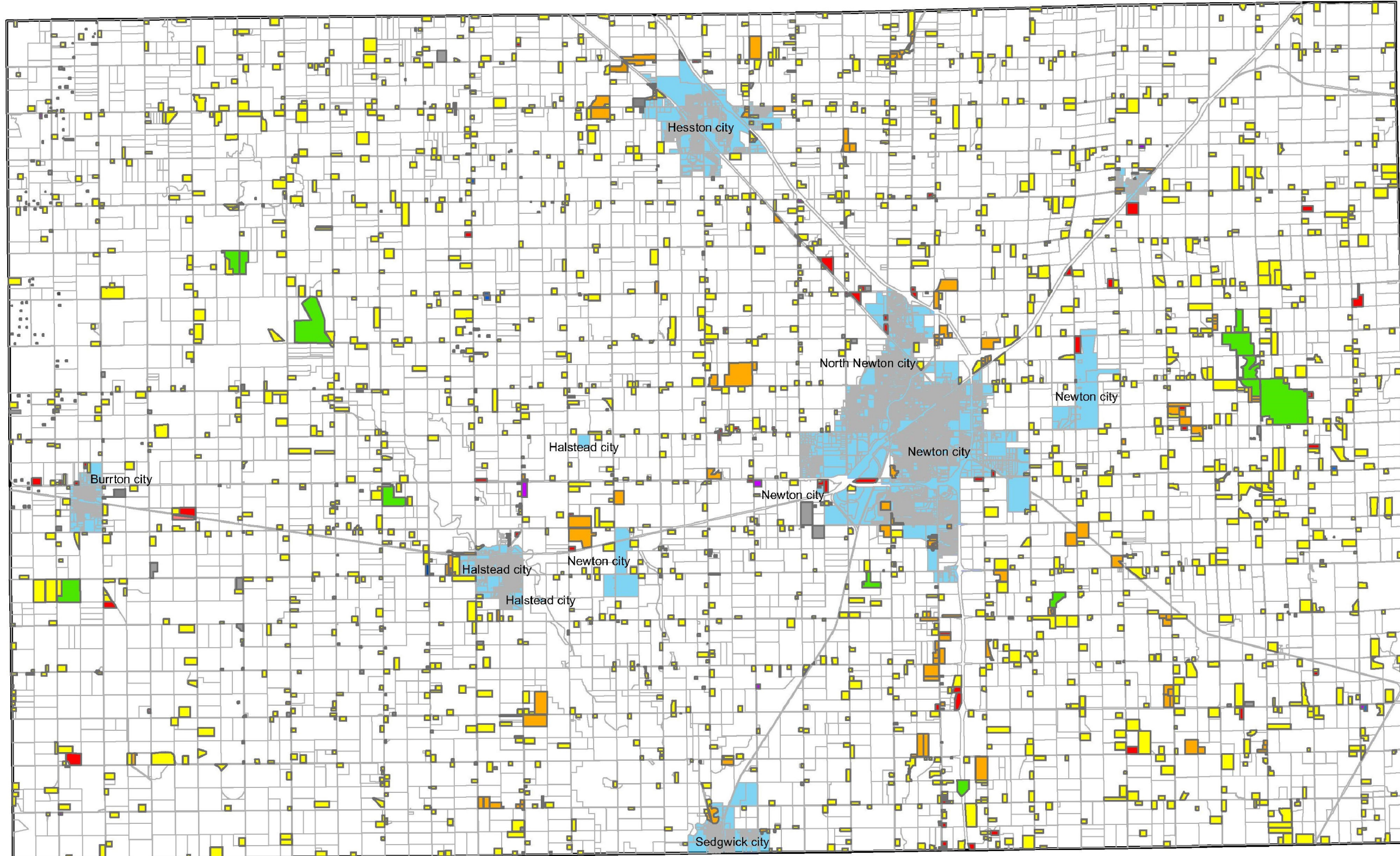
Action Items:

1. Residential subdivisions will not be allowed to locate in the rural preservation areas and should be directed to the rural transition area.
2. Residential subdivisions seeking approval in the urban fringe area will connect to municipal water and sewer service, seek annexation, and be required to meet the subdivision regulations of the bordering city.
3. Residential subdivisions may be allowed in the rural transition area if all of the following conditions are met:
 - α. A detailed site/development plan is prepared when a subdivision is proposed to be located on watershed structures
 - β. Roads providing access to the site are capable of handling additional traffic without causing congestion, excessive dust, or undue deterioration. Vehicular turning movements onto the site must not cause a significant reduction in road capacity or represent a traffic safety hazard
 - γ. A source of potable water must available in sufficient quantity to meet usage requirements. The county planning staff should coordinate development review and approval with the affected rural water district, if applicable
 - 1) Where a public water system is not available, the individual residential tract size should not be less than 5 acres
 - 2) Development proposals will be accompanied by certification of adequate water availability
 - 3) All water supply provisions, whether private or public, will meet the standards of the

Kansas Department of Health and Environment and local regulations

- d. A sewage disposal system must be provided that can safely treat the anticipated quantity and type of wastewater without causing groundwater or surface water pollution.
 - 1) All surface disposal lagoons will be located and designed to preserve a high visual quality
 - 2) All sewage systems will be designed to meet Kansas Department of Health and Environment standards for collection and disposal of sanitary waste, as well as local regulations
 - e. The planning commission may require a drainage study of the area by a licensed engineer
 - f. The proposed development must be compatible with adjacent uses
 - g. The preliminary plat will be designed to conserve unique and sensitive natural features such as woodlands, steep slopes, streams, floodplains, and wetlands, by setting them aside from development
 - h. The overall design of the subdivision must avoid a "ribbon" of lots along the county right-of-way and prohibit drives facing public roads
4. Harvey County is intent on balancing the demand for residential subdivisions with the efficient provision of public facilities and services. In reviewing rezoning requests, subdivisions, and plan amendments, the county planning commission shall determine the impact on the level of service on schools, police and fire protection, and road maintenance. If it can be demonstrated a proposed rezoning or dividing of land overloads public services and requires an increase in government budgets or services, the application may be amended or denied.
5. Discourage development which is located within the path of potential flood waters arising from the catastrophic breach of a watershed structure, flood control, or recreation lake.

FIGURE 14.1 - EXISTING LAND USE



LEGEND

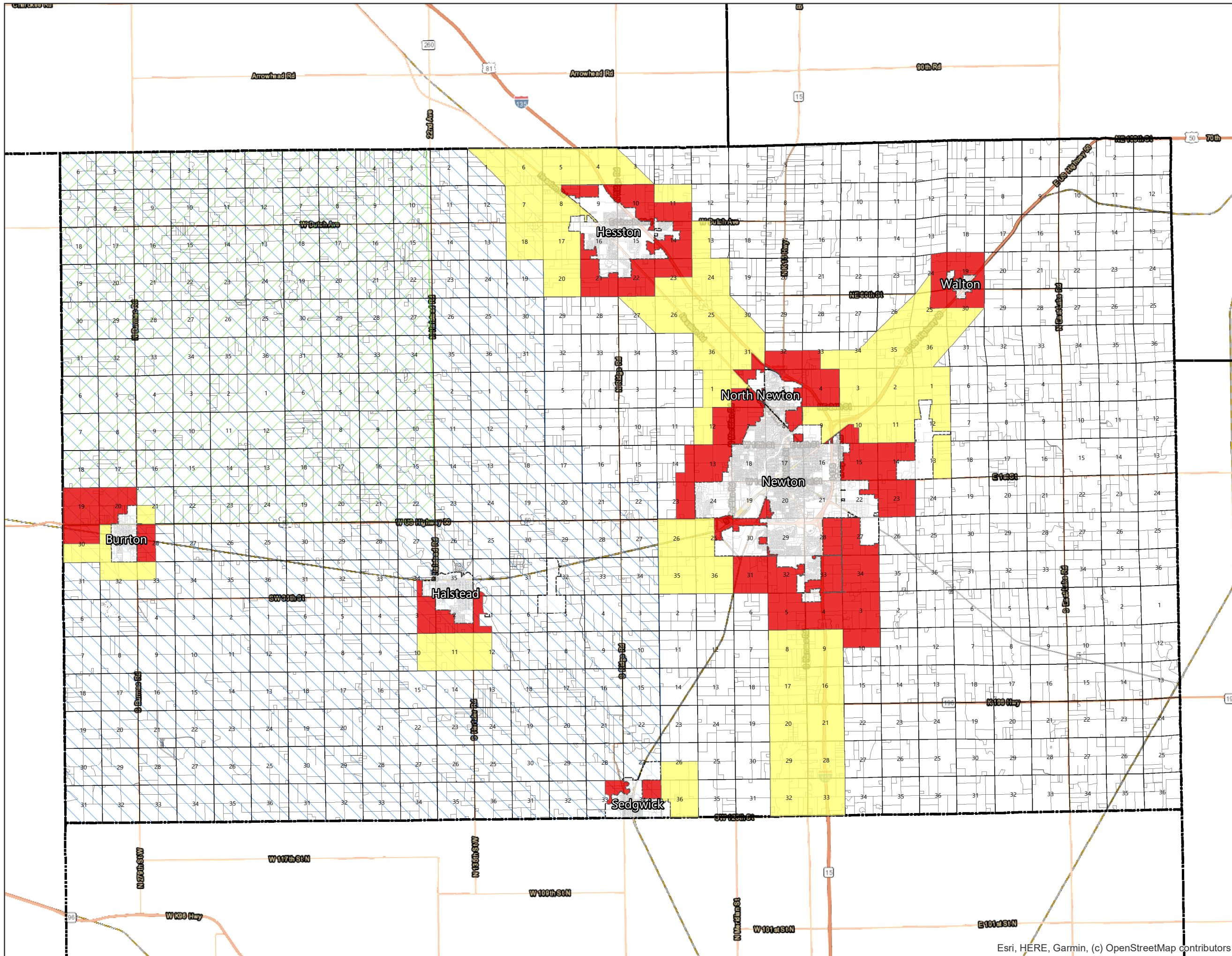
- Municipal Boundary
- Agricultural
- Residential/Farm Homesite
- Rural Single Family Residential
- Parks and Recreational Use
- Commercial or Industrial Use
- Not for Profit
- Utility/Gas/Oil



PROJECTION: KS State Plane (Ft.)
DATUM: NAD 83
DATE: 7.24.23




HARVEY COUNTY, KANSAS
COMPREHENSIVE PLAN
FIGURE 14.2 - CLUMP AND
FUTURE LAND USE



LEGEND



Policy Area

- Agricultural
- Rural Transition
- Urban Fringe
- Municipal Boundary
- Parcels
- Counties
- Environment Protection Overlay
- GMD2



MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning

PROJECTION: KS State Plane (Ft.)
 DATUM: NAD 83
 DATE: 7.11.24



Chapter 15 Transportation

Transportation

Transportation networks are the lifeblood of America, especially in the Great Plains. This is summed up in one simple quote received during public input sessions:

“What would Newton be without the interstates, highways, rails, or buses?”

Transportation networks tie communities together as well as providing a link to the outside world. Adequate circulation systems are essential for the safe and efficient flow of vehicles and pedestrians, as well as accessibility to all parts of the county. This chapter identifies existing systems and those necessary to provide safe and efficient circulation of vehicles within Harvey County.

Existing Systems and Facilities

Residents within a county have specific transportation needs. These include rail service, bus service, air transportation, and vehicular transportation.

Railroad Service

Rail transportation remains an important component of the County's economy - the BNSF and Union Pacific and a local short line traverse the county and several local businesses are geared

toward supporting these lines.

The Kansas Logistics Park in Newton has two sites designated as BNSF Certified Sites. BNSF certification ensures a site is ready for rapid acquisition and development through a comprehensive evaluation of existing and projected infrastructure, environmental and geotechnical standards, utility evaluation and site availability.

BNSF Certified Sites are a part of the Premier Parks, Sites and Transload program which is a strategic approach to addressing the increasing demand for customer site locations by developing various types of facilities across the BNSF network. BNSF Certified Sites have been reviewed by an industry expert in order to ensure accurate reliable data.



Old Atchison, Topeka, and Santa Fe Railroad Depot, now operated by BNSF

Selecting a certified site can reduce development time, increase speed to market time, and reduce upfront development risk of rail-served industrial sites.

Source: <https://harveycoedc.org/key-industries/transportation-logistics/>

Amtrak Service

Newton's Amtrak Station is located at 414 N. Main in downtown Newton. The facility features an enclosed waiting area, wheelchair accessible restrooms, checked baggage service and ticket office.

Newton is on the Southwest Chief route, which runs daily from Chicago to Los Angeles via the American Southwest. The route is part of the Trails & Rails program and National Park Service guides are onboard the Southwest Chief between Albuquerque and La Junta, Colo.; and Chicago and La Plata, Mo. The train departs Newton westbound for Los Angeles daily. It departs Newton eastbound for Chicago daily.

The Southwest Chief serves the following cities: Illinois: Chicago, Naperville, Mendota, Princeton, Galesburg; Iowa: Fort Madison; Missouri: La Plata, Kansas City; Kansas: Lawrence, Topeka, Newton, Hutchinson, Dodge City, Garden City, Wichita (via bus shuttle); Colorado: Lamar, La Junta, Trinidad; New Mexico: Raton, Las Vegas (NM), Lamy (with shuttle available to Santa Fe), Albuquerque, Gallup; Arizona: Winslow, Flagstaff, Williams Junction (Grand Canyon), Kingman; California: Needles, Barstow, Victorville, San Bernadino, Riverside, Fullerton, Los Angeles.

Bus Service

Harvey Interurban

The Harvey Interurban operates two buses and two wheelchair accessible minivans for the purpose of offering shopping, personal appointments, and recreational trips. Seats are filled on a first-call, first-serve basis.

Services for the county's communities include:

Burton/Halstead/Hesston/Sedgwick/Walton

- Medical/Personal Appointment Trips - Available 5 days a week
- Shopping - In Newton or Wichita
- Recreation - Group trips are scheduled monthly

Newton/North Newton

- Medical/Personal Appointment Trips - Available 5 days a week
- Shopping - In Wichita
- Recreation - Group trips are scheduled monthly
- OT Cab Company

Source: <https://www.harveycounty.com>

Beeline Express

The Beeline Express is a scheduled route service providing local routes and nationwide connections. Beeline is subsidized by Kansas Department of Transportation, in order to offer public transportation access to rural communities.

Beeline Express has a daily northbound and southbound route from Oklahoma City to Newton in conjunction with Amtrak. Beeline also offers two daily round-trip bus routes from Wichita to Salina, with stops in Newton, South Hutchinson, Hutchinson, McPherson and Lindsborg. There is a daily round-trip bus route from Joplin to Wichita as well. The stops in Newton are at the Amtrak Station.

Source: beeline-express.com

Commercial Airport Service

Wichita Dwight D. Eisenhower National Airport

Wichita Dwight D. Eisenhower National Airport the nearest commercial airport (27 miles) to Harvey County. It is considered the 4th best small hub airport in the nation. The airport served over 1.7 million passengers in 2019. The airport property is home to over 60 aviation-related businesses including three fixed-base operators, two aircraft manufacturers, general aviation, and cargo facilities.

Sources: <https://www.flywichita.com>

Salina Regional Airport

Salina Regional Airport, Salina, Ks. is known as "America's Fuel Stop". It's central location and 12,300 foot runway is ideal for mid-continent fuel stops. It is used for general aviation and has service by one passenger airline, SkyWest Airlines (United). United offers daily scheduled passenger air service to Denver International Airport and Chicago O'Hare International Airport. The airport earned the moniker "America's Fuel Stop" for Avflight Salina's annual delivery of fuel to thousands of business jets and military aircraft. The air traffic control tower handles over 90,000 aircraft operations per year. Salina airport also offers rental car services and is home to the Kansas State University Salina Aerospace and Technology Campus.

Sources: www.salinaairport.com

Small Craft Public Airports

Newton City/County Airport

Newton City/County Airport (designated EWK) is located two miles east of Newton on approximately 800 acres.

Originally constructed as an auxiliary flight training facility for the U.S. Navy, the airport was converted to a municipal facility after World War II. It is jointly owned by the City of Newton and Harvey County, and a seven member Aviation Commission acts as an advisory group to the City and Harvey County Commissioners.

Today, EWK primarily serves Harvey County as a transport facility, but has been designated by the FAA as a general aviation reliever airport for Wichita's Mid-Continent Airport.

Newton City/County Airport's primary runway is over 7,000 feet long with an ILS and GPS approach.

A modern 3,870 square foot terminal features a fully equipped pilot lounge and seating area, administrative offices, and a conference room. The addition of an enclosed observation vestibule provides a comfortable area for public viewing of flightline operations. WiFi wireless Internet is provided for the convenience of airport guests.

The airport has over 14 businesses based on the airfield offering numerous functions to the airport, including flight instruction, airframe and power plant maintenance and repairs, award-winning aircraft restoration, as well as new and used aircraft sales, ferrying and delivery. There are 85 T-hangars and over 135 based aircraft.

Source: <https://www.newtonkansas.com/departments/airport>

Hutchinson Regional Airport

The Hutchinson Regional Airport, Hutchinson, Ks, has been a business aviation center of the Midwest for more than 40 years. Much more than just a place to land, it is a benefit-packed resource for pilots, passengers, and businesses that use and serve general aviation. The Hutchinson Airport is Class IV FAA Airport with three runways capable of handling corporate aircraft. Amenities include a 7,000 foot all weather runway, and two cross wind runways, the longest being 4,400 foot, precision approaches, and an FAA Contract Control Tower, Charter service is available.

Source: www.hutchgov.com

Col. James Jabara Airport

Col. James Jabara Airport is a general aviation reliever airport for the Wichita metropolitan area. Midwest Corporate Aviation provides full-service fixed-base operator services. Clemens Aviation has expertise in aircraft sales, aircraft management, flight testing, maintenance, and airport development.

The airport is home to the National Center for Aviation Training world-class technical education center supporting the aviation/manufacturing industry cluster. Wichita Area Technical College (WATC) serves as the managing partner for the Center, partnering with Wichita State University's National Institute for Aviation Research (NIAR), to provide industry-driven training courses.

Source: <https://www.flywichita.com/general-aviation-jabara/>

State and Federal Highways

Harvey County is served by Interstate 135, which connects primary East-West (Interstate 70) and North-South I-35 corridors. The establishment of the Kansas Logistics Park in Newton was undertaken specifically to capitalize on its central location and access to I-135.

U.S. Route 50 (US-50) is a main east-west highway serving the southwest, central and northeastern parts of the state. US-50 serves Kansas City as well as (from west to east) Garden City, Dodge City, Hutchinson, Newton, and Emporia.

Source: <https://harveycoedc.org/key-industries/transportation-logistics/>

Transportation Planning and Land Use

Land use and transportation planning create the pattern for future development; both are interdependent on one another in order to effectively shape a community. An improved or new transportation route generates a greater level of accessibility and will likely determine how adjacent land will be utilized in the future.

In the short term, land use shapes the demand for transportation, and vice versa; one key to good land use planning is to balance land use and transportation. However, new or improved roads as well as county and state highways may change land and property values, thus altering the intensity of which land is utilized.

In general, the greater the transportation needs of a particular land use, the greater its preference for a site near major transportation facilities.

Commercial activities are most sensitive to accessibility since their survival often depends upon how easily a consumer can get to the business. Thus, commercial land uses are generally located near the center of their market area and along highways or at the intersection of arterial streets.

Industrial uses are also highly dependent on transportation access - but in a different way. For example, visibility is not as critical for an industry as it is for a retail store. Industrial uses often need access to more specialized transportation facilities, which is why industrial sites tend to be located near railroad lines or highways to suit individual industrial uses.

Street and Road Classification System

Roads are classified into multiple functional areas.

Trafficway:

Major roadway with or without medians accommodating large volumes of traffic with limited access. Primarily used for safe progression of through traffic. Typically controlled by federal or state government.

Major Arterial:

Major street with or without medians accommodating high volumes of traffic and controlled access. Primarily used for safe and efficient circulation of high volumes of traffic between sections of the city or county as well as across the urbanized area. Typically is not intended for direct access to an abutting property.

Minor Arterial:

Streets with moderate volumes of traffic and controlled access. Direct access to abutting properties is allowed. Primarily used for safe and efficient circulation of traffic between areas and across the city/county.

Collector:

Street with low traffic volumes and unlimited access. Primary use is for circulation within an area and between different land uses. Collectors distribute traffic from local street to arterial streets. Direct access should be limited.

Local Street:

Streets with low volume of traffic, slow design speeds, and unlimited access. Primarily used for direct access to abutting properties.

Transportation Policies and Action Items

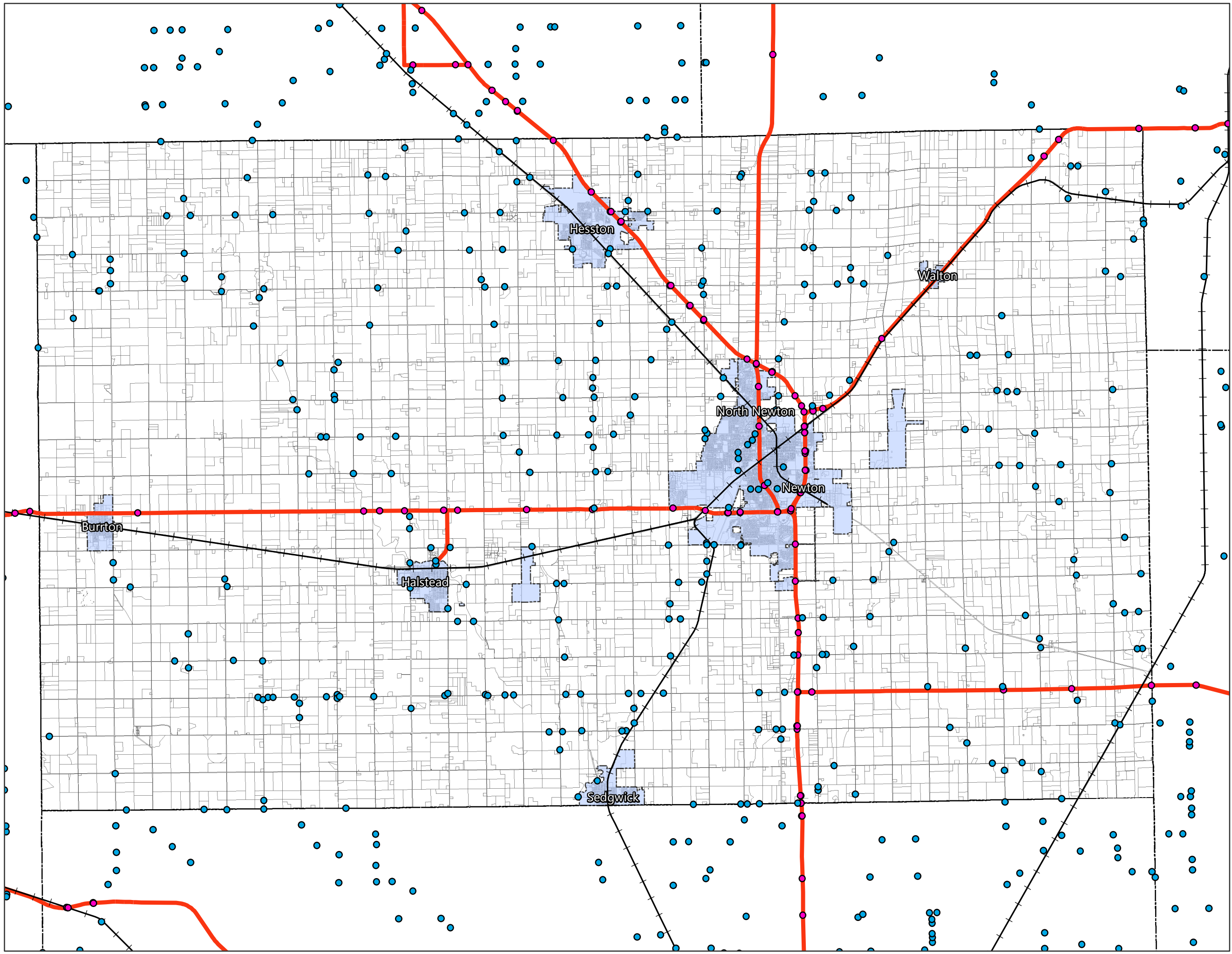
General Transportation

Harvey County should continue to provide a safe and adequate road system throughout the county.

Action Item:

1. Development should be discouraged from occurring in areas where the road system is insufficient to handle any additional traffic load without upgrades being completed.
2. Improve, develop, and maintain well-traveled roads with hard surfacing, when possible.
3. Harvey County should require new development to:
 - A. Minimize direct access points onto arterial rights-of-way by encouraging the utilization of common driveways or service roads
 - B. New development should not be located along roads officially designated as "Minimum Maintenance"
4. Harvey County should continue to provide alternate transportation means such as trails within the parks system. This should be accomplished in conjunction with all parks planning.
5. Harvey County should continue to support and whenever possible expand the Harvey Interurban system.
6. The Newton City/County Airport should continue to be expanded as a regional reliever airport, addressing the following:
 - A. Cargo and shipping facilities needing to or wanting to be outside the Wichita DDE Airport environs
 - B. An expanded option for business aircraft
 - X. With service expansion to the business commuter, the airport needs to provide expanded vehicular access to Wichita
7. Implement a 5-year review of Road Impact Fee Resolution to keep current with changing regulations and statues and to make sure fees are in line with inflation.

FIGURE 15.1
TRANSPORTATION



- LEGEND**
- Non-State Bridges
 - State Bridges
 - +— Railroads
 - Highways
 - ▭ Municipal Boundary
 - ▭ Parcels
 - ▭ Counties

MPC
MARVIN PLANNING CONSULTANTS
Specializing in Municipal, County and Neighborhood Planning

PROJECTION: KS State Plane (Ft.)
DATUM: NAD 83
DATE: 7.24.23

0 1 2 4 Miles



Chapter 16 Implementation

Achieving the County's Future

Successful community plans have the same key ingredients: "2% inspiration and 98% perspiration." This section of the plan contains the inspiration of the many county officials and residents who have participated in the planning process. However, the ultimate success of this plan remains in the dedication offered by each and every resident.

There are numerous goals and objectives in this plan. We recommend reviewing the relevant goals during planning and budget setting sessions to determine what projects may need to be undertaken during the course of the fiscal year.

Action Agenda

The Action Agenda is a combination of the following:

- Goals and Action Items, found throughout the various Chapters
- Land Use Policies
- Support programs for the above items

It will be critical to earmark the specific funds to be used and the individuals primarily responsible for implementing the goals and objectives in Harvey County.

Support Programs for the Action Agenda

Five programs will play a vital role in the success of Harvey County's plan. These programs are:

- **Zoning Regulation Updates:** updated land use districts can allow the county to provide direction for future growth
- **Subdivision Regulation Updates:** establish criteria for dividing land into building areas, utility easements, and streets. Implementing the Transportation Plan is a primary function of subdivision regulations
- **Plan Maintenance:** an annual and five-year review program will allow the county flexibility in responding to growth and a continuous program of maintaining the plan's viability
- **Housing Study:** a Housing Study will be critical to use in direct relationship to the comprehensive plan due to the need for housing issues in the county. The study will help guide the county in the redevelopment and future development of housing throughout the county and all of the communities in Harvey County
- **Strategic Plan:** A Strategic Plan will assist in identifying future strategies for development that will tie into the overall planning effort of the county. It will be critical to work with this document and the plan in unison

Comprehensive Plan Maintenance

Annual Review of the Plan

A relevant, up to date plan is critical to the on-going planning success. To maintain both public and private sector confidence; evaluate the effectiveness of planning activities; and, most importantly, make mid-plan corrections on the use of county resources, the plan must be current. The annual review should occur during the month of January.

After adoption of the comprehensive plan, opportunities should be provided to identify any changes in conditions that would impact elements or policies of the plan. At the beginning of each year a report should be prepared by the Planning Commission, which provides information and recommendations on:

- Whether the plan is current in respect to population and economic changes
- The recommended goals, objectives, and/or policies are still valid for the county and its long-term growth

The Planning Commission should hold a meeting on this report in order to:

- Provide citizens or developers with an opportunity to present possible changes to the plan
- Identify any changes in the status of projects called for in the plan
- Bring forth any issues, or identify any changes in conditions, which may impact the validity of the plan

If the Planning Commission finds major policy issues or major changes in basic assumptions or conditions have arisen which could necessitate revisions to the comprehensive plan, they should recommend changes or further study of those changes. This process may lead to identification of amendments to the comprehensive plan and would be processed as per the procedures in the next section.

Unanticipated Opportunities

If major new, innovative development and/or redevelopment opportunities arise which impact any number of elements of the plan and which are determined to be of importance, a plan amendment may be proposed and considered separate from the annual review and other proposed comprehensive plan amendments. The

comprehensive plan amendment process should adhere to the adoption process specified by Kansas law and provide for the organized participation and involvement of citizens.

Methods for Evaluating Development Proposals

The interpretation of the comprehensive plan should be composed of a continuous and related series of analyses, with references to the goals and policies, the land use plan, and specific land use policies. Moreover, when considering specific proposed developments, interpretation of the comprehensive plan should include a thorough review of all sections.

If a development proposal is not in conformance or consistent with the policies developed in the comprehensive plan, serious consideration should be given to making modifications to the proposal or the following criteria should be used to determine if a comprehensive plan amendment would be justified:

- The character of the adjacent area
- The zoning and uses on nearby properties
- The suitability of the property for the uses allowed under the current zoning designation
- The type and extent of positive or detrimental impact that may affect adjacent properties, or the county at large, if the request is approved
- The impact of the proposal on public utilities and facilities
- The length of time that the subject and adjacent properties have been utilized for their current uses
- The benefits of the proposal to the public health, safety, and welfare compared to the hardship imposed on the applicant if the request is not approved
- Comparison between the existing land use plan and the proposed change regarding the relative conformance to the goals and policies
- Consideration of county staff recommendations

Appendix

Survey

#1: Where do you live within Harvey County?

• Burrton	1.62%
• Halstead	9.49%
• Hesston	9.90%
• Newton	40.20%
• North Newton	9.90%
• Sedgwick	1.41%
• Walton	1.01%
• Rural	23.84%
• Other	2.63%

#2: How long have you lived in Harvey County? [years]

• Less than 1:	3.38%
• 1 to 5:	9.92%
• 6 to 10:	9.07%
• 11 to 15:	9.07%
• 16 to 20:	7.38%
• 21 to 30:	16.67%
• 31 to 40:	14.77%
• 41 to 50:	11.81%
• 50+:	17.93%

#3: Please tell us your age range. [years]

• Under 18:	0.21%
• 18 to 19:	0.21%
• 20 to 24:	1.05%
• 25 to 29:	5.26%
• 30 to 34:	7.16%
• 35 to 39:	10.74%
• 40 to 44:	8.21%
• 45 to 54:	19.16%
• 55 to 64:	21.47%
• 65 to 74:	20.00%
• 75 to 84:	4.84%
• 85 and over:	1.68%

#4: Please tell us how many children you have.

• 0:	18.82%
• 1:	11.21%
• 2:	33.40%
• 3:	22.62%
• 4:	7.61%
• 5+:	6.34%

#5: What age/grade level are your children?

• Daycare/Pre:	10.07%
• K-5:	11.55%
• 6-8:	6.14%
• 9-12:	10.32%
• College:	6.39%
• Grown (adult):	55.53%

#6: My children live:

• At home:	41.44%
• School/College:	5.21%
• Grown - living in Harvey County:	12.90%
• Grown- living in Kansas:	25.31%
• Grown-living out-of-state:	15.14%

#7: Education style for my children:

• Public:	73.01%
• Private:	8.92%
• At home:	5.78%
• NA:	10.12%
• Other (below):	2.17%
◊ I do not have children. I was educated via private and that is what I would choose should I have kids in the future	
◊ Questions 5, 6, and 7 should not be counted - I am a single woman with no children	
◊ Public then homeschooled"	
◊ Private and Public; living in and out of KS	
◊ Homeschooled early elementary, Public late elementary on	
◊ Public K-12, Private College"	
◊ Private preschool this year, next year depends on Covid conditions--may be homeschooled if conditions continue negatively without mask mandate	
◊ Private Preschool, next school year depends on district COVID protocol	
◊ Public and Private	

#8: Employment.

• Full-Time:	55.84%
• Part-Time	9.55%
• Self-Employed:	14.65%
• Home Maker:	4.88%
• Unemployed:	1.06%
• Retired:	22.93%

#9: Agriculture is defined in Kansas as: the use of land for agricultural purposes including dairying, farming, floriculture, horticulture, pasturage, and animal and poultry husbandry and the necessary accessory uses for packing, treating, or storing the produce; provided that the operation of any such accessory use shall be secondary to that of the normal agricultural activities. Is your primary income derived from agriculture?

- Yes: 8.90%
- No: 91.10%

#10: If agriculture is not your primary income source, which of the following industries is your primary income? The following are based upon US Census categories.

- Forestry, Fishing, and Hunting and Mining: 0.00%
- Construction: 4.64%
- Manufacturing: 9.51%
- Wholesale Trade: 0.46%
- Retail Trade: 2.55%
- Transportation and warehousing and utilities: 3.25%
- Information: 1.62%
- Finance, Insurance, real estate, and rental and leasing: 6.96%
- Professional, scientific, management, administrative, and waste management: 6.03%
- Educational, health, and social services: 26.91%
- Arts, entertainment, recreation, accommodation and food services: 1.16%
- Other services (except public administration): 4.41%
- Public admin.: 4.18%
- Retired: 21.11%
- Disabled: 0.23%
- Other: (below) 6.96%
 - ◊ Railroad
 - ◊ Communications
 - ◊ Industrial Automation
 - ◊ social security
 - ◊ Airline
 - ◊ rental
 - ◊ library
 - ◊ My husband is the income provider for our family. He is the manager of an office.
 - ◊ Nurse Practitioner
 - ◊ Fire Department
 - ◊ Architecture
 - ◊ Student
 - ◊ Real estate

- ◊ attorney
- ◊ Higher Education
- ◊ banking
- ◊ Spouse
- ◊ My husband
- ◊ Pastor
- ◊ Non-profit
- ◊ Ministry with faith-based organization
- ◊ Health Care
- ◊ house painting
- ◊ museum professional
- ◊ Law Enforcement
- ◊ Healthcare
- ◊ Medical
- ◊ Human Resources
- ◊ Lawyer/ Judicial

#11: How far is your commute to work? [minutes]

- Work from home: 6.18%
- Work at home: 7.04%
- Less than 10: 31.98%
- 10 to 14: 11.51%
- 15 to 19: 4.90%
- 20 to 29: 5.76%
- 30 to 44: 7.89%
- 45 to 59: 1.71%
- 60 or more: 0.21%
- Retired: 20.26%
- Other: (below) 2.56%
 - ◊ I am a homeschool mom.
 - ◊ Travel for work.
 - ◊ Varies week to week.
 - ◊ Homemaker.
 - ◊ Do not commute - home maker
 - ◊ I am travel [sic] a 7 state area.
 - ◊ Varies
 - ◊ 3 minute walk
 - ◊ It varies
 - ◊ I am semi retired working for 3 cities west of Harvey Co.
 - ◊ As long as the train block [sic] the main road in town.

#12: Highest Level of Education

- Grade/Middle School: 0.43%
- High School: 10.23%
- GED: 0.43%
- Community / Technical /Vocational/: 18.98%
- 4-year College/University: 40.51%
- Graduate/ Advanced Degree: 31.98%

#13: Business/Employer Location

- In Home: 7.88%
- On Line: 1.35%
- Burrton: 1.35%

- Halstead: 6.08%
- Hesston: 10.59%
- Newton: 30.41%
- North Newton: 11.71%
- Sedgwick: 2.03%
- Walton: 0.23%
- Neighboring County: 5.63%
- Wichita: 11.26%
- Manhattan: 0.00%
- Salina: 0.90%
- Hutchinson: 1.35%
- Great Bend: 0.00%
- Other: 18.24%

- ◇ Lower rent
- ◇ We chose to move here for a better quality of life.
- ◇ Rural living
- ◇ Price of land
- ◇ lifestyle, schooling
- ◇ Married a Newtonian
- ◇ college
- ◇ Location of home/lot
- ◇ Hesston College
- ◇ Rural home
- ◇ Found a house we liked
- ◇ Bethel College
- ◇ Education-Bethel College
- ◇ commute
- ◇ Dads house
- ◇ Halstead.
- ◇ Small family town
- ◇ move to country
- ◇ Proximity to school we wanted kids to attend
- ◇ Bethel College
- ◇ Lived in Harvey County from birth to age 18
- ◇ College
- ◇ School - Bethel College
- ◇ We desired a small town feel for our growing family. We fell in love with an old Victorian home and made the move from Wichita.
- ◇ Married Harvey county resident
- ◇ Wanted to live out of Wichita
- ◇ Purchased Farm
- ◇ College
- ◇ To move closer to family, acreage to build on, and closer to our school for our daughters.
- ◇ Bethel College
- ◇ College connections
- ◇ Housing affordability
- ◇ spouse preference
- ◇ Wichita State University - Commute
- ◇ wife
- ◇ Affordable Housing
- ◇ We moved here from Bentley

#14: What brought you to Harvey County?

- Family: 27.48%
- Work: 27.06%
- Retirement: 1.69%
- Retirement and family: 2.11%
- Always lived here: 27.27%
- Other (below):
 - ◇ Family farm
 - ◇ Small town around Wichita
 - ◇ Location
 - ◇ Bought a house
 - ◇ Coming back to where I grew up
 - ◇ Needed a change
 - ◇ Worked in Newton, found a home we liked in Halstead
 - ◇ College
 - ◇ Schools
 - ◇ Small town atmosphere
 - ◇ Spouse
 - ◇ Cheaper housing in 1986
 - ◇ Born here
 - ◇ Marriage
 - ◇ Born here. Lived here until 18. Came back when in 50's
 - ◇ To live out in rural America
 - ◇ We wanted to live in the country to have a hobby farm.
 - ◇ Moved to the country
 - ◇ Desire for Rural environment and conservative values
 - ◇ Bethel College
 - ◇ New start
 - ◇ college
 - ◇ Bethel College
 - ◇ Schools
 - ◇ Found a house to start a family
 - ◇ Better quality of life than that available in larger city
 - ◇ College
 - ◇ Bethel College
 - ◇ Location

#15: All of us have different experiences with where we live, we want to know how YOU FEEL about Harvey County. Is Harvey County a quality place to live?

- Very high: 8.69%
- High: 48.73%
- Neither high nor low: 34.75%
- Low: 3.39%
- Very low: 0.64
- Other (below):
 - ◇ I haven't lived here long enough to make a

solid decision. However, no issues yet

- ◇ Needs nice restaurants; improved downtown Newton aesthetics
- ◇ Middle of the road
- ◇ I enjoy the area... but am growing tired of the taxes.
- ◇ Taxes are to [sic] high city officials are not concerned about spending money and raising taxes not knowing where the retired community will come up with the raise
- ◇ Taxes too high !!!
- ◇ Rental
- ◇ I feel comfortable and happy living here. My caveat is that I have lived here and in Africa so it is difficult for me to make a comparison
- ◇ Not sure yet
- ◇ Still deciding
- ◇ Living in town, I don't think much about "Harvey County"
- ◇ Above average
- ◇ It's a great place to live but not attractive to look at. The downtown area especially -- if I were an outside coming here for the first time, I'd be turned off by the way some of the stores look (or awnings, tempera-painted windows, etc.)
- ◇ Expensive to live here downtown has diminished
- ◇ Very segregated. And systematically designed around discrimination
- ◇ Needs more entertainment to keep youth out of trouble

#16: I plan to retire in Harvey County.

- Yes: 73.40%
- No: 26.60%

#17: I grew up or have lived on a farm.

- Yes: 46.93%
- No: 53.07%

#18: I am confident in Harvey County's future.

- Yes: 69.10%
- No: 30.90%

- Other (below)

- ◇ Obtain rail shipping for our elevators or perhaps allow turn pike doubles for co-op grain trucks
- ◇ Respect the role of a farmer and how they work tirelessly to feed America. Don't give them more regulations.
- ◇ Prevent land grabs by the federal government
- ◇ Support small farmers and efforts to farm in more sustainable ways that use fewer chemicals and regenerate the soil.
- ◇ If Vineyards can make it on their own without subsidies, great. If not, we don't need them
- ◇ Specialty ag products to support regional farm-to-table ecosystem. Eg [sic] hops, Durum wheat, fungi, salad greens, etc [sic]
- ◇ Create a destination.
- ◇ Cutting edge ISP
- ◇ MORE GOLF COURSES OR FOCUS ON GOLF
- ◇ Support for small family farms; integration of sustainable agriculture with preservation of natural environment (collaboration with The Land Institute)
- ◇ Support for restorative and regenerative soil practices, support for new farmers, support

#19: Please answer the following questions as indicated

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree
If I had the means, I would start or invest in a small, local business.	17.68%	27.60%	30.51%	16.95%	7.26%
Commercial real estate is over-priced in Harvey County.	11.38%	17.68%	59.56%	10.17%	1.21%
It is too hard for small businesses to survive here.	15.50%	34.87%	27.60%	20.34%	1.69%
Harvey County towns have nice downtowns for business opportunities.	4.12%	46.25%	18.40%	27.60%	3.63%
The county should offer tax incentives to fill downtown areas.	17.03%	45.01%	22.14%	10.46%	5.35%
Harvey County's history and architecture should be preserved.	32.45%	47.94%	13.56%	5.08%	0.97%
Old buildings and houses should be cleaned up or torn down.	29.51%	44.15%	14.88%	8.54%	2.93%
New business should be along highway corridors instead of downtown.	2.44%	7.80%	29.02%	47.32%	13.41%
The county should keep all new business development within city limits.	11.19%	21.41%	28.71%	31.63%	7.06%
The entrances to towns in Harvey County are attractive.	1.21%	36.80%	28.81%	29.30%	3.87%
I would pay extra taxes for improvements to central business districts.	5.57%	28.33%	22.76%	29.06%	14.29%
Agricultural land should be developed for business and housing.	2.92%	13.38%	23.36%	34.55%	25.79%
The county should focus on developing technology and energy resources.	14.73%	48.07%	22.46%	9.90%	4.83%
Protecting farmland should be the county's top priority.	17.32%	27.32%	30.00%	18.54%	6.83%
Value-added strategies need to be implemented to enhance agriculture.	11.19%	35.52%	42.09%	9.73%	1.46%
Wind farms will strengthen our economy.	14.04%	25.91%	23.00%	17.19%	19.85%
Solar farms will strengthen our economy.	17.87%	30.92%	24.64%	12.32%	14.25%
Wind farms can be attractive.	10.14%	27.05%	16.43%	20.29%	26.09%
I think large wind mills would ruin my view of the landscape.	23.00%	18.40%	15.98%	27.60%	15.01%

#19: Please answer the following questions as indicated (cont.)

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree
Wind energy will help us protect other natural resources in Harvey County.	14.29%	29.06%	21.07%	15.50%	20.10%
New or expanded manufacturing or assembly plants will bring the kind of jobs we need.	14.32%	51.21%	25.24%	8.01%	1.21%
There is a strong, available workforce in Harvey County.	5.58%	36.41%	33.98%	20.63%	3.40%
The County should be more proactive in supporting existing industries and businesses in Harvey County.	16.63%	59.41%	21.27%	1.96%	0.73%
I would take a job on an assembly line.	0.24%	8.29%	21.95%	33.41%	36.10%
Local farmers have a high need for employees but they are unavailable.	4.37%	19.90%	63.59%	10.44%	1.70%
There are enough part-time jobs for high-school students.	11.62%	31.72%	37.77%	15.50%	3.39%
High school kids travel too far for entertainment and jobs.	8.23%	24.21%	45.04%	18.89%	3.63%
Middle school kids don't have anything to do with their free time.	6.54%	21.07%	35.35%	28.09%	8.96%
I will support a county-wide effort to provide jobs and volunteer opportunities for the general public.	10.71%	63.02%	18.73%	6.08%	1.46%
There should be more places where kids can hang out with their friends.	11.25%	44.99%	31.30%	9.29%	3.18%
Harvey County has a variety of housing options.	2.91%	45.04%	22.52%	23.00%	6.54%
Real estate and rental rates are less expensive than for surrounding counties.	2.19%	28.95%	42.34%	18.25%	8.27%
Public housing is adequate for Harvey County's needs.	4.38%	14.60%	51.09%	24.09%	5.84%
Most homes in Harvey County are in good condition.	0.73%	40.88%	30.66%	24.57%	3.16%
New housing should be built within city limits or within close proximity.	16.55%	50.85%	20.44%	9.25%	2.92%

#19: Please answer the following questions as indicated (cont.)

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree
More affordable housing is needed for young families.	16.38%	48.90%	25.92%	6.85%	1.96%
The older adults needs more housing and assisted living	9.27%	21.95%	40.49%	25.37%	2.93%
There needs to be more apartments, town homes, or duplexes.	7.35%	31.62%	36.03%	18.63%	6.37%
Enough homes are for sale in the \$80,000 to \$150,000 price range.	1.95%	19.02%	39.51%	28.78%	10.73%
I would buy a condominium or town home if I could afford one.	2.20%	9.76%	22.44%	33.90%	31.71%
New housing developments should be spread throughout the county.	8.07%	36.92%	30.07%	15.65%	9.29%
There is enough rental property in Harvey County.	3.92%	17.16%	52.21%	20.10%	6.62%
Farmers should be allowed to sell and subdivide their land however they want.	18.73%	27.01%	16.06%	23.36%	14.84%
Overall, homes in Harvey County have an above average appearance.	0.97%	32.36%	34.55%	27.98%	4.14%
I would support a program to strengthen community pride and appearance.	20.98%	53.66%	18.54%	5.37%	1.46%
County roads are in good condition.	4.37%	47.09%	20.63%	19.90%	8.01%
I would support a program to repair/clean-up homes and	13.63%	47.93%	20.19%	15.57%	2.68%
Rural water lines should be available to anyone that wants it.	9.76%	37.07%	32.20%	16.59%	4.39%
Developers should pay for new water lines and other infrastructure.	23.23%	54.52%	16.14%	5.38%	0.73%
Developers should be allowed to build residential subdivisions in rural areas.	6.34%	26.10%	25.61%	23.90%	18.05%
Developers should be required to enhance roads and bridges.	17.69%	47.17%	24.57%	9.09%	1.47%
Developers should be required to locate within existing communities and connect to city services.	15.44%	40.69%	28.43%	13.48%	1.96%
I would be willing to pay an additional tax for county road improvements.	2.69%	28.61%	28.85%	26.65%	13.20%
Public transportation is easily accessible in the county.	0.49%	6.10%	38.78%	29.76%	24.88%

#19: Please answer the following questions as indicated (cont.)

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree
Police, EMS, and fire protection are adequate.	16.75%	59.95%	14.56%	6.31%	2.43%
I receive good health care locally.	23.30%	55.34%	9.47%	10.19%	1.70%
Good dental care is available in Harvey County.	27.18%	54.85%	13.11%	3.64%	1.21%
I feel that adequate senior services are available.	12.22%	41.32%	34.72%	10.27%	1.47%
I feel that adequate senior services are affordable.	6.36%	23.47%	49.63%	17.11%	3.42%
I feel that adequate child care is available.	1.70%	8.03%	42.82%	34.55%	12.90%
I feel that adequate child care is affordable.	0.97%	8.03%	47.20%	29.68%	14.11%
There are adequate after-school programs available.	1.96%	17.11%	54.03%	21.76%	5.13%
Good quality education is available in Harvey County's schools.	11.95%	50.24%	20.00%	13.17%	4.63%
There are not enough teachers in Harvey County.	9.98%	32.36%	45.99%	8.27%	3.41%
There are plenty of extracurricular activities and events for kids.	9.78%	35.21%	33.74%	18.58%	2.69%
There are adequate adults and senior citizens activities.	4.16%	34.72%	41.08%	16.63%	3.42%
I often use community centers and/or walk-n-bike paths, tracks, or trails.	21.03%	36.19%	14.91%	21.27%	6.60%
There are not enough places to exercise, or they are too far away.	5.85%	18.05%	19.27%	44.39%	12.44%
Outdoor recreation options are limited in Harvey County.	6.59%	23.90%	20.73%	40.00%	8.78%
It is important to preserve and share Harvey County history.	23.72%	53.06%	16.38%	4.40%	2.44%
The lakes, reservoir, and streambeds are important assets.	42.54%	51.34%	5.38%	0.73%	0.00%
The aquifer is an important assets and should be preserved.	53.90%	37.32%	8.05%	0.73%	0.00%
The prairie is an important resource for the future of Harvey County.	38.11%	41.02%	15.29%	4.37%	1.21%
The future of Harvey County is more important than preserving its history.	7.58%	27.87%	30.07%	26.89%	7.58%
Retaining youth is the key to Harvey County's future.	19.71%	57.42%	15.82%	6.33%	0.73%

#19: Please answer the following questions as indicated (cont.)

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree
Retaining current business is key to Harvey County's economic survival.	30.15%	59.56%	8.58%	0.98%	0.74%
Recruiting new business should be a priority for the county.	26.34%	52.93%	15.85%	4.15%	0.73%
Existing business districts should be revitalized.	22.00%	49.63%	24.21%	2.93%	1.22%
County and city resources should be consolidated where possible.	20.10%	46.08%	21.57%	8.33%	3.92%
Growth and development should be carefully managed.	26.16%	58.44%	10.51%	4.40%	0.49%
We should partner with neighboring counties for the future of our region.	17.60%	54.28%	21.27%	4.65%	2.20%
Overall, Harvey County is a good place to live.	23.41%	66.83%	5.61%	3.17%	0.98%
Harvey County has a likable rural and small town atmosphere.	25.43%	63.08%	6.36%	4.65%	0.49%
There are adequate cultural opportunities, events and activities.	9.85%	40.89%	21.43%	23.40%	4.43%
County government officials are responsive to community needs.	4.18%	32.43%	38.33%	17.44%	7.62%
Local government officials are responsive to community needs.	4.91%	34.40%	35.87%	17.69%	7.13%

#20: The following value-added strategies for the agricultural economy of Harvey County should be undertaken.

Question	Strongly Agree	Agree	No Opinion/Not Sure	Disagree	Strongly Disagree	N/A
More livestock for feeding grain	4.19%	15.97%	58.90%	8.90%	6.54%	5.50%
New industries using grain in their manufacturing process (such as bio-plastics, etc.)	7.55%	38.54%	39.58%	6.25%	2.60%	5.47%
Greater effort towards exporting local grain to outside markets	10.18%	35.77%	43.34%	4.70%	1.04%	4.96%
Crop diversity (such as hemp, etc.)	18.44%	30.65%	34.03%	8.83%	3.12%	4.94%
Diversification of livestock types	12.76%	30.21%	45.05%	5.73%	1.56%	4.69%
Create farm to home operations (such as farmer's markets, Community-supported agriculture, On-farm stores)	32.64%	41.25%	20.37%	1.57%	0.26%	3.92%
Vineyards and wine making	17.32%	33.60%	32.81%	7.61%	3.94%	4.72%

for organic farmers. Support for farmers who suffer crop loss due to drift of dicamba and other herbicides from neighboring farms. Support and incentives for all local efforts to improve the ecology; soil, water, prairie diversity, pollinators, sustainable animal practices etc.

- ◇ No till farming.
- ◇ The problem is that Harvey County "competes" for grain hauled the short distance to terminals in Wichita
- ◇ Legalize marijuana to increase tax base, increase business opportunities, and reduce

small-scale crime.

- ◇ More fruits -- berries, apples
- ◇ Breweries/distilleries
- ◇ Lower taxes are good. Schools are currently over funded.
- ◇ Sustainable farming, kernza, soil health direct payments to farmers to reduce nitrate leeching
- ◇ Direct payments to farmers to reduce nitrate leeching.
- ◇ Missing out on hemp opportunity; we're a perfect location!

#21: The following are a threat to agriculture in Harvey County.

Question	Strongly Agree	Agree	No Opinion/ Not Sure	Disagree	Strongly Disagree	N/A
Drought	28.07%	53.13%	11.99%	4.09%	0.54%	2.18%
Commodity prices	16.41%	46.09%	32.55%	2.08%	0.52%	2.34%
Large corporate ag. becoming more vertically integrated (such as owning the land, and commodity all the way to the final product)	31.52%	32.30%	27.13%	5.17%	1.81%	2.07%
Foreign producers (such as Brazil, Mexico, China, etc.)	22.02%	31.35%	33.94%	8.29%	1.55%	2.85%
Political policies and actions	27.46%	40.67%	26.42%	2.59%	0.52%	2.33%
Eating practices changing (such as vegetarian, low carb, etc.)	3.63%	18.39%	39.12%	27.72%	7.77%	3.37%
Encouragement of non-agricultural uses (such as residential developments, large commercial and industrial uses)	15.67%	30.03%	35.51%	11.75%	4.44%	2.61%

• Other (below)

- ◇ STOP developing ag land! It's Harvey County's most precious limited resource!! If you want to bring in some new development, then revitalize an older part of town (for example, Dock 44 lot on Meridian in Newton or the southwest end of 1st St.)
- ◇ STOP DEVELOPING AG LAND!! It is Kansas' most precious LIMITED resource.
- ◇ Low prices for harvested grain and livestock
- ◇ Commercial farms are destroying small farms. The USDA has some very interesting stats on that.
- ◇ Climate change and natural disasters
- ◇ Let the free market system work. If it is financially feasible, people will invest and develop those opportunities. Public funding is not the answer
- ◇ Fertilizer prices
- ◇ Failure to react properly to population decline by improving quality of life eg [sic]

walkable towns and neighborhoods, top notch schools, multiuse zoning, etc [sic]

- ◇ NOT HAVING ENOUGH GOLF COURSES
- ◇ Climate change and dependence on fossil fuel
- ◇ Increasing herbicide strength, and the resulting increased tolerance by weeds such as palmer amaranth are a threat to all farmers
- ◇ Climate change (extreme drought or flooding) reduces predictability in the farming sector
- ◇ High taxes are a threat
- ◇ Climate change, monoculture, poor soil health
- ◇ Drought question inappropriate

#22: Please tell us where the majority of the following activities take place.

	Harvey County	Halstead	Hesston	Newton	Sedgwick	Wichita	Hutchinson	Salina	Great Bend	Online/Internet	Out-of-State	Other
Entertainment (such as movies, miniature golf, etc.)	12.1%	0.6%	0.0%	23.3%	1.4%	55.3%	1.1%	0.0%	0.0%	4.9%	0.3%	1.1%
Outdoor recreation (such as hunting, hiking, boating, etc.)	55.1%	1.8%	2.4%	10.3%	0.3%	2.1%	0.9%	0.0%	0.3%	0.6%	16.4%	10.0%
Outdoor exercise (such as walking, running, biking, etc.)	41.0%	7.1%	9.3%	37.4%	0.8%	2.5%	0.3%	0.0%	0.0%	0.0%	0.6%	1.1%
To play sports (such as basketball, tennis, golf, etc.)	30.4%	6.9%	10.0%	32.3%	0.3%	12.9%	0.3%	0.0%	0.0%	0.6%	1.3%	5.0%
Indoor exercise (such as walking, aerobics, weights, etc.)	25.8%	2.4%	8.5%	52.2%	0.0%	5.0%	0.3%	0.3%	0.0%	0.3%	0.9%	4.4%
Swimming (outdoor or indoor)	25.8%	5.0%	9.4%	41.8%	0.6%	7.6%	0.3%	0.6%	0.0%	0.9%	2.2%	5.7%
Cultural events (such as theater, concerts, museums, etc.)	7.1%	0.3%	1.7%	13.1%	1.4%	69.7%	0.9%	0.0%	0.0%	1.1%	2.0%	2.6%
Festivals and fairs	29.5%	1.8%	2.1%	21.2%	0.9%	25.4%	10.9%	0.3%	0.0%	0.3%	2.7%	5.0%
Grocery shopping	17.7%	2.7%	1.4%	65.8%	1.1%	9.5%	1.6%	0.0%	0.0%	0.3%	0.0%	0.0%
Furniture shopping	8.1%	0.6%	0.3%	29.7%	0.3%	46.7%	2.3%	0.3%	0.0%	7.2%	0.6%	4.0%
Clothes shopping	3.6%	0.3%	0.0%	13.5%	0.8%	57.7%	0.8%	0.3%	0.0%	22.4%	0.3%	0.3%
Vehicle shopping	8.4%	0.0%	1.1%	19.0%	0.8%	46.7%	3.1%	1.1%	0.0%	11.2%	4.5%	4.2%
Farm equipment shopping	15.5%	0.0%	0.9%	12.9%	0.0%	11.2%	3.9%	0.9%	0.4%	12.5%	8.2%	33.6%
Antiques shopping	24.6%	1.4%	5.7%	28.6%	0.0%	13.2%	2.1%	0.4%	0.0%	2.9%	4.6%	16.4%
Gas/Convenience items shopping	27.1%	4.9%	7.4%	53.2%	0.3%	6.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%
Hardware/Lumber shopping	15.0%	2.2%	17.8%	31.7%	0.3%	28.3%	3.3%	0.0%	0.0%	0.3%	0.3%	0.8%
Other shopping	12.1%	1.5%	0.9%	18.2%	0.3%	47.0%	2.1%	0.0%	0.0%	15.5%	0.0%	2.4%
Movie rentals	9.9%	0.0%	0.8%	20.2%	0.4%	4.0%	0.4%	0.0%	0.4%	53.0%	2.4%	8.7%
Dining out fast food	19.6%	1.1%	3.9%	51.1%	0.8%	20.4%	1.4%	0.0%	0.0%	0.0%	0.8%	0.8%
Dining out with sit-down service	10.5%	1.1%	2.2%	21.9%	0.8%	60.9%	1.7%	0.0%	0.0%	0.0%	0.6%	0.3%
Community clubs or groups	21.0%	5.4%	6.1%	35.6%	0.7%	17.0%	0.3%	0.0%	0.0%	0.7%	0.7%	12.5%

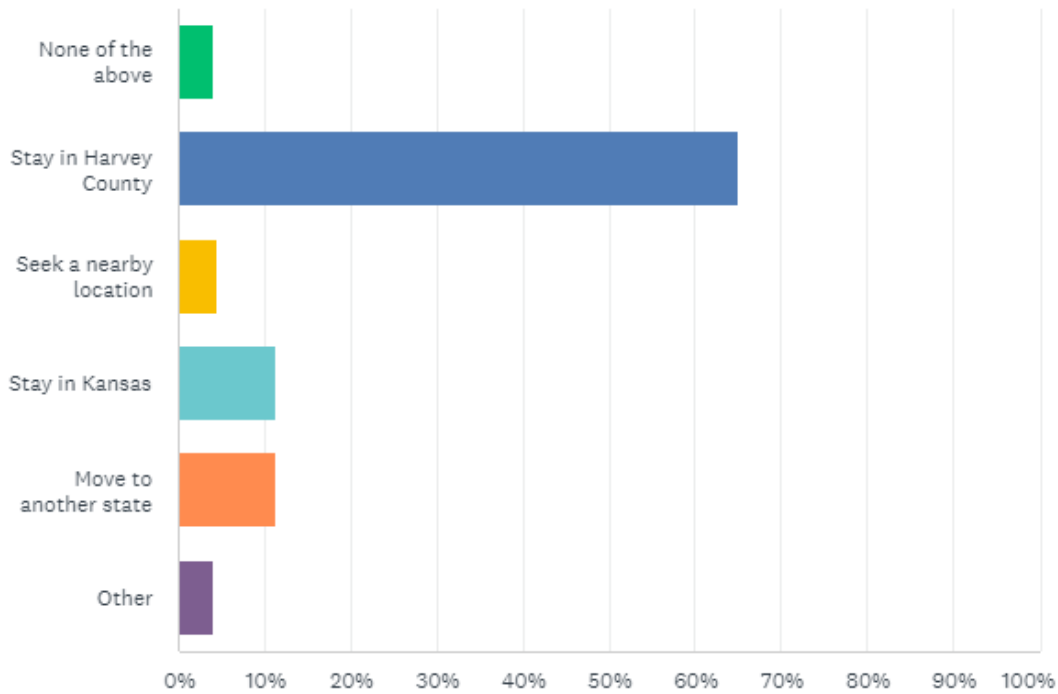
#23: Which of the following services and/or businesses should be the focus of economic development activities in the future?

Question	Very Important	Important	Neutral	Less Important	Not Important
Daycare - children	37.4%	34.9%	22.1%	3.1%	2.5%
Daycare - adults	11.1%	33.1%	43.1%	8.9%	3.7%
Grocery store	34.0%	34.3%	19.3%	9.9%	2.5%
Banking	16.3%	25.0%	27.8%	20.5%	10.4%
Tech support - computers	14.0%	43.0%	28.2%	11.2%	3.6%
Tourism	10.7%	38.5%	30.3%	14.9%	5.6%
Arts and culture	15.2%	41.9%	28.4%	11.0%	3.7%
Main street retail	31.0%	50.1%	14.4%	3.6%	0.8%
Restaurants	38.7%	49.2%	10.2%	1.9%	0.0%
Recreational facilities	21.4%	46.4%	23.0%	6.7%	2.5%
More jobs	38.6%	46.7%	13.4%	1.4%	0.0%
Youth retention	29.3%	47.9%	18.7%	3.3%	0.8%
Senior housing - including assisted living	12.1%	40.3%	32.7%	11.3%	3.7%
Healthcare	35.3%	40.0%	18.1%	4.7%	1.9%
Better broadband	41.7%	33.3%	18.5%	3.1%	3.4%

#24: Access to quality goods and services is important. How available are these to you?

Question	Very Available	Available	Neutral	Less Available	Not Available	N/A
Daycare - children	2.8%	11.7%	21.2%	10.9%	2.8%	50.6%
Daycare - adult	2.0%	6.2%	26.3%	3.9%	2.2%	59.4%
Grocery store	50.8%	34.2%	2.8%	8.1%	4.2%	0.0%
Banking	57.5%	34.6%	3.4%	3.9%	0.0%	0.6%
Tech support - computers	13.5%	29.1%	27.5%	17.1%	6.7%	6.2%
Tourism	5.4%	19.7%	34.7%	16.9%	6.5%	16.9%
Arts and crafts	5.4%	30.9%	30.0%	18.7%	4.3%	10.8%
Nursing home facilities	25.6%	34.8%	12.6%	1.7%	1.1%	24.2%
Assisted living facilities	23.9%	33.4%	13.5%	2.3%	1.7%	25.3%
Meals on wheels	15.8%	24.8%	17.8%	1.4%	1.7%	38.6%
Senior services	12.2%	25.9%	19.9%	5.4%	1.1%	35.5%
Main street retail	10.4%	49.7%	15.7%	19.9%	2.8%	1.4%
Restaurants	9.5%	50.4%	7.3%	29.7%	2.8%	0.3%
Healthcare facilities	28.9%	53.5%	10.6%	5.0%	1.1%	0.8%
Recreational facilities	16.8%	45.7%	16.5%	12.9%	4.8%	3.4%
Agricultural support (such as dealerships, parts, and repair)	3.4%	19.7%	20.9%	12.1%	3.1%	40.9%

#25: What is/will be your plan for retirement?



#26: The most pressing environmental concern for the county now and in the future is:

Question	Most Important	Important	Neutral	Less Important	Not Important
Energy	27.93%	48.88%	15.36%	5.03%	2.79%
Agricultural land	18.93%	52.82%	21.75%	4.24%	2.26%
Soils	19.60%	52.27%	23.30%	3.41%	1.42%
Native Vegetation/Wildlife	13.03%	46.46%	26.06%	12.18%	2.27%
Water	66.94%	30.56%	2.22%	0.00%	0.28%

#27: In regard to economic development, the county should concentrate efforts in which area? (1) Highest to (5) Lowest preference.

Question	1	2	3	4	5
Manufacturing / Assembly	24.2%	29.6%	25.0%	12.2%	9.1%
Technology	26.1%	32.1%	19.9%	15.6%	6.3%
Retail and Wholesale Trade	19.8%	32.6%	28.9%	10.2%	8.5%
Energy	23.2%	33.4%	20.7%	11.1%	11.6%
Agriculture	30.7%	30.4%	16.3%	9.7%	12.9%
Other	37.0%	13.7%	26.0%	1.4%	21.9%

#28: Please rate the following governmental entities.

Question	Excellent	Good	Average	Improvement Needed	Poor	N/A
County Board of Commissioners	6.36%	28.90%	34.68%	10.69%	7.51%	11.85%
County Clerk's office	13.83%	40.06%	25.65%	4.90%	2.31%	13.26%
County Appraiser's office	9.83%	36.42%	27.75%	6.65%	3.47%	15.90%
County Register of Deeds office	13.87%	36.99%	25.43%	4.05%	2.31%	17.34%
County Treasurer's office	16.95%	41.67%	25.29%	3.16%	3.45%	9.48%
County Attorney's office	4.65%	25.58%	28.49%	6.40%	4.94%	29.94%
Department on Aging	5.25%	20.99%	27.70%	7.29%	1.75%	37.03%
Health	18.79%	30.64%	24.86%	6.65%	4.62%	14.45%
Parks	11.08%	49.72%	23.58%	5.40%	2.27%	7.95%
Solid Water	6.89%	27.25%	32.93%	5.99%	2.99%	23.95%
Planning, Zoning, and Environment	3.79%	24.49%	37.03%	11.95%	6.12%	16.62%
County Roads and Bridges Department	5.80%	30.72%	33.33%	13.62%	7.25%	9.28%
Local Fire Department	38.46%	40.17%	13.68%	1.71%	0.85%	5.13%
Emergency Management	30.55%	38.33%	18.73%	2.59%	1.15%	8.65%
Emergency Medical Services (EMS)	37.93%	39.94%	12.07%	3.16%	0.57%	6.32%
Noxious Weed Department	5.56%	20.47%	35.67%	6.43%	2.63%	29.24%
County Law Enforcement	18.62%	45.27%	20.63%	6.30%	1.72%	7.45%
City Law Enforcement	19.14%	39.71%	22.00%	8.57%	1.43%	9.14%
Elementary education	18.97%	32.76%	21.55%	11.21%	4.31%	11.21%
Secondary education	14.04%	33.52%	19.77%	15.76%	4.87%	12.03%
Post-secondary education	20.75%	24.50%	22.48%	14.12%	4.32%	13.83%
County-wide economic development	2.32%	17.10%	42.03%	20.29%	7.54%	10.72%
Public transportation	1.43%	5.73%	22.92%	29.51%	25.21%	15.19%
Senior services	4.90%	21.61%	31.70%	12.39%	3.46%	25.94%

#29: List the one most important quality of Harvey County that must be preserved. (Similar comments have been combined)

- Rural and small town life and atmosphere
- Nothing is off the table over the need for growth
- Downtown
- Freedom
- Small town, rural feel. Please do not turn us into some giant cookie-cutter housing development, warehouse sprawling satellite of Wichita. I can GO to Wichita if I want to see that!
- City living in a rural setting at an affordable price.
- Respect for existing public resources: water, energy, roads, schools
- History of the county and city's [sic] is very important.
- People's Trust in God
- Small town feel. Limit agriculture land development
- It's history
- Main streets
- Availability of outdoor recreation areas and events to bring family and community together.
- History
- Freedom
- Agriculture production
- Willingness to continually improve
- Jobs
- Aquifer
- Reducing blight in county areas to retain proper use of non-town areas.
- Diversity
- Small town values
- Agriculture. With the proximity to Wichita, much of the ground is being used for housing. I would rather see existing housing revamped or torn down for newer houses to be built.
- Neighborless [sic]
- Main Street and Newton History
- Good schools with curriculum to help our youth prepare for their future as adults and future leaders.
- Nice Main Street

- Parks
- Agriculture and rural family heritage.
- Low taxes
- Clean water
- good shopping variety downtown
- Beautiful nature areas, such as East and West Lake and the Newton hike and bike path
- Private property rights
- The one quality of Harvey County that must be preserved is the rural lifestyle available for those looking for a peaceful place to call home where America's God honoring traditional values are lived out daily
- Friendly people
- Community feeling
- Safety
- Constitutional rights of the citizens
- Conservative Family Values
- The undeveloped, open plains. Agricultural land is disappearing rapidly in Sedgwick County
- Our history. All of the old downtown buildings need to be repaired, not torn down, but repaired back to their original condition
- Develop the value of our geographic location within the state and create areal value of being the best small town we can be
- Wildlife
- Low crime rate
- Family support services
- Agencies work together
- The country land and feel
- Wildlife
- That the county remain reasonably populated
- The one most important quality of Harvey County that must be preserved is the character of its people and the sense of connection that exists within the community. A place to call home that encompasses these things is quickly becoming a thing of the past in larger cities. It is the very fabric of our society and needs to be valued and protected
- Open mindedness
- Business integrity
- Collaboration among cities and county
- Quality jobs
- Sand creek
- Entrepreneurship - this town has a rich history of people willing to take risk to make this community a better place.
- Keeping farm land not rezoning for private business and dwellings
- Ethnic diversity
- Encouraging a life seeking peace and justice in relationship with and respect for God
- Balance between small town/rural/railroader atmosphere and suburban feel (as a Wichita suburb)
- Sand creek station golf course
- Bethel College..having a college is really important. Support them
- Good emergency services... Law enforcement, fire and ambulance services
- Strong commitment [sic] to high quality of living for all ages.
- Rural communities
- The youth of our county is our future
- Quality of life
- Opportunity
- Hedge rows
- We need more walking paths
- The broader community that rallies together to support those who have encountered difficulty
- Green space
- A sense of community. Count on your neighbors.
- Must find a solution to the county's lack of recycling opportunities for businesses and individuals.
- Amtrak service
- Rural culture and small town feel
- The aquifer-don't let Wichita take control
- Public education
- High quality of life for every Harvey County Citizen
- Senior center
- Roads
- Preserve what we have and work toward providing better resources in all areas focusing on high quality jobs, consumer resources and retail that meets each community's needs. We need to evolve without losing any current resources
- Adequate clean water
- It seems that Harvey County history has not been preserved well enough for our youth
- Drinkable water
- Access to affordable mental health and medical health care
- Please build an overpass. I grew up in marysville, ks [sic]- a town of 3000- and we built one with less resources than Newton. I don't understand why this can't be prioritized.
- The Mennonite and German cultures and foods
- Everything should be accessible to everyone
- Prairie land
- Preserving environment
- Small town great for families and big untouched country side
- It is away from the larger citys [sic]. We like the peace and quite [sic]

- Sustainable agriculture and the small towns that exist within that
- Decent schools to attract young families
- Native and Hispanic history
- Reduce our impact on the environment/ climate change
- Strong sense of community, people looking out for people
- Air quality
- Sense of small-town community. Uniqueness can thrive here; it is being lost in the Eastern part of the state to corporations and big businesses
- Health care
- Harvey County must continue to produce food for Harvey County, for Kansas and for the nation
- Unique balance of town amenities and agriculture partnerships
- Sense of place....don't want to be a 1-135 corridor [sic] suburb of Wichita
- Youth
- Christian valued
- Stay friendly
- Peace in political situations
- Respect for life and respect for all must be preserved in Harvey County
- Education systems, early childhood to colleges
- Small-town community - neighborliness is something not found as often in larger cities/ urban areas such as Wichita and Kansas City. The strength of the communities in Harvey County is the ability to come together and support one another (financially, emotionally, and spiritually)
- Commitment to community
- The history of the town and its architecture is what made us move from our previous home in Wichita. A lot of younger families now prefer a smaller town feel for their children. They can easily get that in Newton with a small commute to Wichita. With its history, comes a lot of open potential. Owners of older homes should be encouraged (possibly rewarded with tax breaks) to restore and maintain their home. Visitors to Newton often find themselves driving along and admiring the architectural beauty that is present
- Support of Bethel College; it adds a lot to a city the size and economy of Newton.
- Healthy rural environment, with small town amenities
- Comfortable
- Small enough county know big share of the rural people.
- Willingness to help others
- Connections/partnerships
- Culture - emphasis on individual and family rights and privacy
- Maintaining corporate development within, or adjacent to city limits. No island annexation
- The Sand Creek River trails
- Being able to develop rural housing without great cost
- The individual land/farming owners rights, the strong rural strength of agriculture. We must not allow what has happened in Lyon County and the influence of "outside" people and organizations with these direct goals of taking our agriculture community down. We do not want to be the next Nebraska/Kansas 30/30 -- to eliminate the agricultural communities. Yes, focus on better roads and bridges, clean up all cities, bring more businesses into Newton and other cities and better city housing, transportation issues etc; do not even begin to think that getting control of agricultural land/ regulations for developers to make more money will be the answer to improving the county. No to those Wind Mill Companies unless all that wind energy can lower our own Harvey County/City electric bills by over half directly! The checks are quite the temptation for a few. Just for your information: question 22 does not list Burrton for city of selection. Even though we are on the edge, we still consider ourselves as part of Harvey County
- Grocery store in every community
- Access to all services via good roads, bridges and supporting structures
- Building strong relationships with neighbors and peacemaking
- Livability. It doesn't have to be fancy but you want to live in a place that is nice, clean, well kept and friendly
- Open heartedness
- People being able to work together for the greater good of the community
- Nothing! It is a dying community that continues to slowly decline and lose ground to areas that are more progressive like Andover and Mazie [sic]
- Affordable living
- Strong manufacturing
- Good churches and families.
- Water ways
- Quality of rural life, minimal crowding of homes
- We need to make sure HC is a safe place to live, provides families safe drinking water, clean air, affordable places to live (everyone needs a home), and good paying jobs
- Parks

- Well funded law enforcement
- The land!! Would hate to see land being divided up into small acreage for rural housing communities like sedgwick [sic] county [sic]
- Regular folks living and building there [sic] home and life in the country. We currently discriminate against this and foster home growth in the county promoting segregation of wealth classes. And completely killing the American dream of building your own homestead. Instead we segregate and subsidize the rich
- Can't think of a single item
- The small colleges
- Ur [sic] ability to get done what needs to be done
- Towns should remain the core of business and social life. Spreading out along highways leads to further disassociation, less community identity, and the gutting of the center of town.
- Low violence and general concern for neighbor, the Kansas way of life. Good moral values
- Water is the most important thing for everyone. Harvey County needs to make sure that the quality and quantity of the Equus Beds is preserved for generations to come!
- The number of service providers available to residents (citizens.)
- Family. Kids want to live on family farms and should have the right
- The people, it is a great community
- Trust in each other

#30: List the one thing that most needs to be changed about Harvey County.

- Adopt the strong towns/complete streets paradigms for transportation, development, and redevelopment. This could lead to more effective/efficient use of tax dollars and utilities, and stronger tax base (based on tax revenue per acre), not to mention a better place to live
- Adjust hours so that services are available more than 8-5
- Everything should be considered
- Road conditions and preparedness and response to winter weather! The city NEVER pretreats roads and NEVER plows after snowfall
- The County Commission NEEDS to be expanded to at least 5 commissioners. Newton City Commission has more Commissioners than the County does. THAT NEEDS TO CHANGE YESTERDAY!!!
- The county commissioners
- Run down aesthetic. Too many scraggly,

dump, and unkempt houses and properties. There are multiple I can think of in Newton that should just be torn down! An empty lot would be less of an eyesore. Or even better, build something newer and nicer in its place! Don't destroy ag land when you can revitalize from within the town itself.

- Opportunities for healthy living / lifestyles
- Not enough daycare facilities
- Fire/EMS has poor support and funding from local city and county government.
- More available professional jobs
- Public transportation
- Retaining and supporting small businesses
- Affordable Daycare for 0-3
- Support local business
- It is impossible to get a home improvement loan on an old house in an amount that is needed. The appraisals don't compare to new homes, so old houses rot instead of getting fixed up
- Affordable and available single family homes
- Improvement in quality of jobs offered and availability of housing
- Taxes are too high for what we get in return
- Housing for professionals and their families including allowing county land to be turned into developments
- Attract more manufacturing to lessen the tax burden on residents
- Get rid of traffic cameras
- Everything seeming to be Newton or Hesston centered in terms of development or support from the county
- Attitu [sic]
- Transportation at all levels. Safe affordable and reliable along with other accessibility options if that is bike , rail or Interurban
- Maintaining a rural identity is what attracts people to live here and commute to Wichita. You need to maintain that identity while getting more job and amenities opportunities in Harvey county [sic]
- Quit following the current fads all the time
- Water, Utilities and taxes are too high
- Improve bumpy rural roads
- Up keep for some homes
- Avoid renewable energy. Leave that up to the individuals if they want to personally invest in that
- Property tax
- Get better at attracting new businesses
- The flood plan maps for most of the county, based on old inaccurate data.
- Protecting agricultural land from development
- High tech mfg

- The lack of trust in our government, the lack of respect of our professional advisers
- Add businesses to outlet mall
- I have no confidence in the local public schools
- Neglect of rural towns
- I don't know if this is something that needs to be changed, but I do believe that Harvey County should uphold the constitution of our nation and state
- Need to start an attitude of working together
- More restaurants, entertainment and affordable shopping
- The housing is pretty rough. Near Impossible to find an an [sic] apartment that less than in Wichita that isn't a dump. Why should our prices be more or the same as a big city?
- Investment in quality food options for small towns including basic groceries and quality (non fast food) restaurants
- Way to [sic] many law enforcement for such a small town
- Resistance to federal control of the land, health care, and control of the education of our children.
- Grocery store in Hesston
- The retention of our youth. Once they leave home for college or to start a family, they don't come back and settle here. We need more incentive to live here through better paying jobs or more opportunities. We are in competition with all of the surrounding communities. If they are doing something new that is attracting young families, we should strive to do it better.
- Lack of opportunities for those with more \$
- Create a new reputation for Newton to the area around us
- All of the trashy yards and homes in need of repair
- Need to get school ratings up
- More homes to attract outsiders in and give them an option to purchase. Even before the shortage, we had a shortage and are losing community members to areas in sedgwick [sic] county
- Rules regarding land acreage for building in the county
- Need positive changes with our school district
- Greater civic pride - needs to start with kids, adults too hard to change. Caring about others and how our communities look
- Needs fine dining
- The public schools. we are getting killed on people moving to newton [sic] because our schools are old and outdated
- Better economic growth in restaurant and job growth
- Better community
- Entertainment
- Internet access outside city limits
- Bring in more dining and recreational oppourtunities [sic]
- The quality and cost of Newton municipal water service is the one thing that most needs to be changed about Harvey County. The level of minerals in the water is unbelievable and leads one to have other concerns about its safety.
- Move from township govt to Co govt regarding road and bridge management
- Blind conservatism
- Quality of employment opportunities
- Develop a more tourist destination feel including a celebration event that Wichita wants to come to
- We need better management or people for recruiting new industry. Other counties are growing but we are not. We do not have the right people who can negotiate and get positive results for new business and industry to come, invest and stay here! cheaper water and electricity
- Prejudices by race, income
- Waste of money
- The willingness to pay the taxes that will provide excellent teaching and buildings to do so
- de-militarize local law enforcement
- The trains!!!
- build main street railroad bridge in newton [sic]
- Housing assistance for the poor
- Allow farmers to sell land for rural housing if that is their desire.
- Development of high quality, good-paying blue collar jobs
- The quality and expense of tap water. Water bill is nearly 2x Wichita per gallon while also being VERY hard water!
- Better/new high school building to attract families and build strong tax base. It's a must
- Outdoor trails for hiking & walking. Bird migration viewing at waterplant [sic] would bring people to Newton
- Tags and taxes to renew are like buying a new car! Why so high?
- Bedroom communities
- We need a better retail sector county-wide
- Need more large industries (jobs) in Newton
- Need less low paying jobs and more middle to high

income opportunities

- Look around, our county is aging. We need new younger leadership with fresh ideas and actions.
 - More walking paths
 - More affordable for business to expand building of current facilities or new facilities. With out such a high taxes
 - More services available to youth and families
 - Stop trying to be Sedgwick County
 - Zoning that protects rural ag
 - Retail- not Walmart
 - Too much fear Fear [sic] of change, of the future, of one another, of our differences, of failure.
 - Losing money on logistics park Also need better roads
 - Public transportation
 - Please update the library.
 - Entitlements. Tax breaks to retirement centers. Long term tax breaks.
 - Recycling [sic] options have dried up, and city/ county government does not care.
 - need to get movers and shakers back into government positions
 - Focus on what is here before spending a lot of money trying to get something new in - for example support existing businesses, current cultural place and activities first.
 - High property taxes
 - The UGLY trailers parked at the entrance to Newton from Hesston on Old 81 & Anderson. Whoever allowed that to happen should be fired!
 - Adequate healthcare for the poor
 - More quality housing options such as patio homes
 - the illegal drugs in our schools.
 - High utility costs and lack of shopping
 - City takeover of farms
 - Attract families Ann [sic] businesses.
 - public transportation
 - Need more restaurants
 - How slow things happen..announced and may be years until things get to final stage.
 - Avoid billing citizens for business propane and don't give us a 20 year payment if prices are sky high - notify us and pay for usage. None of surrounding counties have this. Poor management. Learn to negotiate contracts better.
 - taxes lowered
 - Reliable and affordable Broadband
 - More paths
 - Commissioners with better planning,
- improvement and preservation of a history
 - Child care and affordability to you [sic] families
 - WATER BILL / UTILITIES ARE TOO HIGH
 - More food/grocery options.
 - County needs to invest in businesses that reside in Harvey County that are expanding. Not just focus on the businesses they can bring into the communities; what are you doing to assist existing business; unrelated to manufacturing? the cities and counties need to do better.
 - Build an overpass. Decrease water prices. Stop giving money to a private golf course. Build more walking/ nature trails.
 - Lower property tax
 - Legislation requiring existing homes to be maintained. We have legislation on how a home should be built and we have legislation on how to scrape a house. Nothing in between which creates a situation of slum landlords and poor quality housing.
 - Better housing for low income families.
 - Cost of utilities
 - We need to look more towards future quality of life, not preservation of old ways
 - lack of diverse representation
 - More jobs
 - Support renewable energy projects.
 - stopping urban sprawl
 - Support local businesses
 - Taxes are high
 - Listen to public - not just go through the motions, and then spend the money anyway - i.e., already made-up mind as to action.
 - Growth
 - Halstead road between Halstead and Bentley needs to be improved.
 - More jobs, quality of roads
 - Get rid of drugs and tear down houses and buildings that are not livable and rebuild
 - Can't think of anything at the moment.
 - Increase environmental sustainability (transition away from use of fossil fuel, reduce waste, and protect land/water/air)
 - We need more millionaires. Seriously. We need more wealth in the county. More philanthropists. More rich donors to local causes. Wealthy people can fund the life enrichment parts of a community- arts, entertainment, specialty healthcare, philanthropic organizations etc.
 - Better tolerance of personal freedoms
 - Sales tax higher than Wichita
 - More diversity in government and law enforcement
 - the Good Ole Boy mentality that seems to permeate in the local governments and schools

- Retaining a skilled work force for the future
- Attracting new businesses
- More sustainable energy sources and preservation of natural resources
- Entertainment
- Expand sense of community [sic], bring different kinds of people into the community and welcome them
- Main street store fronts dilapidated
- more gun control
- Diversity, inclusion, and culture could be stronger
- Creating business and opportunity so that people in the county don't just go to Wichita for everything.
- Renovation of downtown
- Harvey County cannot continue developing into a bedroom community for Wichita. Housing developments can be built anywhere, but only our rich black soil can raise the meats and grains for thousands. We ARE a farming community, we must change and adapt to be a future proof farming community.
- Lower taxes. I tend to think about that when purchasing larger items, as 2 adjoining counties are 1-2% lower. I do try to shop local and support non-big-box stores.
- Finding ways to bring in outside money to our communities.
- East Lake Road needs to be improved.
- ALL housing prices are absolutely 110% abysmal [sic]
- Openness to change and adaption to current living and working trends.
- revitalize downtowns
- I see a lot of houses being built on farmland and it concerns me that while developers build big expensive houses we farmers have a hard time just keeping our basic infrastructure cared for. We need help with upkeep in our shelter belts, help connecting to city services like water and trash, and with improving our insufficient internet. If we lose our agricultural community, who are we? I would love for our local government to look at how expanding Medicaid in this state would improve health care services for us all -- please use your power to convince our local state representative to help us all out.
- Education
- The lack of retail and restaurant businesses both local and chain.
- More services for struggling families
- Run down houses.
- Neighborhoods are a hodge-podge of rentals,

multi-family units and private homes. I don't want to buy a home in a mixed up neighborhood. I want to buy a new home for 140K to 200K in a neighborhood without any rentals and not next to a shopping area and not next to the interstate. Can this be done in Newton or in Harvey County? I don't think so. I am also interested in small acreage living-3 to 10 acres-hard to do in Harvey County, very disappointing.

- We need more business!!!
- Increase taxes to develop infrastructure.
- Main street retail and services.
- Lower utility (water, trash, gas) rates.
- Marketing - Harvey County is home to excellent colleges, businesses, schools, agriculture, and fine arts talent, but people from as close as Wichita have no clue about the wonderful opportunities here. If Harvey Co. could advertise (even just around Kansas) the lifestyle, arts, education, and community feeling here, more people would come to live here. More people would come for vacations. More people would send their students to college here. More people would invest in the communities (financially and with their time).
- more sit down restaurants, especially small business restaurants
- increasing and keeping business so people don't have to travel to Wichita
- Childcare
- Why do people leave? Nothing to do. No high paying jobs.
- Access to reasonably paid jobs, adequate housing, and affordable transportation. Those pieces go hand in hand for those of lower income status. If even a piece of that puzzle is changed for those folks, it will impact the other areas.
- People need to invest in the High School. Support teachers.
- Downtown businesses
- Quality of schools in Newton so that all are equally desirable regardless of income makeup
- Move to renewable energy and much stronger environmental protection
- Local Business support
- Roads/Railroad crossings.
- Sit-down Restaurants
- More growth
- Education
- Stronger communication and partnerships
- Goal #2 on the comprehensive plan - Promote compact urban development in new areas adjacent to existing cities and discourage the

spread of scattered new urban uses in the urban fringe. (Somebody is playing with words here. Promoting development in "adjacent areas" or the "urban fringe" is by definition urban-sprawl. Focus on revitalizing efforts inside of city limits as they are today. There are enormous opportunities among the multitude of dilapidated buildings that have not been used for decades. Decentralize your budgets and mobilize many existing or new sub contractors to update, remodel or completely revamp existing. Harvey communities are fed-up with cities obsessed with plugging a few large prefab contractors into new apartment developments

- Consolidation of government.
- There are so many empty and dilapidated buildings--businesses on Meridian Rd, business spaces in the outlet all, and houses just everywhere. It would be nice to fix up what we already have before trying to build new places everywhere
- Our taxes are too high, I purposely shop in Wichita for this reason
- Agricultural/Rural housing availability
- Improvement of Newton (housing, medical,new businesses - all areas) - it is our hub and strength for Harvey County
- We need well-funded education
- More employment opportunities with good pay
- Limit developers converting farm ground for housing
- I am disappointed in the county's response to the covid pandemic
- We need transports alternatives. Millions are spent maintaining roads that are only safe for cars and trucks. Any paved road outside of a town is deadly for bikes and pedestrians.
- Political divisiveness.
- Feels like we are on a slow slide. Towns are starting to show "wear". Need to invest in schools, public areas, etc. Homes/neighborhoods need rejuvenated
- I feel like Main Street is starting to have more and more empty store fronts and buildings in need of repair
- Provide a path and real support to those struggling to make it
- Basic planning towards the future instead of being stuck in business as usual; I truly believe
- Newton is a dying community with poor education, employment, entertainment, arts
- Upkeep or elimination of rundown houses or buildings
- Expansion of affordable housing options
- Nothing. Very good place to live as it is
- Allow wind farms
- Progressive, pro-people policies
- Clean up downtown area: I consider this a building owners responsibility more than anything. But since some of them don't take care of it; I suppose the city could offer incentives to clean their building façade up. I hear so many previous citizens come back and comment that it looks like Newton is going downhill. It's embarrassing [sic]
- More focus on soil health in ag
- It has to take a progressive view toward evolution of itself
- Keep improving our educational opportunities.
- Housing cost and country homes
- An underpass under the railroad in Newton. There is too much waiting on trains
- How tax money is spent
- The 40 acre homestead laws
- Personal property taxes are way too high
- Hesston needs a grocery store
- Don't try to be just another Wichita suburb
- Making a MUCH better effort to make affordable, accessible, and effective, mental health care available in Harvey County. Our facilities are understaffed, underpaid, underfunded, and overlooked. The turnover it shameful! We are drowning under the weight of mental health issues in our cities, our county, and our schools! It's truly sad!
- Better parks, bigger lakes
- Allow more rural development (individual homes or subdivisions)
- Available high speed internet
- Accessibility to services - through a easily accessible transportation system
- Allowing more rural housing while protecting natural assets.
- We need to fill the industrial park
- We need more to attract new residents such as New School buildings, new libraries and new recreational facilities.

#31: What makes Harvey County a comfortable place to live?

- Cost of living, and #29 above
- Friendly people
- Good law and fire/EMS protection
- It's small enough to be manageable and close enough to larger cities to enjoy employment, school, and entertainment opportunities
- Freedom and really good, honest people
- Sma [sic] town feel. Close to Wichita
- Easy going pace of life. Folks are nice. For the

most part is a pretty affordable county to live in (though property taxes could always be lower). Harvey County is perfectly situated to maintain it's small town, rural feel, yet is close enough to the 'big city' of Wichita to pop down there for most anything extra you might need. Win-win

- Affordable housing and only 30min from work
- Climate, access to resources, semi-rural character, good neighbors
- The proximity to Wichita but without the big city atmosphere
- Near larger towns but still country feel
- The people
- Safety
- Variety of shopping, recreation, and events
- The farm land
- Community support
- Feeling of community and history
- Midwest, small town feel
- A number of qualities
- Rural atmosphere
- Community
- For a town it's size it's infrastructure and public services in general
- Stability
- Easy access to most things
- Our home, church and friends
- Clean air-friendly air-wonderful services
- Open spaces & medium expenses. Good health care available
- Mostly safe
- Close to almost everything
- The crime rate is fairly low
- Law and
- Home Town feeling/ not so commercial [sic]
- Nice towns that are not too big
- Relatively quiet rural living with mostly nice, respectful people
- Has everything I need accept [sic] for Costco
- Good healthcare, good water and sewer service, good streets
- Good neighborhoods and nice, approachable people
- Many opportunities to walk and bike
- The people and their care for others, small town living, not trying to be like Wichita, more traditional values. There are a lot of things that happen in Newton that are far better than other places Taste of Newton, Christmas parade, etc
- The rural lifestyle that is available, the small town caring communities, and the ability to worship the Lord freely make Harvey County a comfortable place to live.
- Good people, good community

- Hesston in particular is a safe, friendly small town with an active and engaged community and quality public education
- Freedom of its people
- Crime control. Kindness. Strong family values
- The amazing small town feel to every community in Harvey County. We are an incredibly safe county to live in because we keep crimes, crimes [sic]
- It's a short drive to anywhere.
- Affordability
- Being located close to the largest city in Kansas and all the goods and services it provides
- Culture
- Cost of living not as high as bigger cities
- Small town, but large enough to have grocery stores and services
- Low crime, affordable housing
- Country feel
- Quiet, low crime
- Reasonable population size, generally nice and respectful people
- Harvey County is a comfortable place to live because it provides a slower pace and a return to more traditional values.
- Good balance of jobs and services
- I can live in the country
- Smaller yet lots of accessible services
- Open space
- Small town atmosphere. College resources. Lack of traffic congestion. Major city resources within short driving distance
- Provides needed services and a reasonable price with a safe environment
- We have two collages [sic]. Newton is basically a clean town with a low crime rate. We have an extlent [sic] hospital and good medical care
- Size
- Lower costs
- It has a small town feel, two newspapers, a college, several museums/galleries, many helping organizations, and people who care about the community
- Enough of basic goods and services, adequate medical care, close to wichita [sic]
- Rural areas
- High quality education and generally affordable housing.
- Great churches, really good colleges and accompanying [sic] programs for the public, better than average medical services, high quality retirement/nursing care communities
- That balance between small town rural feel and suburban convenience
- Small town feel and close to Wichita



- Small and friendly
- Easy to get places
- Decent restate [sic]
- We have room to move around not crowded please keep it that way
- A relatively safe environment to live and raise children. Good ole Midwest Values
- Appreciate the strong cultural values that tie to my heritage, which is Mennonite and agricultural
- Great people, adequate services, good schools
- Low cost
- Small
- There really is not anything to exciting in Harvey County. I guess if you get used to being bored it is a comfortable place to live.
- Good parking, happy healthy kids
- Low key
- Easy access to services
- Good police & fire departments
- The citizens
- Size, basic amenities
- Restaurants, recreation, bike paths, senior living, stores etc.
- Safe place to live. Medical services are a plus. Few big-city problems
- Laissez faire attitude
- Generally friendly place to be
- Affordability - not much traffic - nice parks
- Small town with adequate resources for the middle class
- Ease of access to essential services
- Family
- Harvey County has always provided a reasonable and well sourced lifestyle. I'm concerned that changes are reducing those resources
- Easy to navigate
- The variety of social services provided by caring people
- Praying people - dependance on God. It's safe and nice here because
- of this, family values in community
- Easy access to healthcare
- It is not comfortable, it is existing
- Small towns and good families with above average availability to food and supplies
- SAND CREEK GOLF!, good housing, small town feel, Wichita is close
- My family is here
- Reasonable housing
- Not congested
- Walkability, shade in the summer, improved sidewalks, playgrounds and places for people to sit outside besides their own porch
- Having most needs close by
- Family atmosphere
- Value placed on community service
- Not a lot of traffic
- Relatively safe. Good schools.
- Small-town life, no traffic jams, with services within walking/biking distance, with a progressive attitude, supported by two good colleges
- It is rural yet close to metropolitan area
- No big cities !!!!!
- It's safe
- People are friendly and helpful
- Working to make things better
- The people and it's size
- It is away from the larger citys [sic]. We like the peace and quite [sic]
- Ethnic diversity, educational resources, local restaurant and food sources, nature and recreational resources
- Cost of living. Midwest values. Low crime. Easy access to Wichita.
- Low population and proximity to Wichita
- Friendly, helpful people
- Kind people and affordable goods and services
- Location, easy access to larger towns in Sedgwick, Reno, and McPherson counties
- Ease of travel and safe environment
- A small town feel with plenty of small businesses
- Space (not crowded) and safety
- Nice balance of independence and services
- The people are so nice
- Lower cost of living compared to other cities
- Smaller towns & general feeling of safety
- Easy access around town
- The open space of farm ground, the serenity of people that live in time with nature and understand that you can't eat money
- Being able to live in a rural area with accessibility to goods/services within a reasonable distance
- Water and food are easily accessible
- Its still got the smalltown vibe
- Slower pace of life, accessibility to large city and amenities within short driving distance.
- Access to education/health care and community
- It is mostly quiet
- Less drama
- The people are kind and welcoming. I feel safe in the county
- Rural lifestyle/recreation
- Amazing walking paths!
- The people who are kind. The overall belief in God and in the good of others
- Safety and ease of transportation
- Away from big city crowds, etc., but near when wanted
- A lot of wonderful folks live in Harvey County. The cost of living is affordable. And, basic needs can be met in close

- proximity
- Low housing prices
- Small town atmosphere, but everything is within reach (if you have transportation). Grocery, technology, and other necessities are close if needed
- Safe/small towns to live in. Close to the bigger city
- Harvey County is a comfortable place to live as it provides a small town safer feel for its residents
- Nice grocery stores. health clinics
- Quiet, easy pace
- Healthy rural environment with small town amenities [sic]
- Small town with decent amenities
- Slow pace, not crowded
- Good roads to move around and through the county. Cross roads of major highways to go any direction from home
- Small town life free of surveillance. Privacy. Respect for the individual and families
- Small town settings with easy access to larger metro area opportunities
- Small but not too small
- It has a cozy small town feel and people are friendly
- Right size community
- Low crime, smaller population and friendly people
- Quiet enjoyment
- Lower taxes than [sic] in Reno County....keep taxes low!
- Local community with easy access to Wichita
- Small towns where you feel pretty safe to live
- Small towns, nearby services and location
- Family atmosphere, easy drive to amenities of Wichita or Hutchinson
- Small towns with focus on community needs
- Small town atmosphere (but

- not too small)
- Hesston is a great town. The rest of the county is marginal so I would attribute most of the credit to local government and the opportunities to get outside and do things that they provide
- Elbow room
- Most of my family is here
- Wide open (rural) spaces
- Ease of commuting and parks and trails
- Cost of living versus quality of life
- It is small
- Small community living with highway access to Newton/Wichita
- Good neighbors, access to services such as medical/grocery, etc
- People mind their own business
- Police and fire protection, and good hospital facilities.
- Proximity to Wichita with rural zoning
- Commute to Wichita low crime less densely populated
- Peaceful and quiet
- Familiarity
- Quite country roads, ample wildlife
- People, amenities, cost of living
- Small town atmosphere in a rural productive agriculture setting
- For the most part people respect each other and are kind. There are good people living in our communities
- Population
- Low housing prices
- My clean and quiet neighborhood
- Good people. Community feeling
- The amazing technology that allows us to look at affordable housing on 2-5 acres ALL around this county
- Close to larger cities offering

- lower cost services.
- Small town feeling with a lot of conveniences.
- The small town feel, no matter what city you go to.
- Slower pace, multiple communities, all with great amenities and spirit
- The quiet and nature of citizens
- Close knit
- Honest people

#32: What type(s) of outdoor recreation are most important to you?

- Biking and Hiking
- Safe walking paths and safe parks
- All
- Walking, swimming
- Hunting, Fishing, Camping, Gardening, Hiking
- Boating and drifting
- Safe trails and areas that accommodate horseback riding. I also enjoy walking around town (Newton). Sand Creek's paths are always great. So glad the creek is finally back again!
- Camping, fishing, golfing, nature trails, water parks
- Walking, Bicycling, Camping
- Walking paths and hiking trails
- Any outdoor activity such as likes motor sports fishing hunting
- Dog park
- Parks, rivers, bike/trail paths
- Shooting, fishing, hunting. Wish we had a shooting range
- Walking, nature
- Sports
- Facilities for our youth to attract families
- Mini-golf
- Running, swimming, parks
- Hiking bike birds
- Safe and secure walking paths, water parks for the kids, good to better ball parks
- Sand Creek and the

enhanced Bike/Walk path that are along the creek

- Walking trails
- Golf walking
- Walking on the farm or bike path
- Water
- Playing with my boys outside in our yard!
- Lakes
- Lake activities
- Picnics, walks, bike rides, hikes in rural parks, on my property and nearby private woodlands and pastures and occasional ATV/dirt-bike tours throughout Harvey and Butler counties
- Walking and biking paths, baseball and softball, golf
- Everything that the parks provide. Would like a big Pickleball facility. Bike trails are great!
- Camping, hiking, biking, athletics at a low cost
- Parks, walking/jogging paths.
- Having safe, accessible bike and walking paths within and between Harvey County towns is my most important recreational priority. It is very challenging for a Hesston resident to bike safely to all points in town and also entirely unsafe to bike to Newton. I would like to see investment made in SAFE and efficient recreational paths to encourage more self-powered transportation and less gas powered transportation for short trips
- That which involves the natural elements of creation.
- Walking, horse back riding
- Really anything that allows me and my family to escape the cities and be involved with nature. The bigger cities and Sedgwick County get, Harvey County will be a major attractant to people who want to witness real nature.
- Blue sky and clean air and open spaces
- Access to pools year round
- Water options
- Water sports
- Need improved baseball fields
- Parks and paths
- Fishing, swimming, hiking
- Hiking, camping and backpacking
- Walking and biking are the types of outdoor recreation most important to me. The trails along the Sand Creek in Newton are a wonderful resource for a community of its size and provide an opportunity for citizens to reconnect with nature within their neighborhood.
- Hiking, tree management, fishing and just being outdoors
- Scenic walks and attendance at Bethel

outdoor sports

- Hiking, nature, relaxation. Eagle lookout. The best place to view sunsets
- Swimming, boating and biking
- Walking trails, summer swimming, festivals and car shows
- Music and cultural
- Parks, running and biking trails
- We need good baseball facilities; other surrounding areas have better. Improve bathrooms at parks
- Walking and biking areas... I live about 15 miles from Newton and don't mind traveling to town to enjoy the bike and walking paths... and the side streets... we don't need "fancy" BLUE SKY projects... we need common sense spending. We aren't a vacation destination and we never will be. Let's stop trying to be something we're not
- Specator [sic] opportunities
- Outdoor sports
- Having my own land to do what I want
- Walking/hiking, cycling, riding my motorcycle, gardening, spending time with family
- Water sports (boating)
- Farming
- Nature
- Green space
- Swimming, bike paths and Newton recreation center and YMCA
- Nature preserves with trees, hiking trails, bodies of water, beaches; these are scarce in Kansas
- Walking biking routes available for people who do not want to have to drive to work or shop
- Walking and hiking paths; wellness center
- All types but I primarily enjoy walking, hiking and biking. I have friends that hunt, fish and golf
- Riding horses and walking
- Walkable and rideable trails. Access to recreational facilities
- Youth to have activities that do not cost so much to use
- hiking, biking and exploring
- GOLF
- Horse and Ag related. Harvey County should construct facilities similar to Bar-K-Arena in Lyons, or Fair facilities like Lyon Co., McPherson Co. or even go a little bigger such as facilities located in Dodge City or Garden City. It wouldn't take much to attract a large amount of 4-H, FFA, AG equipment and animal related activities, rodeos, barrel racing, etc. We need better facilities for these activities.
- Pickle Ball courts
- Adult recreation leagues

- Outdoors parks/lakes/creeks/ponds for camping fishing and hiking
- Walking in natural prairie ecosystems and river/water-sheds
- None really. Walking paths I suppose. Safe road bicycling.
- Hiking, walking, hunting, canoeing, fishing, conservation and anthropology studies, skateboarding, birding etc
- These type of questions aren't material to infrastructure
- Trails for walking/running and biking and playgrounds
- Walking, hiking, biking, kayaking; pet friendly areas
- Arts/music, community events and casual athletics, parks and playgrounds
- Exercise, sports, fishing
- Space to walk on a well maintained safe road or path with nature
- Nothing specific, all are important
- Engaging activities, not just parks
- Golf, walking, biking, tennis
- Walking trails, bird watching, star gazing
- Walking, hiking, fishing, birdwatching
- Bird watching -- walks.
- Parks, disc golf courses, public fishing, outdoor venues for concerts/fine arts spaces
- Sports facilities!!!
- Sidewalks, parks
- Adequately maintained ball fields, playgrounds, and sidewalks provide opportunities for multiple age groups
- Bird watching. hiking. can't wait for bird boardwalk to go in
- Lakes and athletic fields
- Walking and biking routes free of auto traffic
- I wish the cheaper public golf course was back. What used to be Fox Ridge
- Hiking trails, access to rivers, streams, lakes
- Working with our farm work
- Walking and biking paths that are accessible for wheelchairs and scooters
- Non specific. I just like to get outdoors as much as possible
- County Parks
- places to hike, walk, and bike (sidewalks and bike lanes around town)
- Ball park facilities - complex for soccer tournaments, baseball, softball!!! We are always leaving our county and going to other counties with our money - food, hotels, complex/tournament fees! Indoor basket and volleyball complexes - we go to Wichita for all of these
- Camping - need better facilities
- Clay shooting, all sports and walking, jogging
- Good walking paths like the one near Bethel College
- Bicycling, hiking, play/adventure areas for kids. Anything else outside that is t [sic] organized sports
- Nature preserves with walking/hiking paths
- Biking, running, swimming, and rock climbing
- Safe, landscaped walking and biking paths
- Golf, trails, good roads for driving
- Safe, well-lit paths for running/walking/cycling; including safe, well-lit neighborhoods with smooth sidewalks and roads
- Not a factor for me
- City parks bike and walking paths Swimming at East Park
- Safe Walking and biking trails.
- Agriculture
- Large fires
- Safe neighborhoods to walk.
- Parks and lakes...AND their upkeep!
- Youth sports
- Walking trails- accessible by all ability of persons. Swimming pools - affordable for all. Ball fields that bring communities together to root for their team
- Parks for kids
- Concerts