

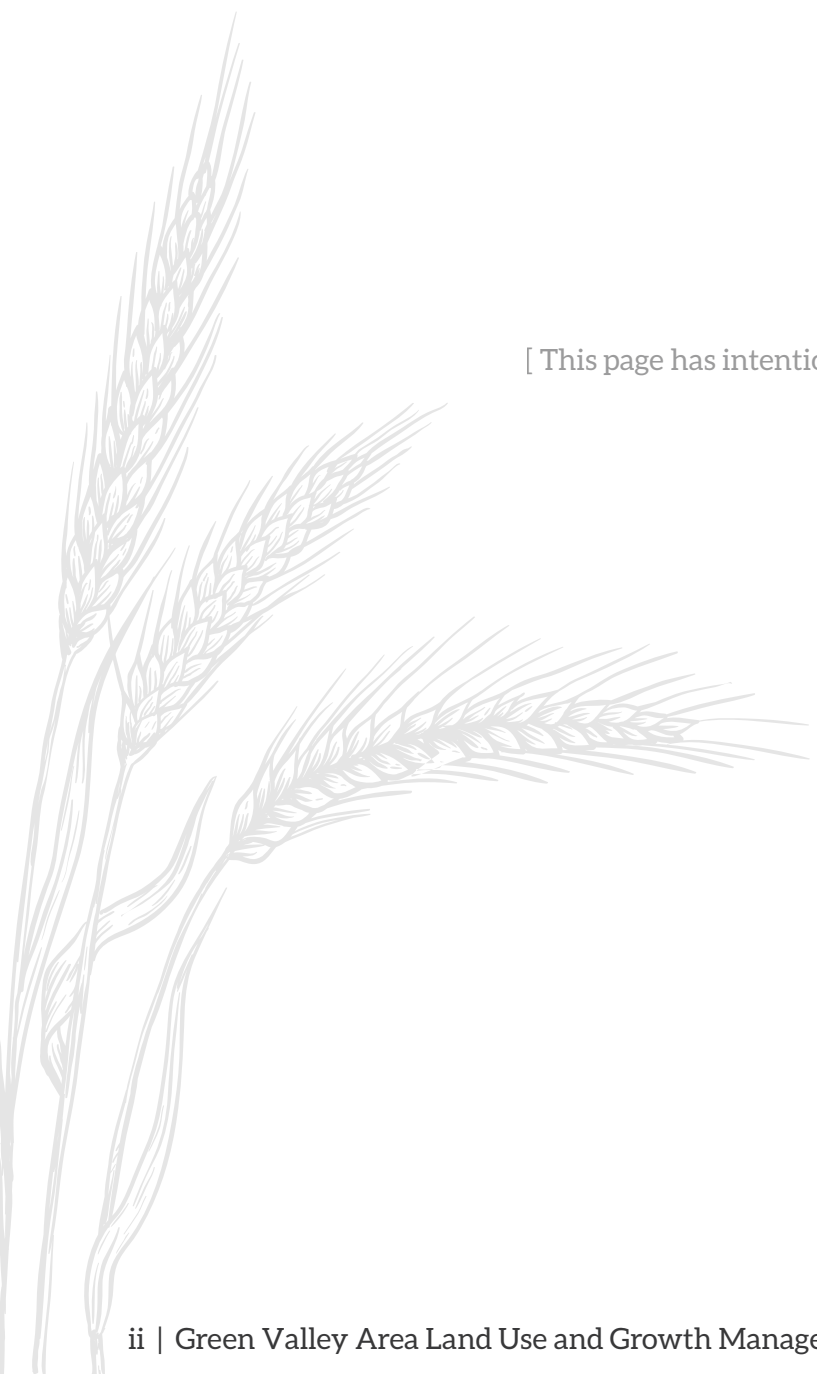
Green Valley Area Land Use and Growth  
Management Plan 2040

# The Future Area Report

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Adopted October 21, 2019



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# The Future Area 1 | INTRODUCTION

The *Green Valley Area Future Land Use and Growth Management Plan 2040* document resulted from a 12-month planning and citizen involvement process. The plan's findings and recommendations focus on the physical and economic aspects of the Area's projected growth and development in the coming years. An analysis of historic growth patterns and issues was summarized in *Exhibit A, Population Outlook and Exhibit C, Existing Area Report*. This Plan provides guiding principles, goals, and strategic action priorities that will help local officials and staff in determining the location, financing, and sequencing of public improvements; administering development regulations; and guiding investment efforts. The plan also provides a basis for coordinating the actions of many different functions and interests within and outside of the Area's governing bodies.

This plan analyzes the Green Valley Area at a granular level to direct the Area's vision for the next 20 years. At its core, this plan is a framework based on thoughtful community discussion and input regarding the current and future challenges both real and perceived occurring in the Green Valley Area. This Plan serves as a guide for Area leaders to shape its future through thoughtful long-range planning to accommodate and direct its projected growth.

## AREA PLAN FOCUS SECTIONS

Land Use and Development

Transportation and Mobility

Growth Capacity, Infrastructure,  
Recreation, and Natural Resources

Economic Opportunity

## WHY THIS PLAN?

The Green Valley Area is facing tough choices. Development is going to continue and create greater strains on public infrastructure. Also, the pace of development does not appear to be slowing down. Lack of a long-range vision can inadvertently result in unintended consequences such as increased traffic on major thoroughfares, incompatible land uses next to one another, overbuilding of certain land use types, and inefficient use of public facilities. A long-range plan provides the guidance needed to decision makers to better control its future rather than simply react to a development plan currently under review.

## PURPOSE

The Green Valley Area Plan is specific to the Area's unique circumstances and was purposefully composed in conjunction with the larger County Comprehensive Plan effort. Area leaders can use this plan to direct future land use decisions and growth management. This plan specifically:

- Considers "big picture" implications and consensus for the Area's future growth patterns;
- Examines future housing stock needs and choices;
- Assesses transportation patterns and future system needs; and
- Develops strategies for future enhancements to the recreational, open space, and quality of life issues for Area residents.

The *Green Valley Area Land Use and Growth Management Plan 2040* is aimed at ensuring that ongoing development will proceed in an orderly well-planned manner and will not overburden public facilities and services, while striving to enhance residents' quality of life.

Ultimately the goal of this plan is to state the intentions desired for the area's physical development, to direct infrastructure investment towards those means, and to create a greater level of predictability for residents, land owners, developers, and potential investors.

## WHY NOW?

Growth has come to the Green Valley Area, and is projected to continue (see *Exhibit A, Population Outlook*). While the development of the Pottawatomie County Comprehensive Plan was underway, County leaders realized that, given observed residential growth in the Area, that now presented an opportunity to analyze this growth, capitalize on efficiencies from the County's plan process, and better understand the implications of continued Area development. This plan looks broadly at key stakeholder issues and reflects the kind of community residents strive to be by carefully considering the balance of land uses, facilities, and services that are developed in a pattern consistent with resident's values. This plan also helps to ensure the long-term protection of the Area, and to make sure Area residents have a voice in this plan through the public participation process.

Another timing issue to consider is the ongoing Green Valley Area governance discussion. Now is the time for Area residents and officials to formally state their long-term vision of their community. The development of this plan was deliberately timed to coincide with the evaluation of potential future governance options to make sure citizens had the ability to weigh-in on their future and voice concerns before the governance issue is decided.

## HOW TO USE THIS PLAN

At its core, this plan document guides the daily decisions of local representatives to carry out the vision established in the subsequent chapters of the plan through the creation of a policy framework. This framework is valid regardless of the ultimate authority responsible for making these decisions. It was purposefully composed with the input of local residents and stakeholders to represent their desires for the ultimate build-out of their community; therefore, the goals of this plan are relevant to and can be adopted by any future governing bodies.

This plan will guide their evaluation of approvals for new residential and commercial development, expenditures for area enhancements, routine maintenance, ordinances that govern the development of Area properties, and pursuit of grant funding to help achieve the strategic goals of this plan.

It should be noted that this Area Plan is not a “cure all” for every tough problem and decision the Area will face. This plan focuses primarily on the land use and growth management of properties within the study boundary to help future governing institutions whether that be a new set of leaders or continue to be the representatives of Pottawatomie County, in the physical planning arena. Keeping these considerations in mind, and following standard practice for long-range planning documents, the action items in this plan are general in nature to ensure the ongoing applicability to the Area and its residents.



## PLANNING AUTHORITY

This Area plan is an extension of Pottawatomie County's Comprehensive Plan. Counties in Kansas derive their authority for Area planning from the State. Kansas state statute 12-747 states "A county planning commission is authorized to make or cause to be made a Comprehensive Plan for the coordinated development of the county, including references to planning for cities as deemed appropriate."

## THE FUTURE AREA

While *The Existing Area* report provides background and insights about the Green Valley Area as it is today, *The Future Area* portion of this Plan focuses on the Green Valley Area as it intends to be in the years ahead. These aspirations are presented in topic sections as listed on page 1. Each topical section highlights key issues and considerations followed by a Framework for Action portion. A final section on plan implementation considerations, priorities, and procedures rounds out *The Future Area* portion of the plan.

## THE EXISTING AREA ENGAGEMENT

Community and leadership engagement activities during *The Existing Area* phase included:

Discussions with representatives of County departments.

Nealy 300 Area-wide community surveys completed



A series of meetings with a the Area Plan Steering Committee.

Over 500 total public comments.

## Guiding Principles

A guiding principle expresses a basic value that applies to any future decision regardless of the governance structure in place. Through the process of preparing this plan for the Green Valley Area, five overarching guiding principles emerged from public comments and research efforts. (GP1, GP2, and GP3 are adapted from the County's Comprehensive Plan, GP4 and GP5 are specific to the Green Valley Area.) The Area's guiding statements are:

**GP1—** The Green Valley Area will be **QUALITY-FOCUSED** and seek long-lasting value in its approach to public and private development and infrastructure in the Area.

**GP2—** The Green Valley Area will be **COLLABORATIVE** in its approach to big picture issues, including infrastructure, transportation, emergency management, and economic issues, forming partnerships and actively participating and having a voice in regional decision-making.

**GP3—** The Green Valley Area will be **ADAPTABLE** as it plans for its future by continuing to build on its historic industries, while investing in elements that will make the Area stronger and resilient to economic trends and other changes.

**GP4—** The Green Valley Area will be **RESPONSIVE** to changing economic conditions and preferred development types to ensure the continued success of future residential and commercial development opportunities.

**GP5—** The Green Valley Area will be **PROACTIVE** about pursuing opportunities to provide oversight and funding needed to ensure that the necessary infrastructure and facility upgrades are addressed at the time of development.

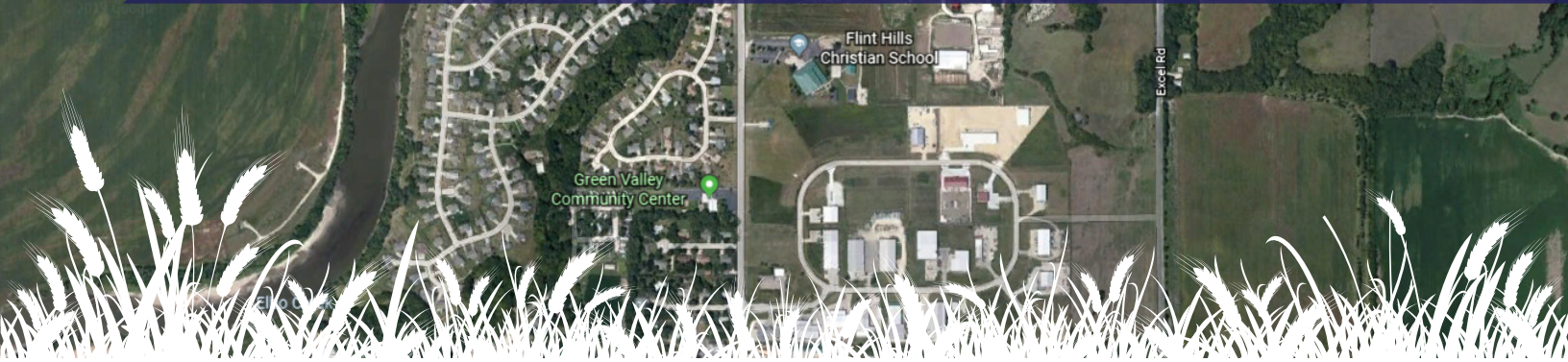


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# The Future Area 2 | LAND USE AND DEVELOPMENT



This plan section establishes the necessary policy guidance to enable Area leaders to plan effectively for the future development of the Green Valley Area. Sound land use planning is essential to ensure that decision makers are prepared not only to serve anticipated public infrastructure and service needs, but also to maintain the desired character of the Area while addressing development pressure.

Land use considerations are integrated with all other components of the Area Plan. For instance, the transportation network provides access to land, which influences the type and intensity of development. The provision or lack of public utilities can also dictate the location, amount, and timing of development. Similarly, proximity to natural areas and public facilities promotes public health and safety at specific locations and, as a result, affects development potential. Site design and development character shape community aesthetics and, thus, the perceptions held by local residents and those considering investment in the Green Valley Area.



## WHAT WE HEARD

Development should contain **single-family housing, duplex** and **limited or no apartment buildings**

**Commercial and industrial** uses should be **separated from residential developments**

There's already land for employers/industry **don't add any more**

Locate commercial **primarily along US-24** between Excel and Lake Elbo Roads

**Industry and employers** should be located **off of US-24**

Industrial (manufacturing) should be located **out of sight** along US-24

**Shopping choices** should be expanded down US-24

**Commercial possibly off of Junietta** once the **new elementary school** is opened

There is shopping within **five minutes in Manhattan**

Let the **market decide**

Slow down building **multi-unit apartments**

There is a need for **more affordable housing** (assisted living, mobile home parks, nursing homes, etc.)

**No** more housing

There is a lot of **unused commercial space in the Manhattan mall**, Academy Sports shopping plaza,  
**how much more can the area support?**

Let **public transportation** drive building, not the other way around

**The US-24** corridor seems most fit for retail use **due to visibility from the highway**

It would be best to **keep industry limited** within existing business parks and  
**extend it east to Lake Elbo Road**

Limit **spot zoning**

# LAND USE AND DEVELOPMENT FRAMEWORK FOR ACTION

## Key Issues and Considerations

The following key issues and considerations related to *Land Use and Development* were identified through the planning process. These essential items should be kept in mind while associated strategic action priorities are pursued in the coming years, and within the context of related guiding principles and goals for *Land Use and Development* as outlined later in this section.

- Growth in the Green Valley area has been uneven and focused north of the US-24 corridor in Blue Township. This new growth has created a strain on existing infrastructure and hastened the need to add new capacity to these systems.
- As residential development continues, demand for service, commercial, and employment uses will increase.
- New housing developments are relatively uniform in character and price point.
- As the Green Valley Area's growth is directly tied to the growth of the City of Manhattan and completion or expansion of regional job centers, coordination with the City of Manhattan and Riley County is essential.

The Land Use and Development Framework for Action is organized in three tiers: (1) Guiding Principles, (2) Goals, and (3) Strategic Action Priorities. These topics are intended to coordinate with and support all aspects of the Area Plan. The Strategic Action Priorities convey tangible actions that will, over time, achieve the Goals of this chapter in line with the Guiding Principles.

## GUIDING PRINCIPLES

Three of five guiding principles relate most to *Land Use and Development*.

**GP1—** The Green Valley Area will be **QUALITY-FOCUSED** and seek long-lasting value in its approach to public and private development and infrastructure in the Area.

**GP2—** The Green Valley Area will be **COLLABORATIVE** in its approach to big picture issues, including infrastructure, transportation, emergency management, and economic issues, forming partnerships and actively participating and having a voice in regional decision-making.

**GP3—** The Green Valley Area will be **ADAPTABLE** as it plans for its future by continuing to build on its historic industries, while investing in elements that will make the Area stronger and resilient to economic trends and other changes.

## GOALS

1. **Site** new growth in appropriate locations with supportive infrastructure and mechanisms to financially support increased demand on services.
2. **Preserve and enhance** existing open and green spaces to provide recreational opportunities to existing and future residents.
3. **Plan** for the strategic development of locations that take advantage of existing infrastructure and limit the expansion of urban style development away from large tracts of land that should be preserved as productive agricultural property.

4. **Ensure** consistent high-quality expectations for development, supported by updated development regulations, standards, and building codes.
5. **Provide** a variety of housing character types and sizes to accommodate the needs of existing and prospective residents and expanding local workforce.

## STRATEGIC ACTION PRIORITIES

1. Ensure that new patterns of development, both residential and non-residential, are compatible with their surroundings. Non-residential uses should be evaluated for compatibility prior to development in or near residential areas.
2. Encourage the development of a diversity of housing densities, sizes, and development patterns within areas of existing development and growth. Both rental and for-sale housing of varying sizes and price points should be encouraged within appropriate locations of the Green Valley Area. Life-cycle housing and housing that allows for aging in place should be encouraged.
  - › Develop a palette of housing options to provide guidance to the development community regarding acceptable scale, density, and architectural standards for new housing types.
  - › Create a framework that evaluates new housing proposals based on the character derived from a look and feel that is compatible with the community, but may vary in size, shape and type of construction.
  - › Consider locating smaller housing types with the varying slopes and distinct architectural features of the Area to encourage a variety of housing types.



- › Compatibility of residential uses should be closely examined prior to being permitted near intense agricultural/farming areas.

3. Concentrate commercial and business development in locations that are appropriate for these uses and within close proximity to their target markets/employees, existing transportation networks, and similar businesses categories.

4. Develop subdivision, zoning, and building code amendments to ensure high-quality development in the Green Valley Area. Work with the development community, residents, Pottawatomie County Economic Development Corporation, and neighboring jurisdictions to develop and adopt codes based on existing best practices and outcomes expressed by Area residents.

- › These codes should include provisions for the upgrading/installation of new infrastructure based on direct impacts from proposed developments.

5. The Pottawatomie County Comprehensive Plan includes a recommendation that a formal review process for new development should be established to ensure development is resulting in desired development patterns. Given the pace of development and effects on related infrastructure, this sort of process should be inclusive of representatives from all affected taxing districts and infrastructure providers to ensure a coordinated approach to development approvals. Consideration should be given to including a Green Valley Area representative for Area projects.

## DIVERSE HOUSING NEEDS

Housing needs are not static. Needs change over time as people move through different stages of their lives.

### The Housing Life-Cycle

The availability of multiple forms of housing prevents polarization of residents in one age, income group, or social status. As one generation of residents moves through its life-cycle, it can move into the housing provided by the previous generation, just as the next generation will move into the housing being vacated. This evolution is facilitated by the provision of diverse housing by type, value, and preferences. For example:

- Affordable rental units for young people just beginning to enter the workforce, single parents, and empty nesters looking to downsize;
- Affordable single-family units for first-time home buyers and young families;
- Larger single-family housing for people with growing families and/or incomes;
- Empty-nester housing characterized by small size, but higher quality, and lower maintenance;
- Housing for seniors and the disabled that accommodates physical limitations;
- Assisted living environments to provide health and medical care.

## Housing Choices

Similar to the housing life-cycle, a variety of housing choices and price points also create a community that can support a variety of individuals and families such as local workforce, teachers, public servants, and business owners that all have different incomes and housing needs.

Another issue affecting housing choice is changing preferences and circumstances that impact the traditional housing life-cycle. Individuals and families are deferring their purchase of traditional single-family detached homes for a variety of reasons including:

- Personal preferences;
- Exiting debt (student loans);
- Delaying having children until later in life;
- Desirability of walkable compact neighborhoods;
- Increase rates of changing jobs and increased desire for mobility;
- Older workers delaying retirement; and
- Older single and divorced individuals.

Cost, availability, generation preferences, marital status and debt are changing the type of housing that appeals to multiple market segments:

- Young professionals may choose to rent much longer than previous generations and have multiple roommates.
- Empty nesters may downsize to multi-unit owner-occupied condominiums or townhomes with no yard maintenance responsibilities.
- Workforce housing is appealing to both recent high-school graduates and older manufacturing employees.

These trends reinforce the need to create a framework to attract a variety of physical housing types and a set of diverse housing options is not a one size fits all proposition in the Green Valley Area.

## TYPES OF NEW HOUSING

Special consideration regarding the character of the surrounding community needs to be taken into account to ensure that new developments (regardless of size and ownership status) are consistent with the expectations of residents, are accommodated by existing or future infrastructure, and are appropriate in the local community. See **Figure 1, Housing Choices** for examples of housing types that fit within the context of the Green Valley Area, but can be leveraged to create a variety of housing choices for various demographic constituencies.

## AGING IN PLACE

The Centers for Disease Control and Prevention (CDC) define aging in place as “the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level.” If needed, those aging in place may receive care or assistance by paid or unpaid (often family) caregivers. As gerontology literature recognizes, older residents renegotiate how - and indeed if - they can continue to stay in their homes as their preferences and circumstances (health, finances, relationships, and family and social supports) shift over time. While there is no universally accepted definition of aging in place, many researchers, advocates, and commentators point to the same list of elements needed to make remaining in one’s home both possible and desirable:

- Affordable, secure, and physically accessible housing;
- Affordable, safe, and reliable transportation alternatives for those unable or unwilling to drive;
- Opportunities to engage in recreational, learning, cultural, volunteering, and/or social experiences; and
- Options for in-home health care and/or assistance with activities of daily living (ADLs) if needed to preclude a move to congregate care.

## Figure 1, Housing Choices

The Green Valley Area can benefit from a variety of housing options to ensure there are a diversity of unit types to appeal to the individual preferences of all potential residents. Previously it was assumed that individuals and families would choose a specific type of housing unit at set phases of their lives. However, based on changing personal preferences, this cycle of housing can no longer be assumed. A person's housing choice is now more frequently dictated by the type of housing that best fits their circumstances and preferences. **Figure 1**, illustrates how different housing types appeal to a variety of individuals and families, as they may move in between various phases of their lives. Still, each housing type is more likely to appeal to certain type of buyer. These "primary" residents have been identified with icons that showcase their housing preference and key demographic information.



## Housing Types

The Existing Area Plan notes that the housing stock in the Green Valley Area is mainly comprised of single-family detached homes. As described on page 12, the lack of diversity in housing contributes to issues regarding affordability and the ability for residents to stay in the Green Valley Area through all stages of life. Diversity of housing types allows for transition in housing to occur. Beyond the traditional single-family home or apartment complex housing can be divided into a variety of categories. Below are a few examples of housing types that may fit will into the Area’s housing mix and create a range and variety of housing options needed to accommodate residents in various stages of their life.



### Duplex and Triplex Housing

Duplex housing consists of two attached single-family units that share a common wall. These can either be side by side units or vertically stacked. This home type can also be configured with three units to create to create triplexes. These types of structures can be rental or owner occupied and fit seamlessly into a variety of neighborhoods.



### Row Housing

Row housing are typically 5 to 8 vertical units of attached single-family homes laid out horizontally and are separated by a common vertical wall between two units. Structures of these designs are often used to create buffers between commercial development and less dense single-family developments.



### Low Density Multi-Family Homes

Multi-family homes provide a viable alternative to the single family home, and can be designed to appear as large scale single-family structures with multiple stories and provide opportunities for both renters and owners. Small four-unit models can be mixed in with duplex and triplex development or even single-family home developments. Structures of this design also are used to create buffers between commercial development and less dense single-family developments.



### **Courtyard Housing**

This category offers the benefits of a row house, with the added “twist” of entry through a courtyard. Courtyard homes may be incorporated into innovative development techniques to include playgrounds, a community center or a forested green space and are designed to fit into the context of the surrounding setting. These types of developments can be placed on harder to develop sites with steep slopes or natural areas since they can be designed to work around those features.



### **Tiny Homes**

The term, “tiny houses,” refers to a social movement where people are choosing to downsize the space they live in. The typical American home is around 2,600 square feet, whereas the typical small or tiny house is between 100 and 400 square feet. Tiny houses come in all shapes, sizes, and forms, but they enable simpler living in a smaller, more efficient space. A private rear yard is an important community-enhancing element. This type of unit creates opportunities for workforce housing and an initial way to purchase a home for younger buyers. Like courtyard housing, they can be designed around natural and sensitive areas to provide more common open space while preserving the natural “feel” of a site.

# FUTURE LAND USE AND CHARACTER MAP

## Character Classifications

A character-based approach to community planning looks beyond the basic designation and use of land (residential, commercial, industrial, public/institutional, etc.) to consider the scale, placement and design of buildings and associated planning of sites, as well as the aggregation of uses within neighborhoods, districts, and corridors. Whether new development or redevelopment, and whether private or public construction, the pattern of land use – including its intensity, appearance, and physical arrangement on the landscape – will determine the character and will ultimately contribute to the image of the entire community over the long term.

In the community character spectrum, the four main character designations are **Rural**, **Suburban**, **Auto-Urban**, and **Urban**. These are common terms that should bring immediate images to mind as one thinks of traveling from the center to the outskirts of a typical community. Over the years, and particularly since the advent of widespread automobile ownership in the 1920s-1930s, sizable portions of many communities have developed in an “Auto-Urban” pattern, which falls in the range between Urban and Suburban.

Community character accounts for the physical traits one can see in an area which contribute to its “look and feel.” A character-based approach to land use planning focuses on key variables, including development intensity, which encompasses the density and layout of residential development; the scale and form (bulk) of non-residential development; and the amount of building and pavement coverage (degree of impervious cover) relative to the extent of open space and natural vegetation or landscaping.

How the automobile is accommodated is a key factor in distinguishing character types, including street design, parking, and the resulting arrangement of buildings on sites.

It is this combination of basic land use and the characteristics of the use that more accurately determines the real compatibility and quality of development, as opposed to land use alone. Aesthetic enhancements such as the design of buildings, landscaping and screening, sign control, and site amenities also contribute to enhanced community character.

## Character Themes

The range of community character classifications and their land use categories used in this plan are as follows:

### Class: Rural

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- Rural—Preservation
- Rural—Agricultural

### Class: Suburban

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- Estate Residential
- Suburban Residential

### Class: Auto-Urban to Urban

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- Single-Family Detached Residential
- Mixed-Density Residential
- Multi-Family Residential
- Neighborhood Commercial
- General Commercial

### Class: Business and Office

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- Business Park

### Class: Open Space

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- Parks/Open Space/Natural Areas

The more readily identifiable character categories include:

- Auto-urban to urban (general) character of commercial development along US-24 corridor and other arterial routes;
- Urban residential development north of US-24;
- Light industrial character along US-24;
- Areas of Suburban Residential character, particularly along the eastern and northern boundary of the Area;
- Areas of larger lot Rural (Estate) Residential, generally north of Junietta Road and east of Lake Elba Road; and
- Undeveloped, rural agricultural character surrounding the more recent development in the Area.

## Land Use Classifications

To address the amount of development pressure facing the Green Valley Area, this plan defines sub-categories of the land use character classifications to assist decision makers.

In the following several pages, each land use classification is described in detail, with respect to development types, the related general character classification, predominant characteristics, intensities, and applicability of current zoning districts (as highlighted in *Table 1, Designation on Green Valley area Future Land Use and Character Map Relative to Zoning Districts*). Together, these land use classifications and categories compose the *Future Land Use and Character Map* see (*Map 1, Green Valley Area Future Land Use and Character Map*). This map is intended to show the general pattern of uses anticipated and/or desired in and around the Area in the years ahead. The map indicates the land use type that is expected to predominate in an area based on what is already on the ground and will likely remain, or possibly evolve over time, and projected new development.

Specific locations are not known in some cases, such as for some future public facilities (e.g., schools, fire stations, etc.), as well as places of worship, that often locate in or near primarily residential areas. Some uses are highly market-driven, with their timing and particular location dictated by the extent and pace of other types of development.

Certain areas are identified with optional land use designations. These are shown in areas that may face alternate development scenarios based on outside influences such as the construction of a second Blue River crossing or the attraction of businesses with large job creation potential. These alternatives also account for the eventual emergence of new housing concepts, the location and extent of which can be difficult to predict ahead of housing market trends and cycles, and developer interest.

The remainder of this section describes the land use categories shown on the Green Valley Area *Future Land Use and Character Map*:

- Rural/ Agricultural Preservation Area
- Estate Residential
- Suburban Residential
- Single-Family Detached Residential
- Mixed-Density Residential
- Multi-Family Residential
- Neighborhood Commercial
- General Commercial
- Business Park
- Parks/Open Space/Natural Areas

## RURAL / AGRICULTURAL PRESERVATION



This designation consists of lands that are sparsely developed, with mainly natural areas, agricultural production and very low-density residential as the primary uses. These areas are located around the periphery of the Green Valley Area boundary. Floodplain areas may also retain their rural character over the long term given their unsuitability for land development.

### Development Types

- Agricultural uses
- Residential homesteads
- Public/institutional uses
- Parks and public spaces, nature preserves, and passive recreation areas

### Characteristics

- Rural character from wide open landscapes, with minimal sense of enclosure and views to the horizon unbroken by buildings in most places.
- Scattered residential development on relatively large acreages, resulting in very high open space ratios and very low site coverage, and providing greater detachment from neighboring dwellings than in single-family residential areas.
- Typically no centralized water or sanitary sewer service available. Also much greater reliance on natural drainage systems, except where altered significantly by agricultural operations or regional storm water management projects and/or infrastructure.

## ESTATE RESIDENTIAL



This designation is for areas that, due to public service limitations or prevailing rural character, should have limited development activity other than large-lot residential. Such areas provide a transition between the Area's rural fringe and more densely developed subdivisions. Lots in this category typically provide substantial openness and separation between individual dwellings.

As a result of larger lot sizes, open space and vegetation are intended to be the more dominant views. The buildings remain the most apparent, dominant forms, with the landscape assuming a secondary role. To achieve an Estate Residential character, the design of these subdivisions must actively seek to imitate more rural areas through the use of rural street cross sections, significant open space throughout the development, the use of rural fence types to divide properties, the preservation or planting of native vegetation along property boundaries, and generous building setbacks on all sides.

### Development Types

- Large lot, single-family detached residential dwellings set back from rural roads
- Some agricultural storage and support uses, e.g., barns and related outbuildings
- Ornamental landscape enhancements and manicured lawn areas

### Characteristics

- Scattered residential development on relatively large acreages (greater than three acres), resulting in very high open space ratios and very low site coverage (sometimes with residential "estate" areas providing a transition from rural to suburban densities).
- Individual wastewater systems.
- The driveway is a dominant element in the composition of the manicured landscape. Garages are often free-standing and situated to the side or rear of the main dwelling.
- Transition between suburban and rural character areas, with further progression along the character spectrum toward rural environments where the landscape is visually dominant over structures.
- Should be limited to within roughly one mile of an existing paved road.

## SUBURBAN RESIDENTIAL



This designation covers areas with predominantly single-family residential uses.

### Development Types

- Detached residential dwellings
- Planned development, potentially with a mix of housing types and varying densities, subject to compatibility and open space standards
- Public/institutional uses
- Parks and public spaces

### Characteristics

- Residential neighborhoods with more openness and separation between dwellings compared to residential areas with smaller lots (single-family detached residential). Lots typically one and a half to three acres in size.
- Individual wastewater systems.

## SINGLE-FAMILY DETACHED RESIDENTIAL



This designation covers areas with predominantly single-family residential uses at typical in-city densities.

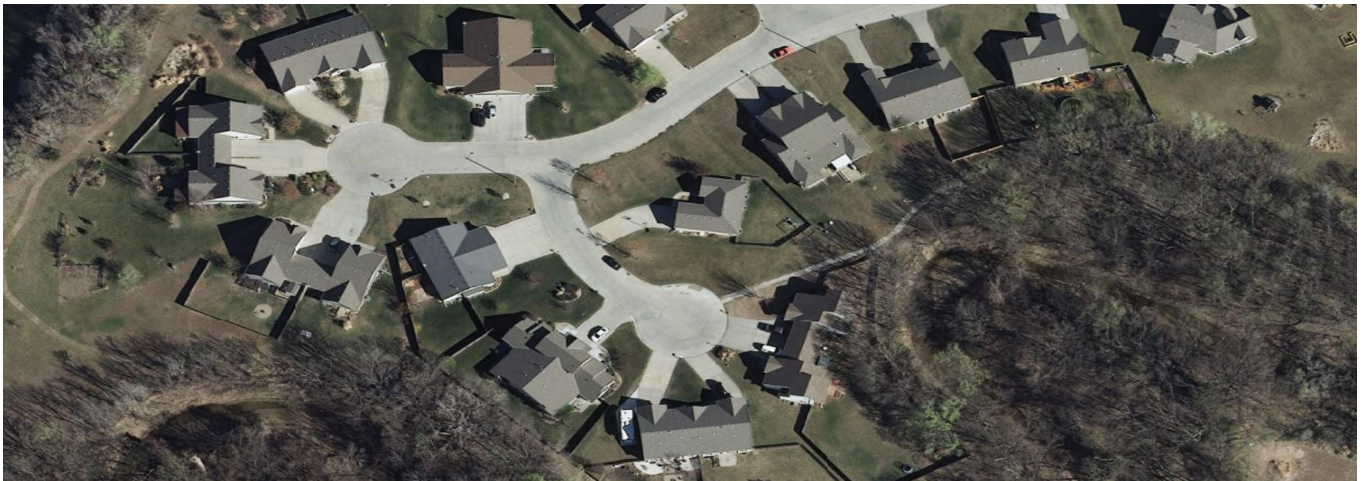
### Development Types

- Detached residential dwellings
- Manufactured home park
- Planned development, potentially with a mix of housing types and varying densities, subject to compatibility and open space standards
- Public/institutional uses
- Parks and public spaces

### Characteristics

- Residential neighborhoods with less openness and separation between dwellings compared to residential areas with larger lots.
- Potential for auto-oriented character, especially where driveways and front-loading garages dominate the front yard and building facades of homes. This can be offset by “anti-monotony” architectural standards, landscaping and limitations on “cookie cutter” subdivision layouts characterized by straight streets and uniform lot sizes and arrangement.

## MIXED-DENSITY RESIDENTIAL



This designation involves areas devoted primarily to development with multiple residential units within close proximity to one another, at a greater intensity (i.e., units per building or acre) than found in single-family detached residential developments. Site design and open space standards may be applied to offset the relative density of this residential type, to ensure adequate recreational space on site for residents, and to provide buffering and screening between this and less intensive residential uses. This use category can also provide a transition from primarily residential to mainly non-residential areas. Buildings are situated to take advantage of shared public infrastructure such as parking lots, water and sewer lines, and shared access onto public streets.

### Development Types

- Detached single-family residential
- Multi-unit attached residential (four units or less) in concentrated development, whether for rent (apartments) or ownership (condominiums)
- Townhomes
- Duplexes
- Triplexes
- Zero lot line single-family homes
- Manufactured housing
- Public/institutional uses
- Parks and public spaces

### Characteristics

- Auto-oriented character typically due to the extent of off-street parking needed. However, the auto-oriented appearance can be softened by perimeter and on-site landscaping, minimum spacing between buildings, co-located parking facilities, site coverage limits, and on-site recreation or open space criteria.
- Multi-family residential (four units per building or less) can blend in with single-family residential areas if such standards and associated buffering requirements are set appropriately within the context of attached residential and/or single-family detached residential uses in the vicinity.
- Developments may contain a mix of residential building types.
- May be limited to two or three stories, with setbacks and/or buffering also increased near less intensive residential uses for compatibility.
- May locate near medical facilities, parks and public services, and shopping areas. Limited, compatible neighborhood commercial uses may be permitted when adequate infrastructure is

## MULTI-FAMILY RESIDENTIAL



This designation involves areas devoted primarily to structures with multiple residential units, at a greater intensity (i.e., units per building or acre) than found in single-family residential. Site design and open space standards may be applied to offset the relative density of this residential type, to ensure adequate recreational space on the site for residents, and to provide buffering and screening between this and less intensive residential uses. This use category can also provide a transition from primarily residential to mainly non-residential areas.

### Development Types

- Multi-unit attached residential in concentrated development, whether for rent (apartments) or ownership (condominiums)

### Characteristics

- Auto-oriented character typically due to the extent of off-street parking needed. However, the auto-oriented appearance can be softened by perimeter and on-site landscaping, minimum spacing between buildings, site coverage limits, and on-site recreation or open space criteria.
- Multi-family residential can achieve a suburban character if appropriate design and bulk standards within the context of attached residential and/or single-family detached residential uses in the vicinity.
- Building designs should be generally limited to two or three stories.

## NEIGHBORHOOD COMMERCIAL



The designation involves commercial developments, whether at a neighborhood or community scale, that stand apart from general or contemporary development through reduced site coverage and other design elements that make this form of development more appropriate to sites where “green” and open spaces predominate over “gray” spaces.

### Development Types

- Range of commercial retail and service uses that are smaller in nature and offer goods and services that support local residential populations
- Office (small-scale office uses depending on the site, that provide services to residents)
- Planned development to accommodate custom site designs or mixing of uses in a suburban character setting
- Public/institutional uses

### Characteristics

- Neighborhood character primarily from reduced site coverage relative to most auto-oriented commercial development.

- Also involves other criteria to yield less intensive and more attractive development outcomes relative to auto-oriented areas, including higher standards for landscaping (along street frontages and within parking areas), signs, and building design.
- May exclude some auto-oriented uses that, by their very nature, cannot achieve a suburban character.
- Near residential properties and areas, the permitted scale and intensity of non-residential uses should be limited to ensure compatibility (including adequate buffering/screening, criteria for placement and orientation of buildings and parking areas, height limits, and residential-in-appearance architectural standards).
- More opportunity for natural and/or swale drainage (and storm water retention/absorption) versus concentrated storm water conveyance in auto-oriented areas.
- Neighborhood-scale commercial uses are expected to emerge over time and should be encouraged on corner sites or other locations within (or near the edge of) residential areas that are best suited to accommodate such uses while ensuring compatibility with nearby residential uses.

## GENERAL COMMERCIAL



This designation is for commercial retail, office and service uses, primarily along portions of major roadway corridors within the community for high visibility and accessibility, but also in other locations to accommodate businesses that draw a consumer base from the larger region beyond the Green Valley Area.

### Development Types

- “Strip” commercial centers along major roadways, with a range of uses, including those on high-profile “pad” sites along the roadway frontage
- “Big-box” commercial stores (e.g., grocery, appliances, clothing, etc.)
- Restaurant chains including various “fast food” and casual dining establishments
- Automobile service related enterprises (e.g., gas stations, automobile service/repair, car washes)
- Medical offices
- Professional office parks
- Research and technology businesses
- Hotels and motels

### Characteristics

- Commercial areas with an auto-oriented character that have significant portions of development sites devoted to vehicular access drives, circulation routes, surface parking, and loading/delivery areas, making pavement the most prominent visual feature. This can be offset by enhanced building design, landscaping, reduced site coverage, well-designed signage, etc.
- Buildings typically set back toward the rear of site to accommodate expansive parking areas in front, closest to passing traffic, resulting in less emphasis on architectural design in many cases.
- Developments desire to maximize signage (number, size) to capitalize on site visibility to passing traffic.
- Often not conducive for access or on-site circulation by pedestrians or cyclists.

## BUSINESS PARK



This designation accommodates uses that are intensive in terms of how “light” industrial and office use activities can affect other nearby properties. This can include factors such as noise, vibration, light/glare, odor, truck traffic, and hours of operation, as well as the sheer scale and intensity of some heavy industrial uses. Depending on the standards applied through development regulations, an industrial area can allow for a wide range of uses, from multi-story office parks, office/warehouse to wholesale, product assembly, and manufacturing. Some communities aim for a more aesthetic business or industrial “park” environment, with specific standards for building arrangement and orientation, building materials and design, extensive landscaping, and especially full screening of loading and outdoor activity/storage areas, if such external activity is even permitted. A campus feel may be further reinforced by private or public streetscape and design enhancements, including special signage at industrial area entries and key intersections, unified lighting design, water features, etc.

### Light Industrial Development Types

- Warehousing
- Light manufacturing and/or processing/assembly

- Business \ office parks
- Office uses accessory to a primary industrial use (contractor’s yards, landscaping, etc.)
- Retail sales and services, including heavy commercial uses (e.g., building supply)
- Public/institutional
- Research and technology parks

### Business Park Characteristics

- Typically auto-oriented character, although master-planned business or industrial park developments may feature more open space and landscaping, regulated signage, enhanced screening, building design standards, etc.
- Potential for outdoor activity and storage, which should be screened where visible from public ways and residential areas.
- May involve significant truck traffic or direct rail service.
- On-site large-scale moving equipment in some cases.
- Potential for environmental impacts that may affect the proximity and type of adjacent uses, including particulate emissions, noise, vibrations, smells, etc., and the risk of fire or explosion depending on the materials handled or processed.

## PARKS / OPEN SPACE / NATURAL AREAS



This designation includes the locations of publicly-owned and maintained public parks, designed for both active and passive recreational enjoyment.

### Development Types

- Public parks and open space
- Public trails
- Joint government and school park areas
- Public recreation areas
- Natural Areas that are unable to be developed (floodplain areas, lakes, steep slopes, conservation districts, etc.)
- Active gathering spaces such as; amphitheaters, public art displays, pavilions, etc.

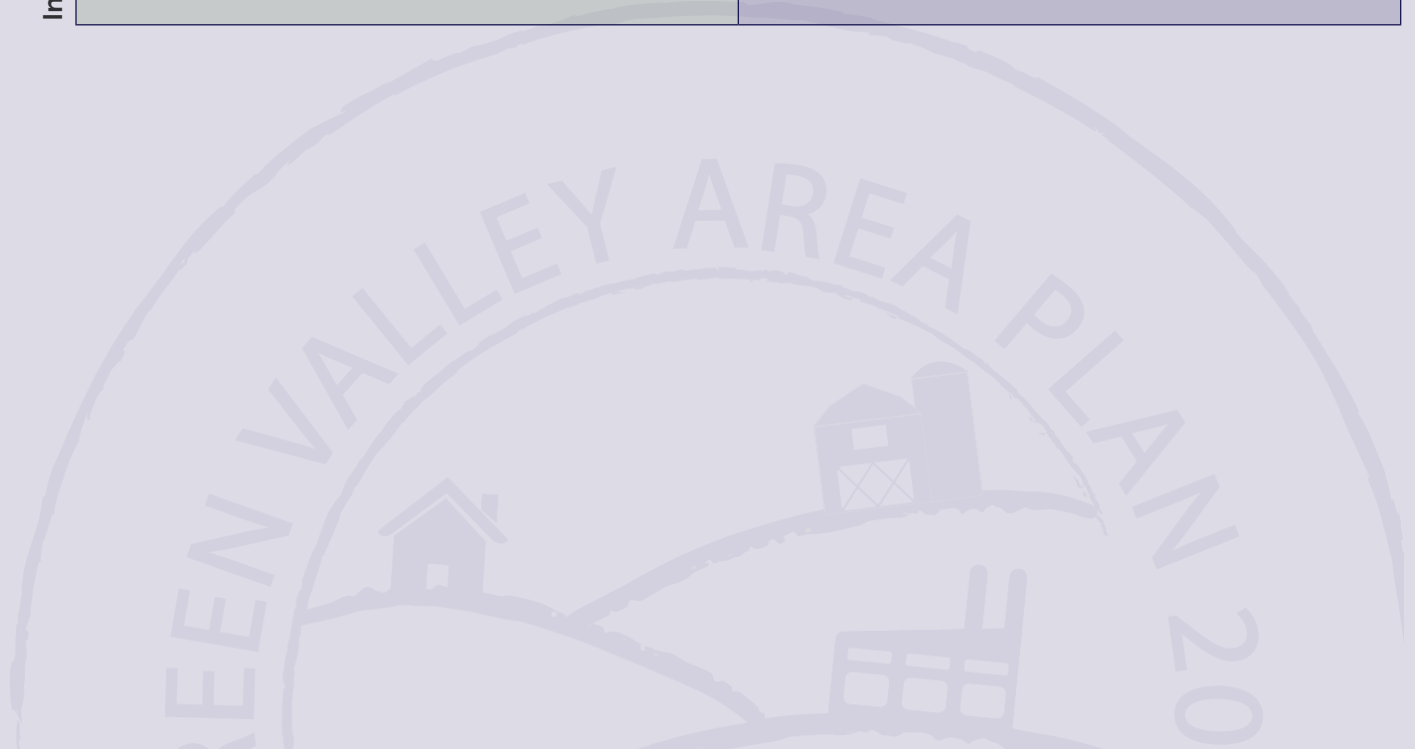
### Characteristics

- Public parkland theoretically will remain so in perpetuity compared to other public property and buildings that can transition to private ownership at some point.
- Park design, intensity of development, and planned uses/activities should match area character (e.g., public squares/plazas in urban downtowns relative to nature parks for passive recreation in less developed areas).

# FUTURE LAND USE PLANNING VERSUS ZONING

The side-by-side comparison below highlights the distinct purposes and uses of a *Future Land Use Map* relative to a *Zoning Map*.

	<b>Future Land Use Map</b>	<b>Zoning Map</b>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Outlook for the future use of land and the character of development in the Area.</li> <li>• Macro level – generalized development patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• Basis for applying different land use regulations and development standards in different areas of the Area (“zones”).</li> <li>• Micro level – site-specific focus.</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Guidance for the Area’s zoning map and related decisions (zone change requests, variance applications, etc.).</li> <li>• Baseline for monitoring consistency of actions and decisions with the Area Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Regulating development as it is proposed, or as sites are positioned for the future with appropriate zoning (by the property owner or the governing body).</li> </ul>
<b>Inputs and Considerations</b>	<ul style="list-style-type: none"> <li>• Existing land use in the Area.</li> <li>• The locational aspects planning priorities involving economic development, housing, infrastructure, parks and recreation, public facilities, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Area Plan and Future Land Use Map for general guidance.</li> <li>• Zoning decisions that differ substantially from the general development pattern depicted on the Future Land Use map should indicate the need for some map adjustments the next time the Area Plan is revised.</li> </ul>



# CRITERIA FOR PROPOSED AMENDMENTS TO THE FUTURE LAND USE AND CHARACTER MAP

Along with procedures for monitoring and periodically updating the Area Plan, another specific issue involves consideration of proposed amendments to the adopted *Green Valley Area Future Land Use and Character Map*. A first consideration is whether a map amendment is necessary immediately, such as in conjunction with a particular rezoning request? Or, can a potential adjustment to the map wait so that it may be examined more holistically, along with any other map changes under consideration, through the next interim review and update of the entire Area Plan?

The items below should be reviewed and addressed, especially by the Planning Commission, when a *Future Land Use and Character Map* adjustment is proposed:

- **Scope of Amendment** - Is the proposed map change limited to one or a few parcels or would it affect a much larger area?
- **Change in Circumstances** - What specific conditions have changed sufficiently to render the current map designation(s) inappropriate or out-of-date (e.g., Area's population size and/or characteristics, Area character and building form, property/structure conditions, infrastructure or public services, market factors including need for more land in a particular designation, etc.)?
- **Consistency with Other Plans** - In addition to the Area Plan, is the proposed map change consistent with the intent and policy direction of any other applicable plans (utility infrastructure or drainage plans, parks master plan, etc.)?

- **Adequate Information** - Do County staff, the Planning Commission, and/or Board of County Commissioners have enough and appropriate information to move ahead with a decision (e.g., utility capacity, potential traffic impacts, other public service implications, resident/stakeholder concerns and input)?
- **Stakeholder Input** - What points, concerns and insights have been raised by area residents, property owners, business owners, or others?



## Development Ordinances

Development ordinances are among the primary tools for implementing the Area Plan. Zoning regulations; in particular, play a significant role in establishing and protecting the physical character of the Area. These regulations delineate land use districts and the types of uses permitted within them, together with standards for buildings and site improvements. As a result, the zoning regulations, together with the subdivision regulations governing the Area where applicable, largely direct development outcomes. This is important as it provides a regulatory context in which local land use decisions may be made to foster a prosperous economy, a sustainable environment, and a high quality of life for residents.

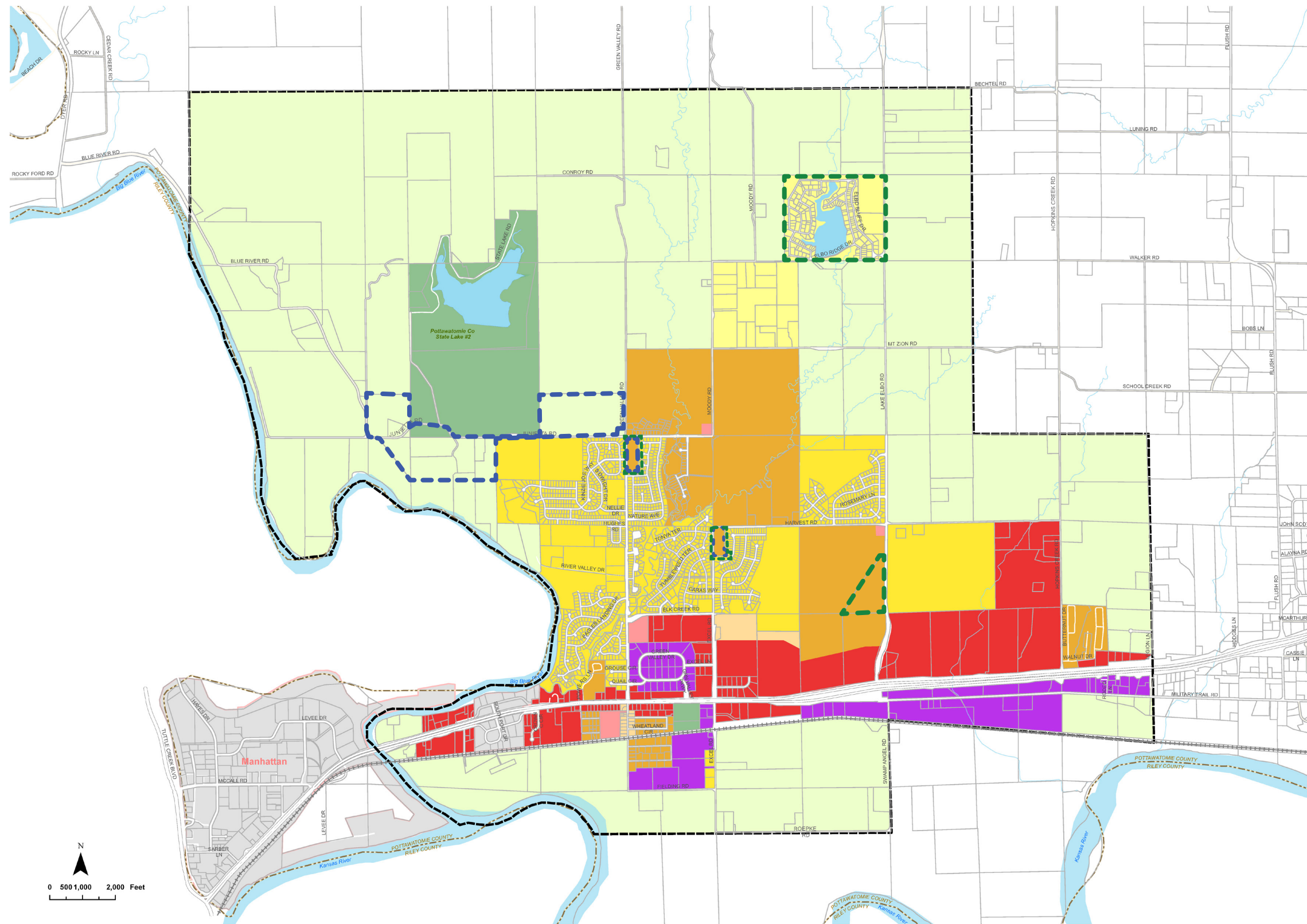
Although the Area Plan and associated *Future Land Use and Character Map* provide only general planning guidance, their role is especially relevant since it can

lead to rewrites and updates of zoning regulations. It is only through the official zoning map and the ongoing zoning administration process that binding, legally enforceable decisions are made about property uses and compatibility on a case-by-case basis. Adoption of this Area Plan, including the *Future Land Use and Character Map*, does not mean that the zoning approach or mapping utilized for the Green Valley Area will automatically change. Instead, the *Future Land Use and Character Map* provides a tool for ongoing evaluation of how land uses in certain parts of the Area may evolve over time while some areas (e.g., established, stable neighborhoods) are likely to stay much as they are over the long term.

Provided in Table 1, *Designations on Future Land Use and Character Map Relative to Zoning Districts*, is a comparison between the map categories relative to the current districts in Pottawatomie County's zoning regulations.

TABLE 1, DESIGNATIONS ON GREEN VALLEY AREA FUTURE LAND USE MAP RELATIVE TO ZONING DISTRICTS		
DESIGNATION	PREDOMINANT USE	ZONING DISTRICT
<b>Rural/Agricultural</b>	Existing agricultural areas and areas not currently developed.	General Agriculture (A1)
<b>Estate Residential</b>	Large-lot single-family detached dwellings.	Ag-Residential (AR)
<b>Suburban Residential</b>	Single-family detached dwellings.	Single Family Residential (R1)
<b>Single-Family Detached Residential</b>	Single-family detached dwellings.	R1, R2
<b>Mixed-Density Residential</b>	Single-family (higher density) and multi-family dwellings (four units or less).	R2, R3, PUD
<b>Multi-Family Residential</b>	Multi-Family (higher density)	R3, PUD
<b>Neighborhood Commercial and General Commercial</b>	Variety of office and retail development.	Commercial Neighborhood (CN) Commercial Highway (CH)
<b>Business Park</b>	Light manufacturing, assembly, logistics, office, research, etc.	Light Manufacturing (M1)

Map 1, Green Valley Area Future Land Use and Character Map



**Legend**

- Rural / Agricultural Preservation
- Estate Residential
- Suburban Residential
- Single-Family Detached Residential
- Multi-Family Residential
- Mixed-Density Residential
- Neighborhood Commercial
- General Commercial
- Business Park
- Parks/Open Spaces/Natural Areas
- Water
- City of Manhattan
- Alternative Junietta Road Scenario (See Map 2)
- Alternative Key Parcel Scenario (See Map 3)



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## ALTERNATE LAND USE SCENARIO - JUNIETTA ROAD

Generally, a Future Land Use Map will assign a single future land use category to each individual parcel. Land use designations are based on a variety of factors such as community input and desired uses, surrounding properties, development pressure, transportation network, and proximity to desirable assets such as parks, shopping, etc.

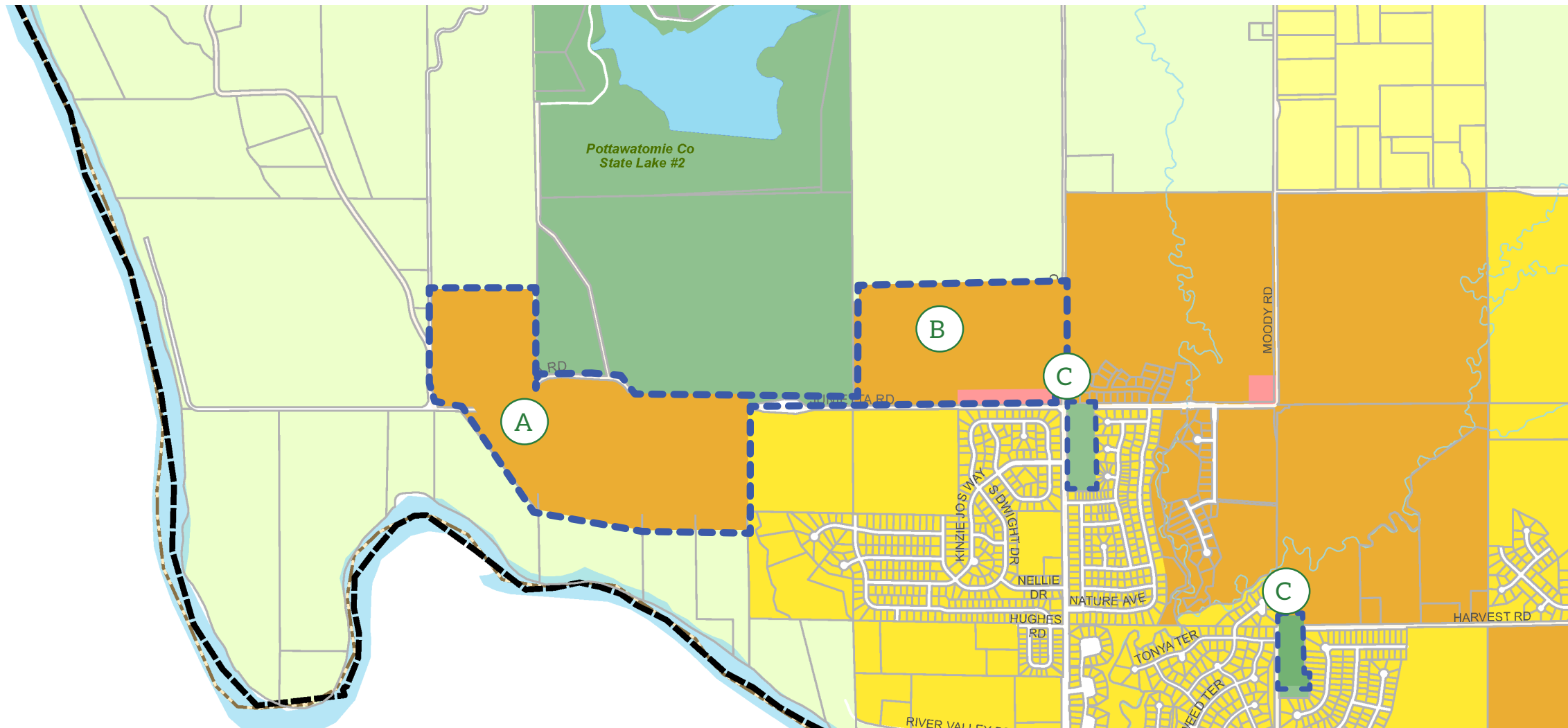
However, in the Green Valley Area the potential for a second blue river crossing is a high impact project that may create the need to evaluate alternate land uses at specific locations along Junietta Road. Therefore, the following Alternate Land Use Scenario Map is included to provide direction if this project is approved.

### Junietta Road

If a Second Blue River Crossing is constructed north of US-24, an increase of vehicle traffic is expected on Junietta Rd. in the form of daily commuters into and out of Manhattan, those accessing State Park No. 2, and activities at the recently approved elementary school facility. Increases in vehicle trips will create development pressure for more variety in uses and a strategic reassessment of this area will be warranted at that time. The Junietta Alternate Land Use Scenario accounts for this with the following land use options:

- (A) Increased mixed-density land uses to accommodate more interest from commuters in living near Junietta Road.
- (B) Increased residents will create demand for a neighborhood commercial node to provide neighborhood level services for residents in the Junietta Corridor. This will also reduce local vehicle trips by providing retail/services destination in close proximity to residents.
- (C) New neighborhood parks/gathering spaces for the Green Valley Area to provide additional greenspaces to accommodate the increased mixed-density areas.

### Junietta Road Alternate Land Use Scenario



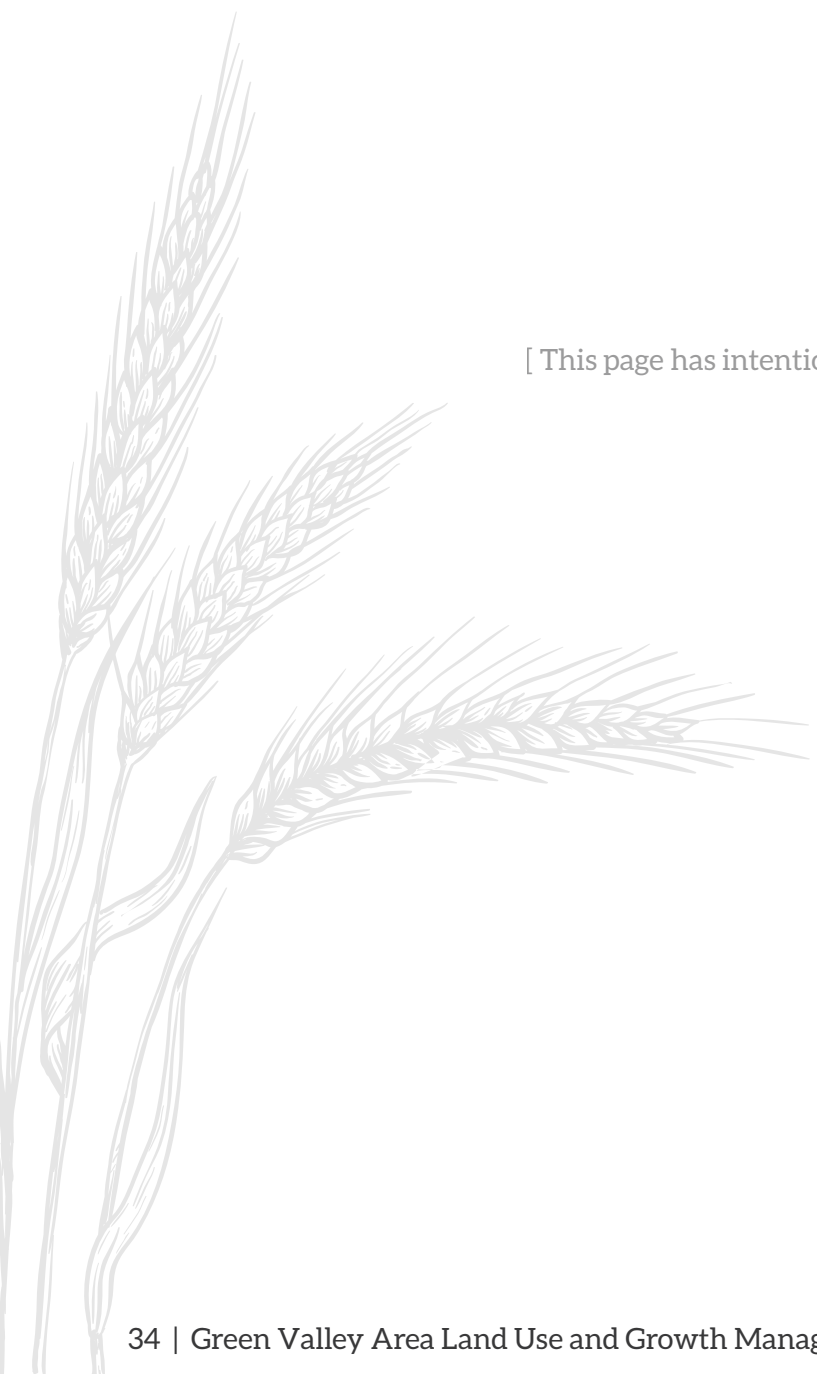
## Map 2, Green Valley Area Future Land Use Map Alternate Scenario - Junietta Road

**Legend**

- Rural / Agricultural Preservation
- Estate Residential
- Suburban Residential
- Single-Family Detached Residential
- Multi-Family Residential
- Mixed-Density Residential
- Neighborhood Commercial
- General Commercial
- Business Park
- Parks/Open Spaces/Natural Areas
- Water
- City of Manhattan
- Alternative Junietta Road Scenario



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# ALTERNATE LAND USE SCENARIO - KEY PROPERTIES

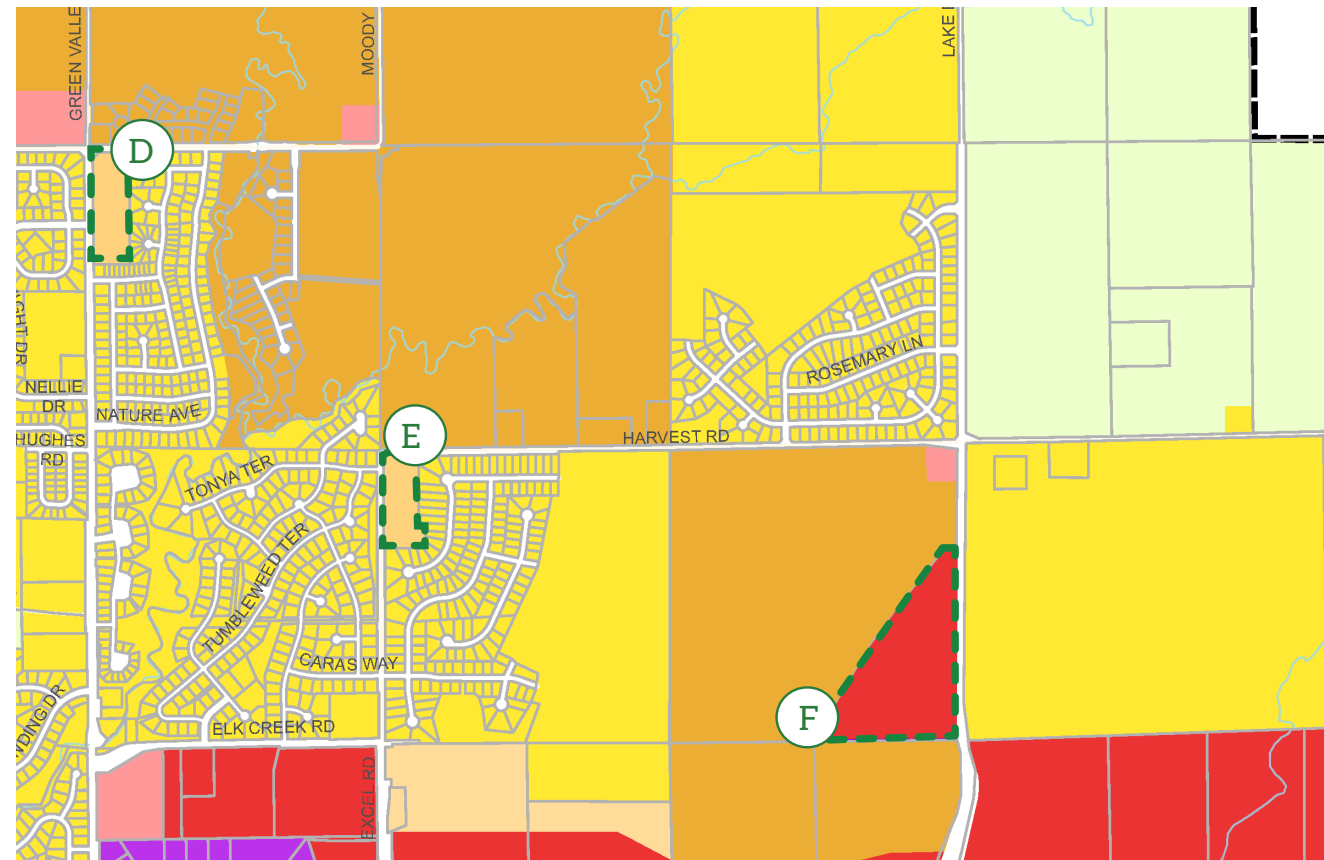
## Key Properties

The typical development pattern in the Green Valley Area has been the development of large tracts, for primarily single-family detached residences. However, over time, several smaller "left-over" tracts have remained undeveloped. These tracts present unique opportunities and flexibility in terms of adapting to market trends as the Green Valley Area continues to build-out.

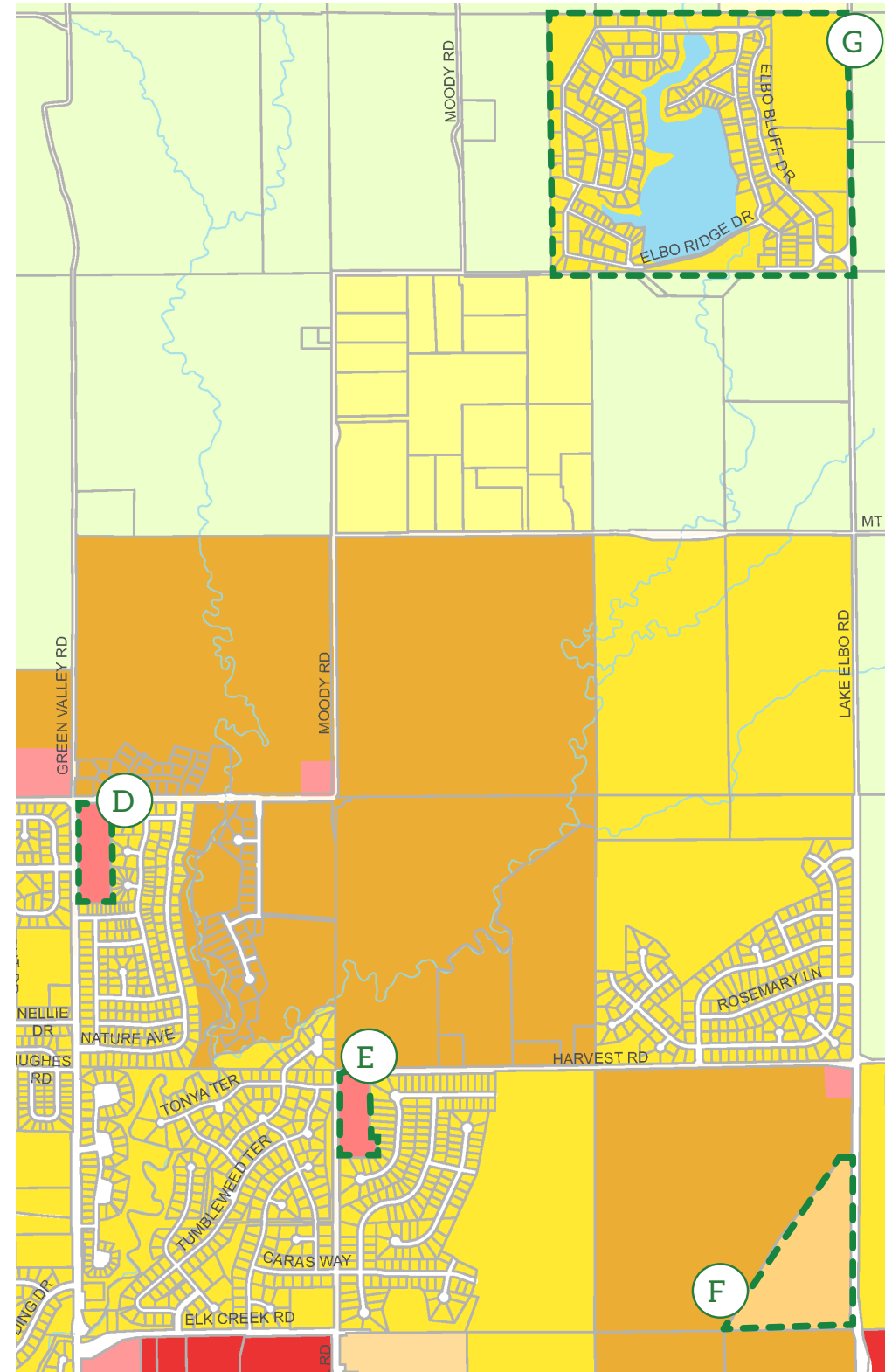
**D & E** Sites D and E are too small to be built as detached single-family homes and are located at the intersection of collector streets with single-family developments on at least three sides. Due to these factors, multiple alternate development opportunities may be appropriate for these properties. Each site may be suitable for Mixed-Density Residential, Multi-Family Residential (12 units or smaller), or Neighborhood Commercial uses depending on how market forces evolve over the next 20 years and new retail market demand created by residential growth. These sites may also be suitable for larger neighborhood park and gathering space facilities as depicted on Map 2 as site C.

**F** Site F is adjacent to a mix of existing and proposed land uses, within close proximity to the US-24 and Lake Elbo intersection, and is bordered by natural features that create bufferyard opportunities. Given this mix of unique assets this site is the ideal "swing" site that can accommodate office or mixed-density residential uses.

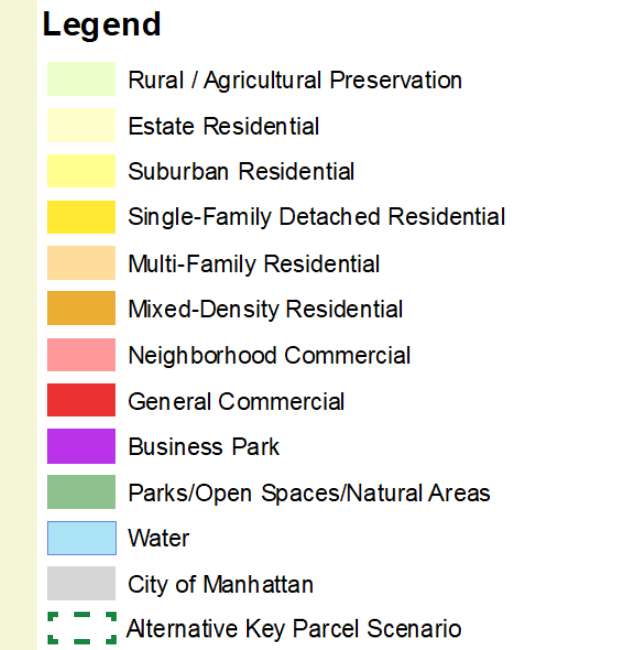
## Key Properties Alternate Land Use Scenarios



**G** If sewer is extended to the Lake Elbo development this land use may need to be modified to single-family detached residential



Map 3, Green Valley Area Future Land Use Map Alternate Scenario - Key Properties



# LAND USE POLICIES

The policy statements below are intended as a supplement to the *Future Land Use and Character Map*, which provides only a visual depiction of desired land use patterns and sound development practices. Elected officials and staff should use these statements as a guide and reference, particularly when making decisions regarding proposed development activity in the Area, and/or changes in zoning classifications within the Area.

## General

1. Land uses should not detract from the enjoyment or value of neighboring properties.
2. Potential negative land use effects (noise, odor, dust, excessive light, traffic, etc.) should be considered in development review/approval and mitigated.
3. Adequate transportation access and circulation should be provided for uses that generate large numbers of trips. Pedestrian and bicycle access should be addressed where appropriate.
4. Well-planned mixed-use projects are encouraged where compatible with nearby development.
5. Floodplain areas should not be encroached upon by future development unless there is compliance with stringent floodplain management practices. These areas should be used for parks or recreational or related purposes, or for agricultural uses.
6. Environmentally sensitive areas should be protected, including wildlife habitat areas.

## Residential

1. Residential areas should not be located next to industrial areas where avoidable.
2. Neighborhood commercial uses should be mixed throughout residential areas, as appropriate, with buffers if needed.
3. Schools, parks and community facilities should be located close to or within residential neighborhoods.
4. Houses should have direct access to local residential streets but not to collector streets or thoroughfares.
5. Houses should not be adjacent to major highways.
6. New residential development should be buffered from collector streets and thoroughfares.
7. Residential developments should include adequate area for parks and recreation facilities, sidewalks, schools, and places of worship.

## Neighborhood Commercial

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1. Neighborhood retail and service uses should be located at intersections of thoroughfares or collector streets.
2. Retail development should be convenient to residential areas.
3. Buffers should separate retail/office uses and residential areas when needed, depending on the use.
4. Low-intensity office and professional uses should provide a transition between more intense uses and residential areas.

## General Commercial

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1. Commercial uses with more intensive operational or traffic characteristics should be located away from most residential areas.
2. Heavy commercial development such as office parks and regional shopping centers should be concentrated in nodes at intersections and along major thoroughfares that are designed and constructed to accommodate higher traffic volumes.
3. Buffers should separate heavy commercial uses from any adjacent residential areas, especially where the commercial use involves visible displays or outdoor storage of merchandise or materials. Where possible, natural buffers should be utilized to provide a more substantial buffer between industrial and other uses.

## Business Park

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1. Light Industrial development should not be directly adjacent to residential areas without significant buffering between properties.
2. Industrial uses should be located in dedicated industrial development areas.
3. Industrial development should be separated from other uses by buffers.
4. Industrial development should have good access to major thoroughfares and highways.
5. Industrial development involving trucking operations should have good access to truck routes, designated hazardous material routes, and railroads.
6. Office, research, technology related, and professional uses should be compatible with nearby residential areas and other uses through appropriate building height limitations and adequate buffering and landscaping.

## Parks/Open Spaces/ Natural Areas

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1. Parks are a desirable use for floodplain areas.
2. Parks and open space should be used to buffer incompatible land uses.
3. Natural features should be used as buffers or preserved open space between or around developed areas.
4. Community attractions that draw many external visitors should be in locations with good regional transportation access and visibility.

## LAND USE AND DEVELOPMENT TOOLS

Land Use decisions in the Green Valley Area are currently under the jurisdiction of Pottawatomie County and Land Use is the section of the Area Plan where the County has extensive authority and proven tools to guide and set standards for land use and development. This flows from the County's "police power" which are granted under state law to safeguard the health and safety of their residents and community as stated in the initial purpose statement of Kansas State Statute 12-741 Article 7 – Planning and Zoning:

**"12-741. Planning and zoning in cities and counties; authorization.** (a) This act is enabling legislation for the enactment of planning and zoning laws and regulations by cities and counties for the protection of the public health, safety and welfare, and is not intended to prevent the enactment or enforcement of additional laws and regulations on the same subject which are not in conflict with the provisions of this act."

Land use and development involve a true partnership between the government and the private development community (property owners, developers, land planners and designers, civil and traffic engineers, etc.). So much of the Area is designed and built by private interests and actors, who rely upon clear parameters and standards from the public sector to ensure that they can meet local expectations within a review and approval framework that yields profitable and mutually beneficial development outcomes. To the extent that the current development regulations can increase clarity, ease communication and expedite the process, both the development applicant and the area stand to gain.





## The Future Area

# 3 | TRANSPORTATION AND MOBILITY



The *Transportation and Mobility* section focuses on current, near-term and long-range transportation needs and priorities in the Green Valley Area. Many of these are outward focused, involving Pottawatomie County, regional partners, and coordination with developers. The primary concern stated during engagement activities was safety and traffic issues (particularly during peak traffic times) along the US-24 corridor and Green Valley Road.



## WHAT WE HEARD

# Traffic on US-24

Junietta Road should be **widened and paved**

**Frontage roads** along US-24 for businesses

Increase **public transportation**

A **second Blue River bridge** over the river is necessary and should be on a limited access road

Incorporate **future transportation demand** into road planning assumptions

Consider increasing the lanes on **US-24 from 4 to 6**

Consider **constructing frontage roads** on both the **north and south sides of US-24**

**Limit access points** and new road intersections on US-24

**Extend and pave** Hardball Road

**Pot holes** should be repaired more frequently to minimize their extent and size

Excel Road should be **extended to the north**

The US-24 and Green Valley **intersection is extremely congested**

Add **crosswalks** to major intersections

Install a **traffic signal at the US-24 and Excel Road** intersection

**Widen the bridge and add a walking path** crossing Green Valley Road over Elbo Creek

Upgrade Junietta Road heading west to **accommodate traffic from the new elementary school**

A **crosswalk** is needed by Flint Hills School

A second Blue River crossing is needed to create another route for **emergency vehicles**

**Relocate existing and new curb cuts** on collector streets intersecting with US-24 further north to avoid traffic conflicts

# TRANSPORTATION PARTNERS, PROGRAMS, AND PLANS

Perhaps in more than any area of planning, transportation involves coordinated efforts and funding streams between different levels of government. Pertaining to the Green Valley Area this includes:

- Kansas Department of Transportation
- Flint Hills Metropolitan Planning Organization (FHMPO) Travel Demand Model
- The Flint Hills Transportation Plan 2040
- Flint Hills Area Transportation Agency (FHATA)
- Additional Jurisdictions - There has been a standing joint City/County/County meeting between the City of Manhattan, Pottawatomie County, and Riley County since the Manhattan Urban Area Comprehensive Plan began. Transportation, growth, emergency response, and other issues often cross jurisdictional boundaries, and these joint meetings provide a forum for challenges and opportunities to be raised. As development in the Green Valley Area continues, commuter traffic will increase and cause strains on the regional transportation system which will only increase the need for ongoing coordination.

## TRANSPORTATION AND MOBILITY FRAMEWORK FOR ACTION

### Key Issues and Considerations

Key issues and considerations related to transportation were identified through the engagement process. These essential items should be addressed as the Area's guiding principles, goals and strategic action priorities for the coming years are pursued.

### Connections to Manhattan

Currently the US-24 corridor is the primary route linking the Green Valley Area to the City of Manhattan. During early engagement discussions the desire for a second connection to Manhattan from the Green Valley Area came up frequently. The majority of concerns regarding the existing US-24 crossing cited congestion of peak hour traffic, but increased routes for emergency service access and flooding concerns were also stated. The US-24 corridor between Manhattan and the Green Valley Area experiences the highest daily traffic volumes in all of Pottawatomie County, with an Annual Average Daily Traffic count of approximately 25,000 near the bridge crossing over the Blue River. Regional Partners have undertaken several studies to examine the feasibility and impact of a second Blue River Crossing. The following list summarizes those efforts (more detailed information is located in Appendix A, the Existing Area Plan):

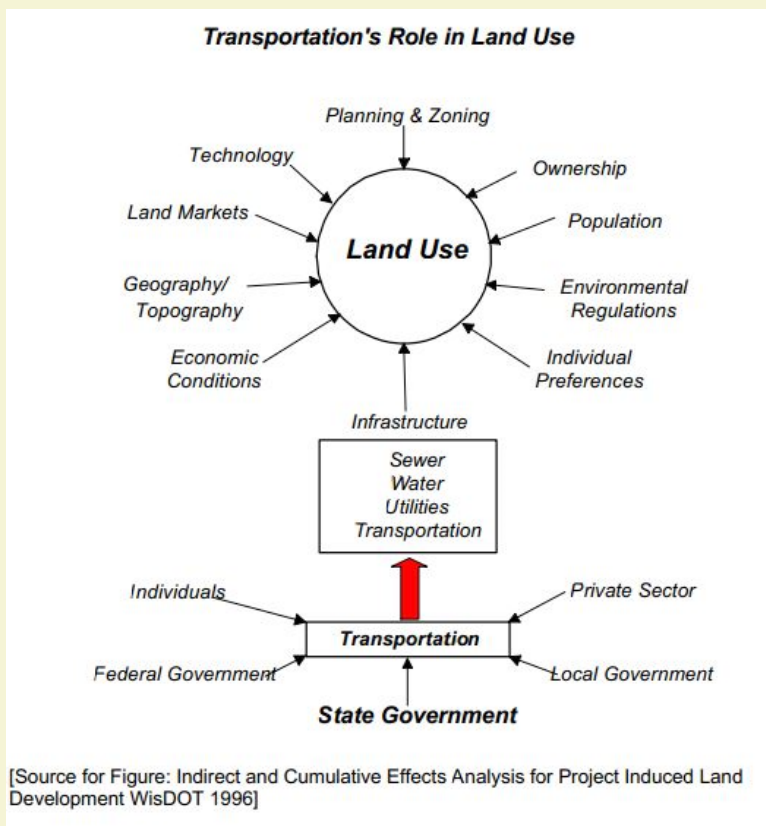
- 2009, US-24 Corridor Study - The Study indicated that the connection would be expected to serve 6,000 vehicles per day (vpd) at its eastern terminus with US-24 and 12,000 vpd at the western terminus of Tuttle Creek Blvd.
- 2012, Pottawatomie County Conceptual Route Study - Examined six different route options.
- 2015, The FHMPO, Region's First Traffic Demand Model - The TDM modeled four scenarios out to 2040: "do-nothing", Blue River crossing at Barnes/Dyer Rd, Blue River Crossing at Marlatt/Junietta Rd, and expansion of US-24 to six lanes. Of these scenarios, only expansion of US-24 to six lanes was shown to alleviate capacity issues.
- 2019, Pottawatomie County presented the Marlatt/Junietta Extension, along with two other County projects, as part of KDOT's local consult meetings for their 10-Year Plan for infrastructure projects.

Discussions about a potential second route have been ongoing. Questions regarding cost, final location, economic impact, and traffic congestion relief have yet to be fully answered.

## Land Use and Transportation Relationship

The relationship between transportation and land use is symbiotic and interconnected. Everything that happens to land use has transportation implications and every transportation action affects land use. Accessibility is usually measured by the number of travel opportunities or destinations within a travel radius—measured either by travel time or distance traveled. Alternately, mobility measures the ability to move efficiently between origins and destinations. Thus, mobility is directly influenced by the layout of the transportation network and the level of service it offers.<sup>1</sup> Accessibility and mobility basically refer to the opportunity and ability for people to access opportunities, goods, services, and other resources to improve the quality of their lives and fulfill basic functions necessary for living. Land development generates travel demand, and travel generates the need for new facilities, which in turn increases accessibility and attracts further development.<sup>2</sup> The ongoing debate among planning professionals is whether transportation influences development or whether land use dictates transportation.<sup>3</sup>

**Figure 2, Transportation’s Role in Land Use**



Coordinating land use and transportation planning initiatives allows development to foster a mix of uses (such as housing, education, employment, recreation, retail and service opportunities) that require a degree of spatial/geographic proximity, layout, and design of those uses. Recent concerns have arisen regarding transportation’s role in exacerbating or combating the problems associated with urban sprawl, suburban congestion, and jobs/housing mismatches.<sup>4</sup>

1: An Overview: Land Use and Economic Development in Statewide Transportation Planning. Federal Highway Administration. Center for Urban Transportation Studies, University of Wisconsin-Milwaukee. 1999.

2: An Overview: Land Use and Economic Development in Statewide Transportation Planning. Federal Highway Administration. Center for Urban Transportation Studies, University of Wisconsin-Milwaukee. 1999. <https://www4.uwm.edu/cuts/lu/lu-all2.pdf>

3: Adapted from Hanson, Susan. The Geography of Urban Transportation, Second Edition.

4: An Overview: Land Use and Economic Development in Statewide Transportation Planning. Federal Highway Administration. Center for Urban Transportation Studies, University of Wisconsin-Milwaukee. 1999. <https://www4.uwm.edu/cuts/lu/lu-all2.pdf>

**A second river crossing has consistently been stated as a high priority to Green Valley Area residents throughout the development of this plan.**

### **Traffic congestion, safety and upgrade concerns on roadways**

Traffic congestion, particularly along the US-24 corridor and collectors intersecting the corridor during peak travel times, were raised repeatedly during the engagement process and was very clearly stated by multiple participant groups as the main concern/priority to future development of the Green Valley Area. Specific items mentioned were:

- Traffic back-ups on US-24 near the Blue River Crossing;
- Long wait times at the US-24 and Green Valley Road Intersection in all directions;
- Lack of a traffic signal at Excel and Lake Elbo Roads; and
- Widening the bridge crossing on Green Valley Road over Elbo Creek.
- Safety concerns: Poor sight visibility at certain intersections, accidents at key intersections and the number of access points from private property onto US-24. Many of these issues are well documented in the 2009 *U.S. Highway 24 Corridor Access Management Plan*.

The County requires that certain gravel roads are paved in conjunction with new development projects; however, some participants expressed concerns about the timing of when these roads are being paved and the construction of new subdivisions. As growth continues in the Green Valley Area, existing gravel roads will only be able to serve a minimal amount of increased traffic. Creating a reliable network of paved roads is a critical factor in a successful Green Valley Area transportation plan.

### **Lack of Sidewalks and Bike Paths:**

Currently there are no official trails or bicycle connections within the area, with the exception of existing state recreation areas, and the majority of existing sidewalks are located within new residential subdivisions but do not provide connections outside of these neighborhoods. The desire to increase access to the existing open space resources within the Area such as State Park No. 2 and the Big Blue and Kansas Rivers, came up as a priority for some within the Area during the engagement process.

### **Future Planning**

Planning for the transportation system should support the achievement of many of the other goals of the Green Valley Area and its residents, including:

- Providing safe routes to schools, work, shopping, and other destinations and providing safe and efficient emergency routes for emergency responders. A well built and maintained transportation system can help to ensure the safety of residents and visitors.
- Reducing peak hour traffic by providing a road network with multiple commute options.
- Increasing economic development opportunities by improving access to jobs.
- Helping manage the increasing costs of an expanded road network
- Decreasing congestion through the creation of a complete road network.

The Transportation Framework Chapter is organized in three tiers: (1) Guiding Principles, (2) Goals, and (3) Strategic Action Priorities. These topics are intended to coordinate with and support the other aspects of the Area Plan. The Strategic Action Priorities convey tangible actions that will, over time, achieve the Goals of this chapter in line with the Guiding Principles.

## GUIDING PRINCIPLES

Three of five guiding principles relate most to *Transportation and Mobility*.

**GP1—** The Green Valley Area will be **QUALITY-FOCUSED** and seek long-lasting value in its approach to public and private development and infrastructure in the Area.

**GP2—** The Green Valley Area will be **COLLABORATIVE** in its approach to big picture issues, including infrastructure, transportation, emergency management, and economic issues, forming partnerships and actively participating and having a voice in regional decision-making.

**GP5—** The Green Valley Area will be **PROACTIVE** about pursuing opportunities to provide oversight and funding needed to ensure that the necessary infrastructure and facility upgrades are addressed at the time of development.

## GOALS

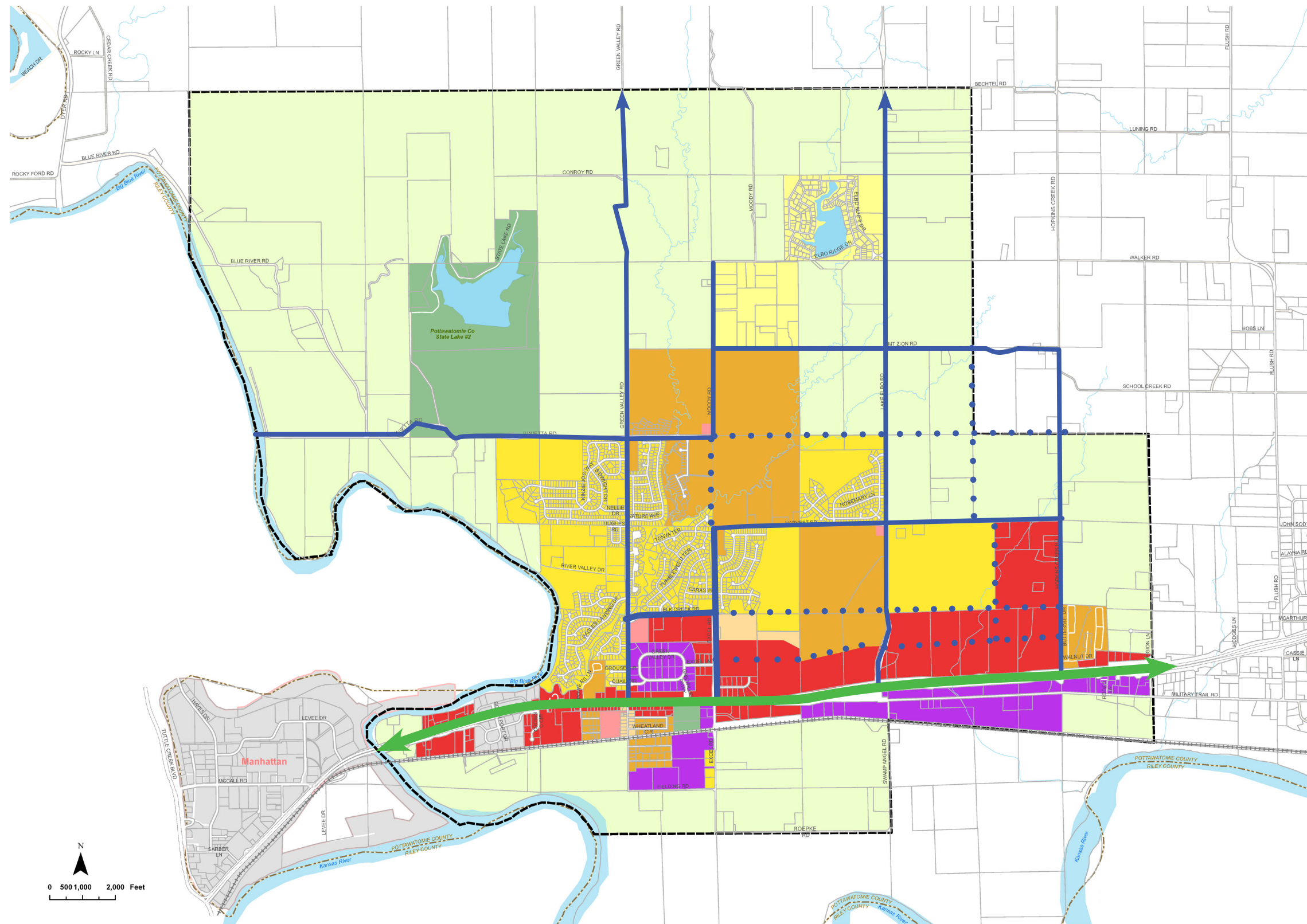
1. **Ensure** the Area's road and bridge system is in good repair and is safe for all users, with projects advanced in a transparent manner.
2. **Provide** increased access to recreation opportunities for residents and visitors and increase opportunities for active transportation.
3. **Support** an efficient and safety-focused US-24 Corridor and supporting road network.
4. **Ensure** roadway types are appropriate to support the growth and development pattern utilizing the roadway, now and in the future.
5. **Finance** costs for constructing and maintaining roadways and other transportation projects in a manner that maintains fiscal soundness.

## PRIORITIES

1. Future transportation network planning emphasizes resiliency, including both redundancy in systems as well as protection from potential hazards and threats.
  - › Continue discussions to move forward with the development of an alternate route connecting Manhattan and the Green Valley Area.
    - Identify potential grant funding sources to widen the US-24 Blue River bridge crossing to 6 lanes and/or for the second Blue River bridge crossing.
  - › Create a Transportation and Thoroughfare Plan for the Green Valley Area to identify the location of new and extended roads and bike paths/sidewalks to create a more connected street and pedestrian network and provide alternative routes to goods and services. *Map 4, Illustrative Transportation Network Map* highlights the location of logical extensions and new roads based on the *Green Valley Area Future Land Use and Character Map* and can be used as a starting point for an in-depth Transportation Plan.
    - The location of these logical connections should be considered when approving new developments for right-of-way dedications or the location of new development roads as part of development approvals.
  - › Work with developers to construct sidewalks and bike paths around the peripheries and/or adjacent to major or minor collectors that abut new development sites in addition to the creation of internal development sidewalks and create an interconnected system of sidewalks throughout the Green Valley Area. These paths/sidewalks should be maintained by the new communities

## STRATEGIC ACTION

Map 4, Illustrative Transportation Network Map



**Road Types**

- █ US-24
- █ Existing Roads
- New or Extended Roads



HOA's similar to private development park facilities. These path areas can be included as part of a development's green/open space requirements.

2. Balance changes in land use with the capabilities of the transportation system.

- › Adopt and implement the Green Valley Area *Future Land Use and Character Map* contained in this plan.
- › Continue to evaluate the capacity of the existing and proposed transportation system in Area Plan amendments, rezoning requests, and site plan reviews.

3. Continue focus on transportation safety.

- › Continue to work with Kansas Department of Transportation (KDOT) to implement the US-24 Corridor Plan and reduce the number of access points and turn-arounds on US-24 to increase traffic capacity and safety.
- › Pursue options to expand the Green Valley Road bridge over Elk Creek with accommodations for pedestrians.
- › Future plans for a second Blue River bridge crossing should include the evaluation and potential incorporation of a dedicated pedestrian path as part of the final design.

4. Build partnerships with developers to coordinate land use and transportation investment and promote shared, equitable contributions to implementing the transportation system. This partnership will be particularly important in preserving corridors for and identifying likely alignments for a system of collector roadways to join compatible land uses (see *Map 4*).

- › Examine the existing development process to ensure that the road infrastructure being developed is appropriate for the scale of growth. Review required Traffic Impact Analyses conducted for new land development to ensure the analyses are consistent with the growth projections and land use patterns in the Area Plan.
- › Examine potential for impact fees (see *Section 4, Growth Capacity, Infrastructure, Recreation, and Natural Resources* for more details concerning impact fees).
- › Evaluate existing regulations that require developers to pave and upgrade roads to include the construction of private bike paths / sidewalks as part of these roadway expansions.

5. Coordinate with the FHMPO to expand transportation options linking The Green Valley Area and the greater Flint Hills region.

- › Continue to pursue a Green Valley Area stop on the Wamego regional commuter shuttle.

## ACCESS MANAGEMENT

Access management refers to managing the number interruptions that impede even traffic flow, which is essential to preserving the capacities of major/minor arterials and collector streets. The capacity and level of service (LOS) of the thoroughfare is affected by the following:

- Impedance of traffic flow by vehicles entering and exiting properties;
- Number of intersections;
- Lane width;
- Synchronization of traffic control devices;
- Allowances for deceleration and/or acceleration at ingress/egress points; and
- The presences or void of a center turn lane or median.

Traditionally, the majority of residential uses in Cities developed on gridded local streets. More recently; however, residential uses have deviated from this traditional pattern of development, where consecutive, individual lots, each with their own point of access / egress, have been developed along roadways which are now, or will be in the future, used as collectors or minor arterials.

Likewise, convenient access can make or break a commercial corridor. Too many access points can exacerbate traffic congestion and lead to unsafe driving conditions. The primary benefit of having an access management plan is that it lays the foundation for correcting existing access management problems, while preventing others from occurring in the future.

Too many curb cuts are inefficient and dangerous for drivers and pedestrians alike. In order to accommodate access to existing and future development in a safe and efficient manner, the following objectives should be implemented. Objectives include:

- Managing the location, design, and type of property access in order to reduce traffic congestion and frequency of crashes;
- Preserving the flow of traffic and existing road capacity;
- Supporting economic growth;
- Improving access to businesses and homes;
- Maintaining or improve property values; and
- Preserving the public investment in the transportation infrastructure.

Access management is critical to maintaining safety, improve mobility and access, and to improve travel conditions by minimizing conflicts between through vehicles and slower, turning vehicles.



# ACCESS MANAGEMENT PRINCIPLES

As growth continues, it may be worthwhile to review and update the access management principles as they pertain to development in the Green Valley Area.

The following principles are a guide to help guide future access management initiatives:

---

**Provide a Specialized Roadway System.** Design and manage roadways according to the primary functions that they are expected to serve. Roadway operations can be improved by achieving the proper balance between traffic flow and access to abutting property.

---

**Limit Direct Access to State Highways and Other Major Roadways.**

---

**Promote Intersection Hierarchy.** The higher a roadway's functional classification the higher the degree of access management that should be applied so that the roadway continues to perform according to the function it was designed to serve.

---

**Locate Signals to Favor Through Movements.** Failure to carefully locate access connections or median openings that may later become signalized can cause substantial increases in arterial travel times.

---

**Preserve the Functional Area of Intersections and Interchanges.** Access driveways located too close to intersections or interchange ramps can cause serious traffic conflicts that impair the function of the affected facilities.

---

**Limit the Number of Driveways and Other Conflict Points.** Simplifying the driving task - by limiting the number of conflict points a motorist is faced with - contributes to improved traffic operations and fewer collisions.

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**Separate Driveways and Other Conflict Points.** Drivers need sufficient time to address one potential set of conflicts before facing another. Separating conflict areas helps to simplify the driving task and contributes to improved traffic operations and safety.

---

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

---

**Use Non-Traversable Medians to Manage Left-Turn Movements.** Medians channel turning movements on major roadways to designated locations. Non-traversable medians and other techniques that minimize left-turns or reduce the driver workload can be especially effective in improving roadway safety.

---

**Provide a Supporting Local Street System and On-Site Circulation System.** Interconnected local street systems and on-site circulation systems provide alternative routes for bicyclists, pedestrians, and drivers alike.

---

**Match Driveway Design with Operational and Safety Needs.** Driveways accommodate a wide range of vehicle types, traffic volumes, and vehicle turning speeds. Consequently, driveway design should be tailored to meet the needs of the vehicles using the driveway.

---

**Coordinate Actively with Other Agencies regarding transportation and land use.** To optimize the benefits of access management, coordination and cooperation with all the appropriate transportation agencies is essential when introducing design techniques along a roadway or preparing an *Access Management Plan*.

## A Word on Street Connectivity

The street's contribution to the neighborhood environment is as important as the street's role as a transportation conduit. The minimization of through traffic on residential streets has been one of the primary means of improving the neighborhood environment, and discontinuities in the street network have been one of the primary techniques used to minimize through traffic. In other words, the decline in street connectivity over the twentieth century reflects a conscious effort to improve quality of life in residential areas.

Although this effort has largely succeeded in reducing through traffic on residential streets, it has affected the quality of life in residential areas in other unintended and not always positive ways (Handy 1993). First, most applications of the hierarchy concept produce residential areas bounded by high-speed arterials, with limited entrances from those arterials. As a result, residential areas are often separated from surrounding development, with low connectivity between neighborhoods and street networks within residential subdivisions are dominated by T-intersections and cul-de-sacs. These networks are designed to slow speeds and reduce through traffic, but these designs also tend to reduce connectivity within the neighborhood, leading to indirect, inefficient routes from one location to another and add more traffic to arterial streets that can be reduced by a more connected network.

Figure 3, Connected Street Pattern

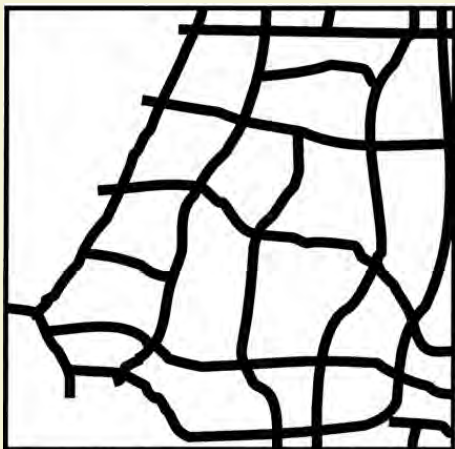
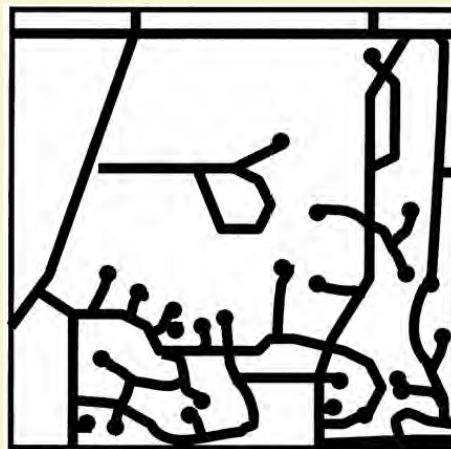


Figure 4, Disconnected Street Pattern



Source: Susan Handy, Robert G. Paterson, and Kent Butler, Planning for Street Connectivity: Getting from Here to There, PAS Report No. 515.

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## The Future Area 4 | GROWTH CAPACITY INFRASTRUCTURE, RECREATION, AND NATURAL RESOURCES



The growth happening in the Green Valley Area, characterized by significant residential development with 527 homes built since 2010 and another approximate 1,000 residential lots either platted or in the development review process. With this scale of development there is a need for continued capital investments in public infrastructure such as utilities, roads, and amenities for residents to help maintain a high quality of life. Planning for the location of future land uses, development types, and new infrastructure creates a framework for land development. Development regulations govern new subdivision activity, provide for the appropriate use of land through zoning, and set minimum standards for the nature and quality of development. However, with this expected growth comes the inevitable question of how to pay for the increasing demand on public infrastructure. Finally, effective oversight and management of ongoing growth and revitalization also depends on solid partnerships with other key public agencies, including the Rural Water District 1, Unified School District 383, KDOT, FHMPO, and neighboring counties and cities, among others.

The *Growth Capacity, Infrastructure, Recreation, and Natural Resources* section focuses on current, near-term and long-range infrastructure needs and priorities in the Green Valley Area. Many of these are outward focused, involving regional partners and coordination.

## WHAT WE HEARD

**Take advantage of existing** County properties to provide more amenities and activity areas

Find somewhere for a good **sports complex**

**None** (growth) needed

State Park No. 2 needs to be **maintained and the greenspace around the park should be increased**

**Sidewalks, trails, parks, and public recreation** should be priorities

Utilize **existing floodplain** property for recreation

A **trail connecting** to the City of Manhattan should be created

Create a **connection between** Elbo Creek and Timber Creek

Incorporate **new trails to and around** State Park No. 2

Create **safe walking routes to schools** for school age children

Increase park by **local institutional uses** such as churches and the new elementary school

Create a **safe route for kids** to cross Green Valley Road heading to the new elementary school

There is a need for **family and small-scale** recreation areas

A community **pool facility** is needed

Enough parks and trails are **provided by the City of Manhattan**

**We moved out of Manhattan** to enjoy slower, cheaper living  
municipal needs can be served by municipalities

Trails and sidewalks are needed **along collector and arterials** roads

All new developments need greenspace and/or trails

Increase the **quality of roads to access** State Park No. 2

This area needs an **outdoor public shooting range**

Parks, trails, and sidewalks should be a **function of the neighborhood HOAs**

# GROWTH CAPACITY FRAMEWORK FOR ACTION

## Key Issues and Considerations

Key issues and considerations related to growth capacity were identified through the Area Planning process. These essential items should be addressed as the Area’s guiding principles, goals and strategic action priorities for the coming years are pursued. Infrastructure is a key consideration in the ability of the Green Valley Area to grow and thrive. Without adequate, sustainable financed infrastructure, the Area will not be a viable or attractive location for potential residents or businesses to locate. Well-functioning infrastructure is also crucial for maintaining and improving the standard of living for current residents.

## Directing Growth

The Green Valley Area has experienced tremendous growth in the past decade. With the region’s continued attraction of job creating entities such as the National Biological and Agricultural Defense Facility (NBAF), growth pressures in the Area are likely to continue.

During engagement efforts for the Area Plan the following concerns were most frequently mentioned:

1. Maintaining the Area’s current character while development continues.
2. Build and maintain infrastructure required to keep up with the demands of new development
3. Create a road network that mitigates or reduces the increased traffic congestion from new development and provides for the provision of emergency services.
4. Create a system of trails and paths to connect developments to retail and recreational destinations.

In order to maintain current levels of service within the Area, as well as buffer the high-growth areas from the those with a rural character, growth must be directed to appropriate locations. These are locations where new development will:

- Be consistent with the desired character of the area;
- Pay their own way with regard to the new and improved infrastructure that it will require; and
- Located near existing or planned utilities.

This is a logical planning solution to identify areas for near- and long-term urban growth, as well as areas for open space and resource protection. This solution is most commonly referred to as “smart growth” (See **Page 50** for a more detailed description).

A combination of relevant smart growth strategies along with the location of planned and future utilities form the foundational layer of where to direct new residential and commercial development. When the location of existing and planned infrastructure are made part of the development process the development community, services providers, and residents can all ultimately take advantage of the costs savings provided through the efficient utilization of resources and facilities. (See **Page 59** for more information on how these principles cost less)

## Open Space and Recreation

Access for citizens to open space and recreational opportunities is an important feature of smart growth principles, but should also be treated as an important public infrastructure component. As the Green Valley Area continues to increase to a more urban density, the capacity and funding of these types of facilities needs to be accounted for in addition to more traditional infrastructure items.

## PRINCIPLES OF SMART GROWTH

When communities choose smart growth strategies, they can create new neighborhoods and maintain existing ones that are attractive, convenient and safe. They can protect the environment while stimulating economic growth. Most of all, they can create more choices for residents, workers, visitors, children, families, single people, and older adults—choices regarding where to live, how to get around, and how to interact with the people around them. When communities do this kind of planning, they preserve the best of their past while creating a bright future for generations to come.

The Smart Growth Network (SGN) is a network of private, public, and non-governmental partner organizations seeking to improve development practices in neighborhoods, communities, and regions across the United States. SGN has developed 10 smart growth principles, which, when applied, can help to create compact, sustainable, livable communities. The principles include:

- Encouraging community and stakeholder collaboration in development decisions;
- Preserving open space, farmland, natural beauty, and critical environmental areas;
- Mixing land uses;
- Taking advantage of compact building design;
- Creating a range of housing opportunities and choices;
- Creating walkable neighborhoods;
- Fostering distinctive, attractive communities with a strong sense of place;
- Strengthening and directing development towards existing communities;
- Providing a variety of transportation choices; and
- Making development decisions predictable, fair, and cost effective.

Communities that are successful in translating these principles into planning policies are well on their way to achieving socially, environmentally and economically sustainable places for their citizens to live work, and play.

Source: Smart Growth Network. This is Smart Growth. [www.smartgrowth.org](http://www.smartgrowth.org)

Planning for the growth capacity of the Green Valley Area supports the achievement of many of the other goals of the Area and its residents, including:

- Continued growth in the Area.
- Robust economy with diverse employment and revenue generation.
- Development of mechanisms to balance growth and agricultural and rural preservation.
- Safe and efficient transportation network to serve current and future residents.
- Access to new and existing open space and recreational amenities.

The Growth Capacity Framework for Action is organized in three tiers: (1) Guiding Principles, (2) Goals, and (3) Strategic Action Priorities. These topics are intended to coordinate with and support the other aspects of the Area Plan. The Strategic Action Priorities convey tangible actions that will, over time, achieve the Goals of this chapter in line with the Guiding Principles.

## GUIDING PRINCIPLES

Four of five guiding principles relate most to *Growth Capacity, Infrastructure, Recreation, and Natural Resources*.

**GP1—** The Green Valley Area will be **QUALITY-FOCUSED** and seek long-lasting value in its approach to public and private development and infrastructure in the Area.

**GP2—** The Green Valley Area will be **COLLABORATIVE** in its approach to big picture issues, including infrastructure, transportation, emergency management, and economic issues, forming partnerships and actively participating and having a voice in regional decision-making.

**GP4—** The Green Valley Area will be **RESPONSIVE** to changing economic conditions and preferred development types to ensure the continued success of future residential and commercial development opportunities.

**GP5—** The Green Valley Area will be **PROACTIVE** about pursuing opportunities to provide oversight and funding needed to ensure that the necessary infrastructure and facility upgrades are addressed at the time of development.

## GOALS

1. **Focus** on maintaining existing infrastructure balanced with the demands of new growth and development.
2. **Upgrade** the road network to improve traffic flow and safety as identified growth properties continue to develop.
3. **Ensure** adequate water and wastewater system capacities and coverage for Area residents.
4. **Find** ways to fund new infrastructure that accompanies growth, such as water, wastewater, drainage and roads at/near designated growth areas, as well as the long term maintenance of infrastructure.
5. **Increase** coordination with Rural Water District 1 and other service and infrastructure providers and partners.
6. **Develop** a system of private and public open spaces, sidewalks, and natural areas to provide pedestrian connectivity throughout the development ready portion of the Green Valley Area and access to natural amenities.

## STRATEGIC ACTION PRIORITIES

1. Coordinate the goals of the *Blue Township Sewer Master Plan and Green Valley Area Plan*.
2. Complete Area-wide master infrastructure plan (including roadways, bridges, stormwater drainage, open space and facilities, etc.) Building from the *Blue Township Sewer Master Plan* recommendations, develop an infrastructure plan for the Area that will include future infrastructure needs based on this Plan's *Green Valley Area Future Land Use and Character Map*.
  - › The infrastructure plan should include recommendations for funding mechanisms and updated fee structure policies for the conveyance of all utilities needed to support ongoing development in the Area. This Plan should be phased looking format to the year 2040.
  - › Coordination with Rural Water District 1 and a future water capacity analysis should be made a high priority as water supply will comprise a significant portion of the infrastructure plan.
3. Use the Blue Township Sewer Master Plan, and recommended Area master infrastructure plan, to identify properties "ripe" for development.
  - › Direct growth to places where it fits in with the character of the Area and pays its own way with regard to the infrastructure it requires.
  - › Encourage development patterns on these sites that create efficiencies by minimizing the need to create new infrastructure such as single-family cottage homes, duplexes, and townhome developments.
  - › Position new development proposals to take advantage of proximity to existing open space and recreational areas.
- › Limit growth outside of these areas so that it does not overwhelm existing infrastructure.
- › Respect the property rights and economic realities of rural landowners by providing development options that create value.
4. Evaluate Kansas State Law to determine how available funding mechanisms for development related costs such as impact fees, recapture agreements, special service districts, and special benefit districts can be utilized to assist with the installation and maintenance costs of new infrastructure.
5. Prioritize investment in infrastructure to support economic development. Identify the infrastructure needs of the commercial and industrial sites identified on *Map 1, Future Area Land Use Map* to identify capacity needs and deficiencies to be utilized to secure funding for infrastructure projects that will help upgrade these sites to "shovel ready" status, whether through county funds, partnerships, or creation of special financing districts or development of impact fees.
  - › Pursue infrastructure impact fee/funding assessment.
  - › Begin a discussion with Unified School District 383 to create an open space / active play facility that is open to the public during non-school hours at the elementary school property located at Moody and Junietta Roads.
  - › Actively seek public/private partnerships to pursue expansion of industrial parks and infrastructure financing.
6. Update the County's Zoning Ordinance to accommodate a variety of housing options within the R2 and R3 residential zoning districts.

# IMPACT FEES

The question of how to pay for infrastructure in the area has been a consistent issue in recent years.

Impact fees are a simple concept (a fee to have those generating the need for the infrastructure or other investment pay for some or all of it through a fee) but can be complicated in how they are structured. Generally, the jurisdiction imposing the fee must:

- Clearly identify the purpose of the fee;
- Identify how the fee will be used;
- Demonstrate a reasonable relationship between how the fee will be used and the type of project it will be leveraged on; and
- Only use the fees for the stated purposes and be able to account for the fees.

Prior to assessing impact fees, officials must determine the costs of capital improvements related to development and how to allocate those costs in a proportionate and equitable manner.

An impact fee study would examine which model of impact fee makes the most sense to pursue by defining the relationship between the need for capital improvements (infrastructure) and development and explore methods such as a plan-based capital impact fee calculation, cost recovery impact fee calculation, and an incremental expansion impact fee calculation.

7. Update the development regulations and standards for the Area to ensure the development process will result in necessary level of infrastructure and facilities desired for new developments.

- › Current development regulations require that "All proposed residential development plats consisting of more than 20 acres shall be accompanied with an "area recreation and open space plan." Add a requirement to include that new developments create a subdivision-maintained bike path/sidewalk along the perimeter right-of-ways of all new developments in addition to interior street sidewalks. This will help create a network of sidewalks to link new developments to open spaces and amenities in the Green Valley Area. These amenities may be counted as part of a new development's open space requirement.

8. Consider development of a *Green Valley Open Space and Recreation Plan*. Such a plan could examine the desires of residents and the overall open space and recreation needs of the Area, and identify desired locations for fulfilling these needs. Open space designations can also be used to help create larger more usable green spaces that are coordinated between multiple developments.

9. Utilize this Area Plan to advance infrastructure priorities at a regional level. Upon completion of the plan, setup meetings with Riley County, the City of Manhattan, and FHMPO to discuss furthering regional priorities such as a second Blue River Crossing and widening of the US-24 bridge over the Blue River.

10. Pursue adding a non-voting *ex officio* member to the Manhattan Urban Area Planning Board (MUAPB) to discuss issues such as development in the Green Valley Area, transportation, and emergency response coordination. Area representatives need to be at the table to have an active leadership role in matters that impact the Area.

11. Incorporate the recommendations of the 2017 *Big Blue and Kansas River Floodplain Management Plan* when reviewing new development proposals:







- › Additional or revised stormwater detention requirements
- › Additional or revised erosion control and water quality requirements.

12. Utilize Low Impact Development (LID) techniques and pursue regional stormwater facilities with joint-use benefits such as recreation and trails within the stormwater facility. *The Green Valley Area Future Land Use and Character Map* can be used as a guide for potential regional facilities.

- › Evaluate Area stormwater regulations to include the use of LIDs (examples are illustrated on page 60) to determine if these techniques can be used to offset the size of detention area required for new developments and increasing the amount of profitable land per development.

## COMPLETE STREETS

The complete streets concept does not call for immediate retrofit of all streets but is done with simple and incremental changes. Examples include:

-  **Improving traffic signal timing and coordination**
-  **Restriping traffic lanes to provide bicycle lane/path in one or both directions**
-  **Providing pedestrian countdown signals and audible push buttons**
-  **Installing ADA-compliant wheelchair ramps/pads and restriping crosswalks for higher visibility**
-  **Installing refuge islands, raised medians etc.**
-  **Installing on-street angled parking, instead of parallel parking, to narrow down wide roadway**



# HOW COMPACT DEVELOPMENT CAN BENEFIT THE GREEN VALLEY AREA

Development patterns have a huge effect on a governing body's finances. The cost of infrastructure like roads and sewers, as well as services like fire departments, ambulances and police are major budget items for any governmental entity, and decisions about development patterns can raise or lower the cost of these services. According to a national survey conducted by Smart Growth America utilizing compact development principles may:

**38 Percent  
Saving on  
Infrastructure**

## **1. Smart growth development costs one-third less for upfront infrastructure.**

Smart growth development would cost an average of 38 percent less than conventional suburban development for upfront infrastructure. Some studies have concluded that this number is as high as 50 percent. All development requires infrastructure to support and supply it. The studies included in this report primarily refer to roads, water lines and sewer lines, which account for most of the infrastructure cost associated with new development. Smart growth development patterns require less infrastructure, meaning upfront capital costs, operations, maintenance and, presumably, cost for eventual replacement are all lower. Smart growth development also often reuses existing infrastructure, lowering upfront capital costs even more.

**10 Percent  
Savings on  
Services**

## **2. Smart growth development saves municipalities an average of 10 percent on ongoing delivery of services.**

Our survey concluded that smart growth development saves municipalities an average of 10 percent on ongoing public services such as police, ambulance and fire service costs. Many public services are sensitive to a community's pattern of development because the configuration of a community—and the way the community is connected geographically—profoundly affects service delivery. A smart growth pattern will, at the very least, save operating costs simply because service vehicles drive fewer miles. In some cases, the actual number of vehicles and facilities can be decreased, along with the personnel required to provide those services.

**10 Times  
More Revenue**

## **3. Smart growth development generates 10 times more tax revenue per acre than conventional suburban development.**

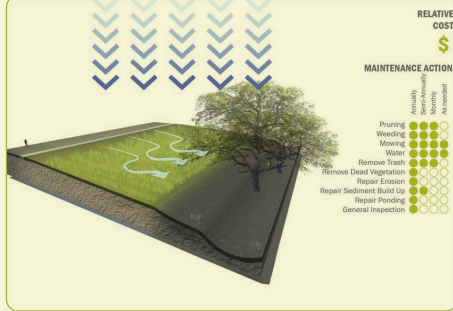
Our survey concluded that on a per-acre basis, smart growth development patterns produce far more tax revenue than conventional suburban development. When we refer to tax revenue, we are typically referring to property taxes and sales taxes, and in some instances licensing fees and other small sources of revenue. Property tax in particular is an extremely important source of revenue for most communities. In a 2010 U.S. Census survey of local government budgets nationwide, 48 percent of revenue from municipalities' own sources came from property taxes, and 10 percent came from sales taxes, though the relative importance of these taxes varies across the country.

Source: Smart Growth America, Building Better Budgets

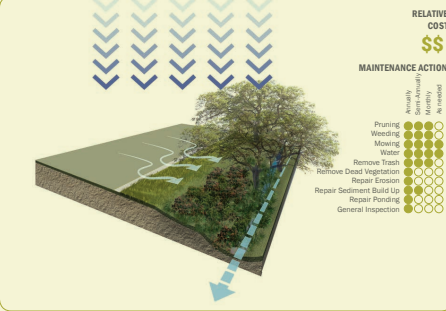
# WHAT DOES LOW IMPACT DEVELOPMENT LOOK LIKE?

LID practices mimic the natural processing of stormwater runoff and can create more attractive communities. LID techniques and strategies are listed below.

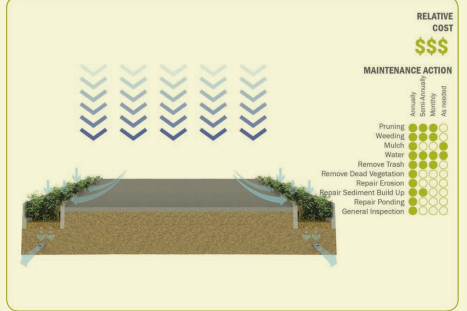
## VEGETATED FILTER STRIP



## VEGETATED SWALE



## BIORETENTION CELL / RAIN GARDEN



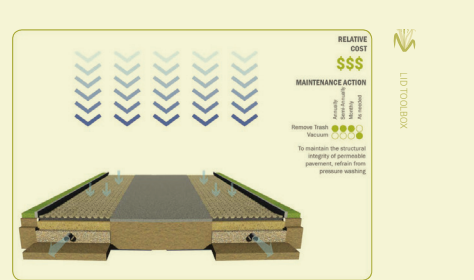
## BIOSWALE



## STORMWATER PLANTER BOX



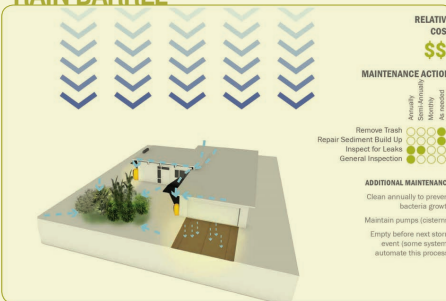
## PERVIOUS PAVEMENT



## CONSTRUCTED STORMWATER WETLANDS



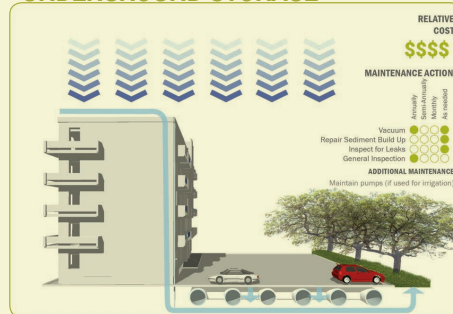
## RAIN BARREL



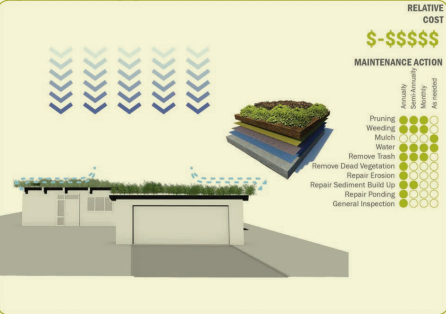
## CISTERN



## UNDERGROUND STORAGE



## GREEN ROOF



As illustrated, a range of techniques can be utilized to achieve low-impact development (LID). It is important to determine that the technique selected to mimic a site's predevelopment hydrology is consistent with the character of the built environment.

Source: *Designing for Impact: A Regional Guide to Low Impact Development*. Houston-Galveston Area Council.



## The Future Area 5 | ECONOMIC OPPORTUNITY



The *Economic Opportunity* section focuses on current, near-term, and long-range economic needs and priorities in the Green Valley Area. Many of these are outward focused, involving regional partners and coordination. An overarching concern involves development of a strong and resilient economy. Increased economic activity that creates a growing tax base better enables governmental and quasi-government entities the ability to deliver infrastructure and services desired by residents and businesses in the Area. In turn, the services, infrastructure, and amenities provided are enticements that encourage further economic growth. Well-constructed economic development policies will provide the Green Valley Area the greatest opportunity to influence the quality, quantity and timing of development. Such policies will create the ability to shift some of the risk of funding public improvements to private sector partners and will afford the opportunity to ensure growth pays for itself.



# ECONOMIC OPPORTUNITY FRAMEWORK FOR ACTION

## Key Issues and Considerations

Key issues and considerations related to economic opportunity were identified through the Area Planning process. These essential items should be addressed as the Area’s guiding principles, goals and strategic action priorities for the coming years are pursued.

### Opportunities and Land Availability

Based on a location quotient analysis of the Green Valley Area, there are high concentrations of transportation and warehousing and manufacturing businesses relative to Pottawatomie County and the State of Kansas. This information indicates that the Area already has a trained workforce in these categories which can be used to attract more businesses. Tying strengths in these categories can also be used to attract business that will support the new National Bio and Agro-Defense Facility (NBAF) given the area’s proximity to that facility.

The Pottawatomie County Economic Development Corporation (PCEDC) has a track record of success utilizing public and private money to develop infrastructure in these business parks, allowing them to be sold to expanding or new commercial entities at an affordable price. The PCEDC has an existing industrial park in the Green Valley area named the Green Valley Industrial Park; however, this park is fully developed and does not have any properties available. Limiting factors include the cost, availability and suitability of land and the high cost of infrastructure, including storm drainage and roads.

Discussions with economic development professionals in the Area and region revealed that existing barriers to additional investment within the Area include a dearth in the availability of shovel-

ready suitable land for growth industries.

PCEDC has examined available sites throughout Pottawatomie County including specific development sites in the Green Valley Area and have this information available to identify primary retail and business development sites.

### Neighborhood Shopping Needs

A trade area retail gap analysis of the Green Valley Area identified a slight demand for neighborhood scale businesses for basic goods and services. However, this same analysis revealed that many Area resident’s shopping needs are being fulfilled in nearby regional shopping centers in Manhattan. Demand for more retail opportunities will increase as new residential units are built in the trade area.

This same gap analysis also identified that concentrations of motor vehicle dealerships and furniture stores in the Area. These types of uses tend to cluster around one another. Since these are high sales tax-producing uses, policies to attract similar businesses should be examined by local economic development entities and local officials.

### Regional Proximity

The proximity between the Green Valley Area and its neighbors, particularly Riley County and the City of Manhattan, have strengthened in recent decades. The explosive growth of the Area shines a spotlight on the need for enhanced coordination and regional solutions. The Green Valley Area will be able to continue to capitalize on regional activity and should focus on working with area partners to leverage available sites and new infrastructure; particularly, along the US-24 corridor. Area representatives should also focus on development strategies that illustrate how the Green Valley Area is a “top notch” location for businesses that fit into the target industry sectors identified in the Region Re-Imagined Plan.

Planning for the economic opportunities of the Green Valley Area should support the achievement of many of the other goals of the Area and its residents, including:

- Assisting to pay for new infrastructure (water, sewer, roads, etc) through increases in property and sales tax revenues.
- Attracting quality retail and employment destinations that support and cater to Area resident needs.

The Economic Opportunities Framework for Action is organized in three tiers: (1) Guiding Principles, (2) Goals, and (3) Strategic Action Priorities. These topics are intended to coordinate with and support the other aspects of the Area Plan. The Strategic Action Priorities convey tangible actions that will, over time, achieve the Goals of this chapter in line with the Guiding Principles.

## GUIDING PRINCIPLES

Three of five guiding principles relate most to *Economic Opportunity*.

**GP1—** The Green Valley Area will be **QUALITY-FOCUSED** and seek long-lasting value in its approach to public and private development and infrastructure in the Area.

**GP3—** The Green Valley Area will be **ADAPTABLE** as it plans for its future by continuing to build on its historic industries, while investing in elements that will make the Area stronger and resilient to economic trends and other changes.

**GP4—** The Green Valley Area will be **RESPONSIVE** to changing economic conditions and preferred development types to ensure the continued success of future residential and commercial development opportunities.

## GOALS

1. **Enable** a balanced, diversified and resilient economy to ensure desirable local employment opportunities, strengthen the Area’s tax base, and sustain quality of life.
2. **Highlight** the Area’s proximity and links to Manhattan and the larger region to attract new development opportunities.
3. **Actively pursue** partnerships for potential future NBAF facilities/investments as well as other potential research based growth industries.
4. **Ensure** the necessary infrastructure is available to meet demand for retail as well as growth sectors such as manufacturing and light industry.

Even though government cannot influence all the factors important to economic development, it can have a significant impact through its roles as public service provider, regulator, business recruiter, and potential deal-maker. Of these roles, the first two are essential; government must provide quality basic services and an efficient regulatory environment if it wishes to create economic development. Providing further incentives to businesses is optional—whether it makes sense depends on what government can reasonably offer, the extent to which such offerings are necessary to attract business, and the cost of those offerings.

Local government involvement in economic development can take several forms, including:

- Clearing and assembling adequate land for business (zoning, remediation and abatement, and similar devices);
- Underwriting risk (industrial development bonds, tax abatement, sales tax reimbursement, and low interest loan programs);
- Providing amenities and infrastructure (construction of utilities, tax increment financing);

- Promoting economic development (participation in chambers of commerce, economic development organizations, trade missions, other nonprofit groups);
- Providing job training, or establishing supporting institutions that provide job training (e.g., community colleges and technical schools);
- Changing the tax structure to promote economic development; and
- Modifying regulations that are seen as burdensome to business.

## STRATEGIC ACTION PRIORITIES

1. Prioritize investment in infrastructure to support economic development. Identify areas in which existing infrastructure is currently limiting economic development. Work to secure funding for these infrastructure projects, whether through County funds, partnerships, or creation of special financing districts or development of impact fees.
  - › Pursue infrastructure impact fee/funding assessment.
  - › Actively seek public/private partnerships to pursue expansion of industrial parks and infrastructure financing.
2. Pursue adding a non-voting, ex officio, Area representative member (business owner or developer) to the Manhattan Urban Area Planning Board (MUAPB) to discuss development in the Green Valley Area, transportation, and emergency response coordination. A representative should be at the table to advocate for policies that will benefit the Area.

## ECONOMIC DEVELOPMENT PARTNERS AND TOOLS

The Pottawatomie County Economic Development Corporation currently provides a host of business assistance tools to businesses looking to locate in the Green Valley Area including:

### Revolving Loan Fund

The revolving loan fund assists with business start-ups and expansions and has approximately \$100,000 in available funds. In 2016 there were 322 small business loans in the County. PCEDC also has access to StartUp Kansas funds, which provide gap financing to help entrepreneurs start or grow a business. The loan maximum from StartUp Kansas is \$45,000.



### Small Business Development Center

PCEDC cost-shares the services available through the Washburn University Small Business Development Center. Services may include developing business plans, market projections, and linking to national networks and financial resources.

### Economic Gardening

Focuses on strengthening existing businesses, economic gardening services may include data-mining, use of geographic information systems, or developing connections. PCEDC is the local partner with Network Kansas

Network Kansas also offers programs such as the Kansas Ice House Entrepreneurship Program where entrepreneurs attend an eight week certificate program to develop entrepreneurial skills and Destination Boot camp a two-and-a-half day off-site in-depth training.

3. Provide a range of workforce housing options for a diverse and expanding workforce.

- › Ensure that zoning and development regulations allow for a mix of housing types in appropriate locations throughout the Area.
- › Follow the *Green Valley Area Future Land Use and Character Map* areas of growth and preservation, focus on expanding housing options within designated areas of growth.

4. Pursue implementation of first-time building codes for the Green Valley Area. Building codes will ensure safe and consistent quality development within the Area.

- › Work with development community and other stakeholders during building code generation and roll-out phases to ensure awareness about the changes and how it will affect the development process.

5. Develop design guidelines for commercial and industrial zoning properties within the Green Valley Area. Design guidelines can help ensure a consistent development outcomes by establishing predictability. Design guidelines can also help to reduce visual inconsistencies and create an improved aesthetic experience.

6. Develop a Green Valley Area specific marketing strategy to be used to actively pursue business attraction opportunities.

- › Examine and identify land that may be suitable for retail development opportunities.
- › Develop Green Valley Area specific marketing materials that highlight the trade area's demographic advantages.

7. Establish an incentive policy and approval process that identifies specific criteria to utilize while evaluating incentive requests for business attraction efforts.

- › The size and scale of incentive packages should consider the amount of new jobs being created, average hourly wages, amount of new tax generation, etc.
- › Incentives should be in conjunction with projects that further public goals such as creating or expanding local infrastructure.
- › Incentives should be performance-based and detail certain benchmarks that a developer/business must meet before payment/reimbursement of any agreed to financial incentive.

8. Pursue neighborhood supporting retail and other retail components that were shown to be needed in the Green Valley Area based on a retail trade area analysis.

- › Ensure that zoning districts permit neighborhood commercial scale retail development.
- › Periodically update the trade area retail leakage gap analysis as the Area's population continues to grow.

9. Utilize psychographics to understand the Green Valley Area market. Understanding the market can help to tailor strategies to the different segments of the population that live in the Area and their different buying and spending habits. The Area's in-depth psychographic profile may be found in Appendix B. (See **page 67** for a definition of psychographics)

# DEVELOPMENT INCENTIVES - HIGH LEVEL OVERVIEW

Local governments in Kansas have a variety of potential ways to help incentivize commercial and industrial development. Here are a few tools that may be useful for local officials and partners to help attract new businesses to the Green Valley Area.

## **Industrial Revenue Bonds (IRB)**

In Kansas, IRBs are issued by cities, counties and the Kansas Development Finance Authority. Proceeds from the sale of the bonds to private investors are made available to enable credit-worthy companies to purchase land and pay the costs of constructing and equipping new facilities or the costs of acquiring, remodeling and expanding existing facilities. There are restrictions on the types of businesses (must be involved in the manufacture of goods) that can utilize IRB and what improvements are eligible for these types of incentives need to be vetted thoroughly.

## **Tax Increment Financing**

Tax Increment Financing (TIF) is a real estate redevelopment tool applicable to industrial, commercial, inter-modal transportation area and residential projects. TIF uses the increases in real estate tax revenues to retire the bonds sold to finance eligible redevelopment project costs (K.S.A. 12-1770 et seq.) or to reimburse the developer on a pay-as-you-go basis.

## **STAR Bond Financing**

Sales Tax and Revenue (STAR) Bonds were created by the Kansas Legislature. STAR Bonds are used to assist the development of major entertainment or tourism destinations using the sales tax revenues generated by associated retail development. STAR Bonds allow state sales tax revenue generated by the project to be used along with local sales taxes as a source of revenue to retire bonds issued to finance eligible project costs. STAR Bond projects in rural areas have no specific financial threshold, but must be of major regional or statewide significance. Generally, STAR Bond financing is used in connection with large retail projects that contain an entertainment and/or tourism destination. The creation of a STAR Bond district requires the approval by the Secretary of Commerce.

## **Property Tax Abatement**

The board of county commissioners of any county or the governing body of any city may approve, for economic development purposes, a property tax exemption for up to 10 years per Article 11, Section 13 of the Kansas Constitution, for the following types of projects: the property (real or personal) must be used exclusively for manufacturing articles of commerce, conducting research and development, or storing goods which are sold or traded in interstate commerce. The property must also be: (1) associated with a new business; or (2) associated with the expansion of an existing business that creates new employment.

## **Sales Tax Incentives**

Local units of government have the ability to rebate their local portion of sales taxes generated to a business. Typically, these incentives are used to encourage the location of large sales tax producers into a jurisdiction. Pottawatomie County currently has a local sales tax of 1.0 percent. Hypothetically, if a new business generates \$10,000,000 in annual sales, they generate \$100,000 in sales tax. This new revenue (or a portion of it) could be used to help offset public improvements costs fronted by a business while developing their business's site.

## **Community Improvement District (CID)**

The CID funding mechanism can be used to finance a variety of locally approved development-related activities including property acquisition, infrastructure development, and parking and building construction within the district. A CID can derive revenues through special assessments, a district-only sales tax, or other funds as appropriated by the city or county. Financing is provided through bond issuance or can be project generated on a pay-as-you-go reimbursement basis.

# WHAT ARE PSYCHOGRAPHICS?

Psychographics is a term used to describe the characteristics of people and neighborhoods which, instead of being purely demographic, speak more to attitudes, interests, opinions and lifestyles. Tapestry (ESRI) is a leading system for categorizing day- and night-time populations into one of 67 distinct lifestyle segments based on these factors. Many commercial retail developers rely on psychographics to measure a market’s depth for certain consumer preferences and propensity to spend across select retail categories. Similarly, a growing number of residential developers are interested in an area’s psychographic profile because it can serve to eliminate some of the uncertainty associated with delivering unproven product types to a market.

ESRI’s data development team has a 35-year history of excellence in market intelligence. The team’s economists, statisticians, demographers, geographers, and analysts produce independent small-area demographic and socioeconomic estimates and forecasts for the United States. The team develops exclusive demographic models and methodologies to create market-proven datasets, many of which are now industry benchmarks such as Tapestry Segmentation, Consumer Spending, Market Potential, and annual Updated Demographics.

**Figure 5, Summary of Green Valley Area Psychographics and Percent of Households Tapestry Segments**



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## The Future Area 6 | IMPLEMENTATION



With this Green Valley Area Future Land Use and Growth Management Plan, current and future officials, partner agencies, and organizations will have an essential new document

that should be frequently referenced for guidance in Area decision-making. The plan should be a “living document” that is responsive to ongoing change. Additionally, considering the ongoing governance discussion, the action items and strategic action priorities were crafted to be implementable by any future governing body. The Plan’s key planning considerations, goals, policies, and action strategies must also be revisited periodically to ensure that the plan is providing clear and reliable direction on a range of matters, including land development issues and public investments in infrastructure and services.

Implementation is not just about a list of action items. It is a challenging process that will require the commitment of the Area’s current and future elected and appointed officials, staff, residents, business owners, major institutions, other levels of government, and other organizations and individuals who will serve as champions of the plan and its particular direction and strategies.

### WHY THIS PLAN SECTION IS IMPORTANT FOR THE GREEN VALLEY AREA

This section emphasizes the importance of creating actionable items that can be transferred to any form of governance that may ultimately preside over the Green Valley Area’s land use decisions.

- It adds a shorter-term strategic perspective to what is otherwise intended as a guide to the Area’s long-term enhancement over the next 20 years.
- It includes a list of priority actions for the Area and other plan implementation partners to focus on during the next several years after plan adoption.
- It underscores the need to keep the plan fresh and relevant through annual review and reporting procedures and periodic updates.

One key theme to reiterate is that this plan was developed in conjunction with Pottawatomie County staff and with regular open opportunities to obtain feedback for constituents. Ongoing commitment to this plan will not only benefit current and future residents, but buy-in now will ensure that any future governing bodies have the direction they need to foster a seamless transition that still abides by the priorities established in this plan.

## PLAN ADMINISTRATION

During the development of this plan, representatives of government, business, community groups, and others came together to inform the planning process. These community leaders – and new ones that will emerge over the horizon of this plan – must maintain their commitment to the ongoing implementation and updating of the plan’s goals, policies, and action strategies.

## EDUCATION

Long-range plans such as the Green Valley Area Plan are relatively general in nature, but they are still complex policy documents that account for interrelationships among various policy choices. As such, educating decision-makers and administrators about plan implementation is an important first step after plan adoption. As the principal groups that will implement the plan, County department heads, the Board of County Commissioners (BOCC), Planning Commission, and PCEDC should all be “on the same page” with regard to priorities, responsibilities, and interpretations.

Consequently, an education initiative should be undertaken immediately after plan adoption, which can include:

- A discussion of the individual roles and responsibilities of the BOCC, Planning Commission, other advisory bodies, PCEDC, and individual staff members;
- A thorough overview of the entire Area Plan, with emphasis on the parts of the plan that relate to each individual group;
- Implementation tasking and priority setting, which should lead to each group establishing a one year and three-year implementation agenda; and
- Continuing to assist with the ongoing governance discussion.

## DEFINITION OF ROLES

As the County’s elected officials, the Board of County Commissioners should assume the initial lead role in the implementation of this plan. Their role, while still significant, may need to be revised depending on the outcome of the ongoing Green Valley Area governance discussions. The key responsibilities of the Board of County Commissioners are to decide and establish priorities, set time frames by which actions will be initiated and completed, and determine the budget to be made available for implementation efforts. In conjunction with the County Administrator, BOCC members must also help to ensure effective coordination among the various groups that are responsible for carrying out the plan’s action strategies.

The description of roles in the following pages assumes for the time being the County and its elected officials/staff will be the governing agency responsible for implementing this plan immediately after the plan’s adoption, but this will need to be reevaluated and this section amended based on the outcome of the governance discussion.

# IMPLEMENTATION METHODS

## Capital Projects

As development continues in the Green Valley Area, investment in capital projects and infrastructure will continue as a high priority. Decision makers should examine all available tools to help pay for or offset significant portions of those costs that are specifically related to new developments. Policies are needed to detail which options such as impact fees, recapture agreements, off-site improvement requirements, TIFs, and other mechanisms are most feasible in the Green Valley Area.



## Programs and Initiatives

Programs involve the routine activities of County departments and staff, as well as special projects and initiatives they may undertake. As part of plan implementation, this may include initiating new or adjusting existing programs and activities, expanding community outreach efforts, or providing specialized training to accomplish a priority objective more promptly and/or effectively.



## Regulations and Standards

Given that private investment decisions account for a vast majority of the Area's physical form, land development regulations and engineering standards are fundamental for plan implementation. Consequently, in the Green Valley Area, Pottawatomie County zoning and subdivision regulations and associated development criteria and technical engineering standards are currently the basic keys to ensuring that the form, character, and quality of development reflect the Area's planning objectives. These regulations should advance the Area's desire for quality development outcomes while recognizing economic factors. They should not delay or interfere unnecessarily with appropriate new development or redevelopment that is consistent with plan principles and directives.



## Partnerships and Coordination

Some Area initiatives identified in this plan cannot be accomplished by Area officials on its own. They may require direct coordination, intergovernmental agreements, or funding support from other public entities or levels of government. Additionally, non-profit and private entities play a unique role to help advance the successful and continued development of the Area as the entities who will attract new development. In order to accomplish all these goals, there will be a need for cooperative efforts, volunteer activities, and in-kind services (which can count toward the local match requirements for various grant opportunities), and from public/private financing of community improvements.



## Targeted Planning / Studies

Various areas of governance and infrastructure require more detailed study and planning, especially as required to qualify for external funding opportunities. These studies involve targeted planning work at a "finer grain" level of detail than is appropriate for long-range planning purposes (e.g., utility infrastructure master plans, open space facility needs and planning, corridor-focused plans, etc.) As such, some parts of this plan will be implemented only after some additional planning or special study to clarify next steps and associated costs and considerations.



## Board of County Commissioners

The BOCC should take the lead in the following general areas:

- Adopting and amending the plan, after recommendation by the Planning Commission.
- Establishing the overall implementation priorities and time frames by which action strategies in the plan will be initiated and completed.
- Considering and approving the funding commitments that will be required.
- Adopting new or amended land development regulations to implement the plan.
- Offering final approval of projects and activities and their associated costs during the County's annual budget process, keeping in mind the need for consistency with the plan and its policies.
- Providing policy direction to the Planning Commission, other appointed County boards and commissions, and County staff.
- Creating a transition framework for relevant plan recommendations depending on the outcome of ongoing governance decisions.

## Planning Commission

The Planning Commission should take the lead in the following general areas:

- Ensuring that recommendations forwarded to the Board of County Commissioners are reflective of the plan goals, priorities, and action strategies.
- Periodically obtaining public input to keep the plan up to date, using a variety of outreach and citizen and stakeholder involvement methods.

## County Staff

County Staff should take the lead in the following general areas:

- Managing day-to-day implementation of the plan.
- Supporting and carrying out thoroughfare and park planning efforts.
- Managing the drafting of new or amended land development regulations.
- Reviewing land development applications for consistency with the Area Plan.
- Working with the County's legal counsel to understand the applicability of recommended infrastructure funding mechanisms.
- Administering collaborative programs and ensuring open channels of communication with various private, public, and non-profit implementation partners.
- Maintaining an inventory of potential plan amendments, as suggested by County staff and others, for consideration during annual and periodic plan review and update processes.
- Generating and presenting an annual report to the Planning Commission and BOCC concerning progress toward implementation of the Area Plan.

## Pottawatomie County Economic Development Corporation

The Pottawatomie County Economic Development Corporation should take the lead in the following general areas:

- Assisting staff in implementation of plan elements related to economic development and, in some instances, housing development.
- Create and manage the recommended marketing and business attraction programs to attract identified retail and job creation activities to the area.

## ACTION AGENDA

The goals in this Area Plan will ultimately be attained through a multitude of specific actions. Many of the initiatives highlighted in this section cut across – and are supported by – multiple elements within the plan. Compiled in **Table 2 Green Valley Strategic Action Items**, is a list of key action strategies derived from the various plan elements. The table does not include every recommendation found throughout this plan. Instead, it details a shorter “to do” list of strategic priorities, their potential timing, and who is responsible for initiating, administering, and participating in the implementation process.

Additionally, the action strategies have been categorized regarding those actions that will involve (1) capital investments, (2) programs and initiatives, (3) regulations and standards, (4) partnerships and coordination, and (5) targeted planning/studies. Most capital projects will also require, to varying degrees, additional feasibility analysis, construction documentation, specifications, and detailed cost estimates.

Table 2 provides a starting point for determining task priorities. This is an important first step toward plan implementation. County leadership should determine which of the immediate goals (indicated with the 0-2 year time frame), should be initially implemented. Once near-term action items are identified, leaders should allocate necessary resources (funding, staff time, etc.) to complete these items. Leaders should identify a lead staff member (department) to develop a first year work program in conjunction with County management, other departments, and other public and private implementation partners to implement these action items.

The ongoing governance discussion should also be considered as part of the evaluation process to determine which initial action priorities to pursue. Identifying action items that can be completed or

easily passed to another staff/group of decision makers needs to be part of the process to identify which action items to pursue first and how they will benefit the citizens of the Green Valley Area regardless of who the governing body is in the future.

These near-term action priorities should be revisited by local officials and staff annually to recognize accomplishments, highlight areas where further attention and effort are needed, and determine whether some items have moved up or down on the priority list given changing circumstances and emerging needs. It should be kept in mind that early implementation of certain items, while perhaps not the uppermost priorities, may be expedited by the availability of related grant opportunities, by a state or federal mandate, or by the eagerness of one or more partners to pursue Area initiatives. On the other hand, some high-priority items may prove difficult to tackle in the near-term due to budget constraints, the lack of an obvious lead entity or individual to carry the initiative forward, or by the Area’s readiness to take on a potentially controversial new program.

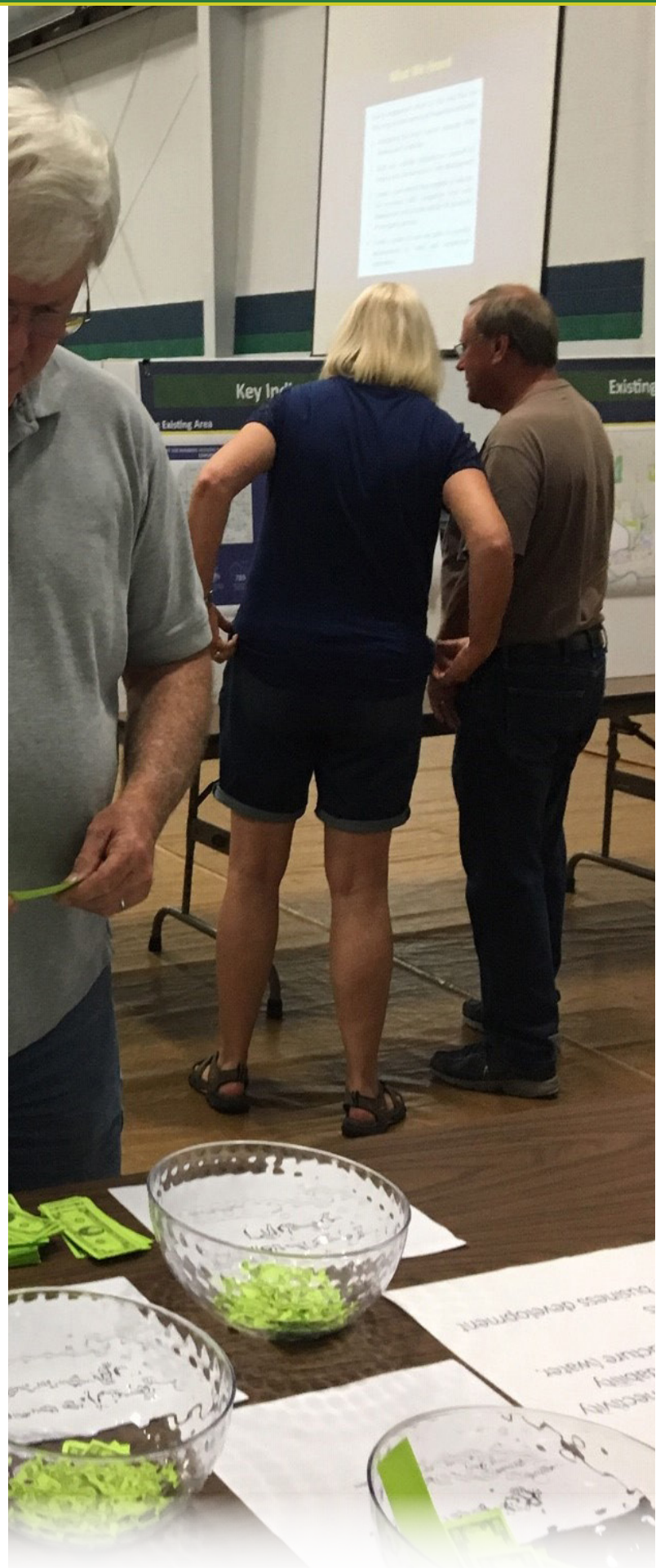
## COMMUNITY PRIORITY CATEGORIES

Throughout the process of developing this plan, residents, steering committee members, and town hall / open house attendees were asked what the top priorities should be for the Green Valley Area Action Agenda. This input was used to establish a priority ranking of these categories. The following list details how community members prioritized these categories starting with the highest priority to the lowest priority:

1. Traffic Reduction
2. Public Infrastructure Upgrades
3. Pedestrian Connectivity
4. Housing Choices / Affordability
5. Business Attraction

While this list represents Green Valley Area Residents priorities, there are additional factors such as funding availability, staff time, regulatory agency approval, and development approval that ultimately decide the order in which Action Agenda items are implemented. The community priority that each Action item helps accomplish has been included to help decision makers evaluate the implementation timing of each identified action.

These items have also been included in Table 2 to help guide future leaders to set priorities based on need and community input obtained during this planning process.



**TABLE 2 : GREEN VALLEY STRATEGIC ACTION ITEMS**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>IMPROVE STREET NETWORK AND CONNECTIVITY</b>				
<ul style="list-style-type: none"> <li>• Create a Transportation and Thoroughfare Plan for the Green Valley Area to identify the location of new and extended roads and bike paths/sidewalks to create a more connected street and pedestrian network and provide alternative routes to goods and services.</li> <li>• Build partnerships with developers to coordinate land use and transportation investment and promote shared, equitable contributions to implementing the transportation system.</li> </ul>	<p>Traffic Reduction</p> <p>Pedestrian Connectivity</p>	<p>Transportation and Mobility</p> <p><b>SAP 1, Bullet 2 and SAP 4</b></p>	<p>1-2 years and Ongoing</p>	<p>Capitol Projects</p> <p>Targeted Planning / Studies</p> <p>Regulations and Standards</p> <p>Partnerships and Coordination</p>
<b>REDUCE TRAFFIC ON US-24</b>				
<ul style="list-style-type: none"> <li>• Continue to work with KDOT to implement the US-24 Corridor Plan and reduce the number of Access Points and turn-arounds on US-24 to increase traffic capacity and safety.</li> <li>• Coordinate with the Flint Hills MPO (FHMPO) to expand transportation options linking The Green Valley Area and the greater Flint Hills region.</li> <li>• Utilize this Area Plan to advance infrastructure priorities at a regional level. Upon completion of the plan, set-up meetings with Riley County, Manhattan, and FHMPO to discuss furthering regional priorities such as a second Blue River Crossing and widening of the US-24 bridge over the Blue River.</li> </ul>	<p>Traffic Reduction</p> <p>Public Infrastructure Upgrades</p>	<p>Transportation and Mobility</p> <p><b>SAP 3, Bullet 1 and SAP 5</b></p> <p>Growth Capacity, Infrastructure, Recreation, and Natural Resources</p> <p><b>SAP 9</b></p>	<p>2-6 Years and Ongoing</p>	<p>Capitol Projects</p> <p>Partnerships and Coordination</p> <p>Programs and Initiatives</p>

**TABLE 2 : GREEN VALLEY STRATEGIC ACTION AGENDA**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>UPDATE DEVELOPMENT REGULATIONS</b>				
<ul style="list-style-type: none"> <li>Develop design guidelines for commercial and industrial zoned properties within the Green Valley Area. Work with the development community, residents, Pottawatomie County Economic Development Corporation, and neighboring jurisdictions to develop and adopt codes based on existing best practices and outcomes expressed by Area residents.</li> <li>Evaluate regulations and Kansas State Law to determine how all available funding mechanisms for development related costs such as impact fees, recapture agreements, special service districts, and special benefit districts can be utilized to assist with the installation and maintenance costs of new and upgraded infrastructure required by a new proposed development.</li> <li>Update the development regulations and standards for the Area to ensure the development process will result in necessary level of infrastructure and facilities desired for new developments.</li> <li>Pursue implementation of first-time building codes for the Green Valley Area.</li> </ul>	<p>Traffic Reduction</p> <p>Public Infrastructure Upgrades</p> <p>Pedestrian Connectivity</p> <p>Housing Choices / Affordability</p>	<p>Land Use and Development <b>SAP 4</b></p> <p>Transportation and Mobility <b>SAP 4</b></p> <p>Growth Capacity, Infrastructure, Recreation, and Natural Resources <b>SAP 4 and 7</b></p> <p>Economic Opportunity <b>SAP 4</b></p>	<p>1-2 Years and Ongoing</p>	<p>Regulations and Standards</p> <p>Partnerships and Coordination</p> <p>Programs and Initiatives</p>

**TABLE 2 : GREEN VALLEY STRATEGIC ACTION AGENDA**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>CONNECT DEVELOPMENT AND OPEN SPACES WITH BIKE TRAILS / SIDEWALKS</b>				
<ul style="list-style-type: none"> <li>Work with developers to construct sidewalks and bike paths around the peripheries and/or adjacent to major or minor collectors that abut new development sites in addition to the creation of internal development sidewalks to create an interconnected system of sidewalks throughout the Green Valley Area.</li> </ul>	<p>Traffic Reduction</p> <p>Pedestrian Connectivity</p>	<p>Transportation and Mobility</p> <p><b>SAP 1, Bullet 3</b></p>	<p>Ongoing</p>	<p>Regulations and Standards</p> <p>Partnerships and Coordination</p>
<b>BUSINESS ATTRACTION</b>				
<ul style="list-style-type: none"> <li>Prioritize investment in infrastructure to support economic development. Identify areas in which existing infrastructure is currently limiting economic development. Work to secure funding for these infrastructure projects, whether through County funds, partnerships, or creation of special financing districts or development of impact fees.</li> <li>Establish an incentive policy and approval process that identifies specific criteria to utilize while considering incentives used in business attraction efforts.</li> <li>Pursue neighborhood supporting retail that were shown to be needed in the Green Valley Area based on a retail trade area analysis.</li> </ul>	<p>Businesses Attraction</p>	<p>Economic Opportunity</p> <p><b>SAP 1, 7, and 8</b></p>	<p>2-3 Years and Ongoing</p>	<p>Regulations and Standards</p> <p>Partnerships and Coordination</p> <p>Programs and Initiatives</p>

**TABLE 2 : GREEN VALLEY STRATEGIC ACTION AGENDA**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>COORDINATE DEVELOPMENT AND INFRASTRUCTURE EXPANSION WITH PARTNER AGENCIES</b>				
<ul style="list-style-type: none"> <li>Complete Area-wide master infrastructure plan (including roadways, bridges, stormwater drainage, open space and facilities, etc.) building off of the <i>Blue Township Sewer Master Plan</i> recommendations.</li> <li>Prioritize investment in infrastructure to support economic development. Identify the infrastructure needs of the commercial and industrial sites.</li> <li>Actively pursue partnerships to work with local jurisdictions as they make investments in their infrastructure (such as roads, storm drainage, etc.) to coordinate with potential expansions and investments of PCEDC, particularly for industrial parks.</li> </ul>	<p>Public Infrastructure Upgrades</p> <p>Business Attraction</p>	<p>Growth Capacity, Infrastructure, Recreation, and Natural Resources</p> <p><b>SAP 2 and 5</b></p> <p>Economic Opportunity</p> <p><b>SAP 1, Bullet 3</b></p>	<p>2-6 Years and Ongoing</p>	<p>Partnerships and Coordination</p> <p>Targeted Planning / Studies</p>

**TABLE 2 : GREEN VALLEY STRATEGIC ACTION AGENDA**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>ENCOURAGE A LOGICAL DEVELOPMENT PATTERN FOR THE LOCATION OF NEW DEVELOPMENTS</b>				
<ul style="list-style-type: none"> <li>• Concentrate commercial and business development in locations that are appropriate for these uses and within close proximity to their target markets / employees, existing transportation networks, and similar businesses categories.</li> <li>• Use the <i>Green Valley Area Future Land Use and Character Map</i> and Blue Township Sewer Master Plan, and recommended Area master infrastructure plan, to identify properties “ripe” for development.               <ul style="list-style-type: none"> <li>› Direct growth to places where it fits in with the character of the Area and pays its own way with regard to the infrastructure it requires.</li> <li>› Encourage development patterns on these sites that create efficiencies and minimize the need to create new infrastructure such as single-family cottage homes, duplexes, and townhome developments.</li> <li>› Position new development proposals to take advantage of proximity to existing open space and recreational areas.</li> <li>› Limit growth outside of these areas so that it does not overwhelm existing infrastructure.</li> <li>› Respect the property rights and economic realities of rural landowners by providing development options that create value.</li> </ul> </li> </ul>	Public Infrastructure Upgrades  Business Attraction	Land Use and Development <b>SAP 3</b>  Growth Capacity, Infrastructure, Recreation, and Natural Resources <b>SAP 3</b>	1-3 Years and Ongoing	Programs and Initiatives  Partnerships and Coordination  Targeted Planning / Studies

**TABLE 2 : GREEN VALLEY STRATEGIC ACTION AGENDA**

Action	Priority Categories	Plan Location	Initiate	Action Type
<b>ENCOURAGE THE DEVELOPMENT OF MORE HOUSING OPTIONS</b>				
<ul style="list-style-type: none"> <li>Encourage the development of a diversity of housing densities, sizes, and development patterns within areas of existing development and growth. Both rental and for-sale housing of varying sizes and price points should be encouraged within appropriate areas of the Green Valley Area. Life-cycle housing and housing that allows for aging in place should be encouraged.</li> <li>Develop a palette of housing options to provide guidance to the development community regarding acceptable scale, density, and architectural standards for new housing types.</li> <li>Provide a range of workforce housing options for a diverse and expanding workforce.</li> </ul>	Housing Choices/ Affordability	Land Use and Development <b>SAP 2</b>  Economic Opportunities <b>SAP 3</b>	2-3 Years and Ongoing	Regulations and Standards  Programs and Initiatives
<b>CREATE CONNECTED PARKS</b>				
<ul style="list-style-type: none"> <li>Consider development of a <i>Green Valley Open Space and Recreation Plan</i>. Such a plan could examine the overall open space and recreation needs of the Area (and desires of the public) and identify desired locations for fulfilling these needs. Open space designations can also be used to help create larger more usable green spaces that are coordinated between multiple developments.</li> </ul>	Public Infrastructure Upgrades  Pedestrian Connectivity	Growth Capacity, Infrastructure, Recreation, and Natural Resources <b>SAP 8</b>	2-4 Years and Ongoing	Targeted Planning/ Studies

# PLAN AMENDMENT PROCESS

The Green Valley Area Plan is meant to be a flexible document allowing for adjustment to changing conditions over time. Shifts in political, governance, economic, physical, technological, and social conditions, and other unforeseen circumstances, may influence and change the priorities and fiscal outlook of the Area. As the Green Valley Area evolves, new issues will emerge while others will no longer be as relevant. Some action items will be found impractical or outdated while other plausible solutions will arise. To ensure that it continues to reflect the overall goals of the Area and remains relevant over time, the Plan must be revisited on a regular basis to confirm that the Plan's elements are still on point and the associated goals and action strategies are still appropriate.

Revisions to the Area Plan are two-fold, with minor plan amendments occurring as needed and more significant updates and modifications occurring every five years. As an example, a minor amendment could include revisions to certain elements of the plan as a result of the adoption of another specialized plan. Major updates will involve: reviewing the Area's base conditions and anticipated growth trends; re-evaluating the plan findings and formulating new ones as necessary; and adding, revising, or removing action strategies in the plan based on implementation progress.

## Annual Progress Report

Staff should prepare an annual progress report for presentation to the Planning Commission and Board of County Commissioners. This ensures that the plan is consistently reviewed and that any needed modifications or clarifications are identified for the plan amendment process. Ongoing monitoring of consistency between the plan and the County's implementing regulations should be an essential part of this effort.

The Annual Progress Report should include and highlight the following:

- Significant actions and accomplishments during the last year, including the status of implementation for each programmed task in the Area Plan.
- Obstacles or problems in the implementation of the plan.
- Proposed content amendments that have come forward during the course of the year.
- Recommendations for needed actions, programs, and procedures to be developed and implemented in the coming year.

## Five-Year Update / Evaluation and Appraisal Report

An evaluation and appraisal report to Board of County Commissioners (or future governing body) should be prepared every five years. This report should be prepared by County staff with input from County departments, the Planning Commission, and other boards and commissions, including the Pottawatomie County Economic Development Corporation. The report process involves evaluating the existing plan and assessing how successful it has been in achieving the Area's goals. The purpose of the report is to identify the successes and shortcomings of the plan, look at what has changed over the last five years, and make recommendations on how the plan should be modified in light of those changes.

The report should review baseline conditions and assumptions about trends and growth indicators. It should also evaluate implementation potential and/or obstacles related to any un-addressed major action strategies. The evaluation report and process should result in an amended Area Plan, including identification of new or revised information that may lead to updated goals and action strategies.

More specifically, the report should identify and evaluate the following:

1. Summary of major actions and interim plan amendments undertaken over the previous five years.
2. Major issues in the community and how these issues have changed over time.
3. Changes in the assumptions, trends, and base studies data in the Existing Area Report, including the following:
  - › The rate at which growth and development is occurring relative to the projections put forward in the plan.
  - › Shifts in demographics and other growth trends.
  - › Area-wide attitudes, and whether apparent shifts, if significant, necessitate amendments to the stated goals or action strategies of the plan.
  - › Other changes in political, social, economic, technological, or environmental conditions that indicate a need for plan amendments.
  - › Changes to the governance structure for the Green Valley Area.
4. Ability of the plan to continue to support progress toward achieving the Area's goals. The following should be evaluated and revised as needed:
  - › The ongoing governance discussion should be monitored to re-evaluate the priority status of the Action Agenda Items.
  - › Individual sections and statements within the plan must be reviewed and revised, as necessary, to ensure that the plan provides sufficient information and direction to achieve the intended outcome.
  - › Conflicts between goals and action strategies that have been discovered in the implementation and administration of the plan must be pointed out and resolved.

- › The list of priority actions must be reviewed and major accomplishments highlighted. Those not completed by the specified time frame should be re-evaluated to ensure their continued relevance and/or to revise them appropriately.
- › As conditions change, the time frames for implementing major actions in the plan should be re-evaluated where necessary. Some actions may emerge as a higher priority given new or changed circumstances while others may become less important to achieving the goals and development objectives of the Area.
- › Based upon organizational and procedural factors, as well as the status of previously assigned tasks, the implementation task assignments must be reviewed and altered, as needed, to ensure timely accomplishment of the plan's action strategies.
- › Changes in laws, procedures and missions may impact the Area's ability to achieve its goals. The plan review must assess these changes and their impacts on the success of implementation, leading to any suggested revisions in strategies or priorities.



# The Future Area APPENDIX A | POPULATION OUTLOOK

## POPULATION OUTLOOK FOR POTTAWATOMIE COUNTY (Basis for Green Valley Area Projections)

Population projections are an important component of a long-range planning process. They help determine and quantify the demands that will be placed on public facilities and services based on the potential pace and scale of the County's physical growth. Projections reflect local, regional, national and international trends and offer a basis to prepare for the future. However, forecasting population changes can be challenging, particularly for the long term, because it is often difficult to account for all circumstances that may arise. Therefore, it will be important for the County to monitor population and economic growth continually to account for both short- and longer-term shifts that can influence development activity and trends in the community and larger region.

### Alternative Growth Scenarios

Demographers caution that population projections become trickier as the geographic area gets smaller. This is because local population change is strongly influenced by less predictable factors such as housing prices, availability of vacant land to develop, and economic shifts at the regional level.

Given this context, the chart in this section provides a comparison of several potential scenarios for future population change in Pottawatomie County. The projections build on the latest U.S. Census figure of 23,661 for 2016 and identify potential population levels in five-year increments forward to 2040.

## Wichita State Projection

The Center for Economic Development and Business Research (CEDBR) at Wichita State University releases Kansas county-level population projections through the year 2064. The projections methodology “is based primarily on the age-cohort survival method of forecasting. For each county, each five-year age-gender cohort’s population change was fore-casted in five-year increments, starting with U.S. Census Population Estimates data for 2014. Under this forecasting method, each cohort group’s population is forecasted forward five years at a time by using the estimated mortality rate and the estimated migration rate for that age-gender cohort in the county to projection population changes for that age-gender cohort.” (CEDBR, February 2016 release).

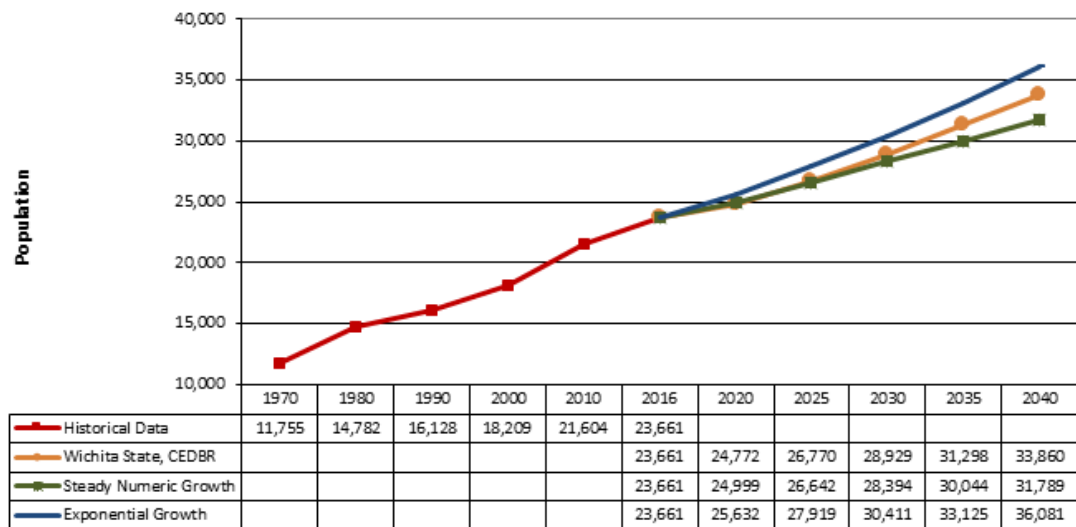
## Projections Based on Varying Quantities and Rates of Growth

Another population projection method extends historical trends to future years. Linear growth forecasts are “straight line” projections that result in the same absolute number of new persons

being added to the population in each period. This produces a declining rate of growth over time as the same amount is being added to an ever-expanding base (in the case of Pottawatomie County, adding 3,395 residents per decade). Exponential growth projections produce higher numbers than linear by assuming a constant rate of growth over time. This is similar to the power of compound growth in a savings account over time; the interest (i.e., growth) rate may not change, but it is being applied to an ever-expanding balance, resulting in larger and larger interest earnings over time. In the case of Pottawatomie County, the Exponential and Linear Growth scenarios result in a population difference of 4,292 because the growth increments are large.

The Exponential Growth line is based on the 1.7 percent compound annual growth rate (CAGR) the County experienced from 2010 to 2016. The Exponential Growth line leads to a 2040 population of 36,081 while the Linear Growth line, labeled as “Steady Numeric Growth” on the chart, leads to a 2040 population of 31,789.

**Figure 6, Pottawatomie County Projections based on Varying Quantities and Rates of Growth**



# THE GREEN VALLEY AREA

The Green Valley Area is not an officially designated statistical area and historic population figures for the Area do not exist. Therefore, a population growth estimate had to be generated using known data specific to the Green Valley Area. The following methodology was used to generate a population growth estimate for the Area utilizing residential construction permit data.

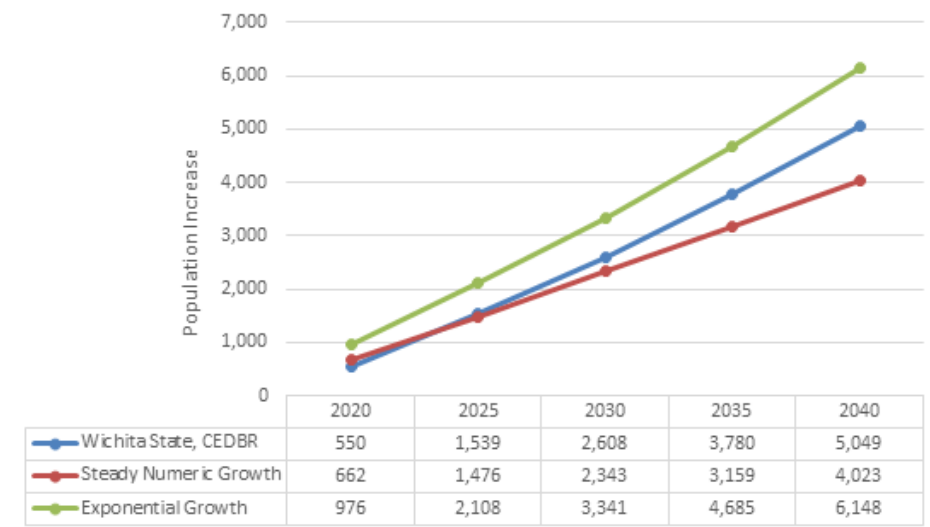
The percentage of new homes permitted in The Green Valley Area from 2010-2018 was 527 as compared to 1,067 in all of Pottawatomie County. This equates to 49.4 percent of all new home permits issued in the county during this time frame. Next, the incremental amount of new population added to the County was calculated for each year in the County population estimate table. For Example, the difference in total population from the year 2016 to 2020 in the Wichita State model is 1,111. Assuming that 49.4 percent of this new population is living the homes built in the Green Valley Area, the estimated increase in the Green Valley Area's population from 2016 to 2020 is 550. This same methodology was applied to all years in the County-wide population estimate as show in the chart below and then used to create total population estimates for each year.

# BOTTOM LINE

It is wise to think in terms of a range of potential growth rather than an absolute number given the uncertainty of any small-area forecast that extends beyond a few years. It is assumed for this Plan that The Green Valley Area's 2040 population will increase by a forecast range of 4,023 to 6,148 persons, which yields a midpoint of 5,086.

Using a base population estimate of 3,983 (provided by ESRI's Business Analyst Software), the midpoint of a potential growth range to assume for this Area Plan – between the higher Exponential Growth projection and the Wichita State projection – would put the Area's population at approximately 4,533 in 2020; 6,591 in 2030; and 9,032 in 2040. This would mean an additional 5,049 residents from 2018 and implies that the Green Valley Area could add the equivalent of 127 percent of its current population by 2040. For perspective, ESRI calculates that the 2018 average household size in The Green Valley Area is 2.8 persons, meaning that 1,803 additional housing units would be needed to accommodate 5,049 additional residents.

**Figure 7, Green Valley Area Projections Based on Percentage of Pottawatomie County Growth Projections**



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# The Future Area APPENDIX B | PSYCHOGRAPHICS



LifeMode Group: Family Landscapes

## Middleburg

4C

Households: 3,319,000

Average Household Size: 2.73

Median Age: 35.3

Median Household Income: \$55,000

Percent of  
Green Valley Area  
Households  
**79.2%**

### WHO ARE WE?

Middleburg neighborhoods transformed from the easy pace of country living to semirural subdivisions in the last decade, when the housing boom reached out. Residents are conservative, family-oriented consumers. Still more country than rock and roll, they are thrifty but willing to carry some debt and are already investing in their futures. They rely on their smartphones and mobile devices to stay in touch and pride themselves on their expertise. They prefer to buy American and travel in the US. This market is younger but growing in size and assets.

### OUR NEIGHBORHOOD

- Semirural locales within metropolitan areas.
- Neighborhoods changed rapidly in the previous decade with the addition of new single-family homes.
- Include a number of mobile homes (Index 152).
- Affordable housing, median value of \$158,000 (Index 89) with a low vacancy rate.
- Young couples, many with children; average household size is 2.73.

### SOCIOECONOMIC TRAITS

- Education: 66% with a high school diploma or some college.
- Unemployment rate lower at 7.4% (Index 85).
- Labor force participation typical of a younger population at 66.7% (Index 106).
- Traditional values are the norm here—faith, country, and family.
- Prefer to buy American and for a good price.
- Comfortable with the latest in technology, for convenience (online banking or saving money on landlines) and entertainment.



Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by GfK MRI.



LifeMode Group: Cozy Country Living  
**Green Acres**

6A

Households: 3,794,000  
 Average Household Size: 2.69  
 Median Age: 43.0  
 Median Household Income: \$72,000

Percent of  
 Green Valley Area  
 Households  
**13.0%**

**WHO ARE WE?**

The *Green Acres* lifestyle features country living and self-reliance. They are avid do-it-yourselfers, maintaining and remodeling their homes, with all the necessary power tools to accomplish the jobs. Gardening, especially growing vegetables, is also a priority, again with the right tools, tillers, tractors, and riding mowers. Outdoor living also features a variety of sports: hunting and fishing, motorcycling, hiking and camping, and even golf. Self-described conservatives, residents of *Green Acres* remain pessimistic about the near future yet are heavily invested in it.

**OUR NEIGHBORHOOD**

- Rural enclaves in metropolitan areas, primarily (not exclusively) older homes with acreage; new housing growth in the past 10 years.
- Single-family, owner-occupied housing, with a median value of \$197,000.
- An older market, primarily married couples, most with no children.

**SOCIOECONOMIC TRAITS**

- Education: 60% are college educated.
- Unemployment is low at 6% (Index 70); labor force participation rate is high at 67.4% (Index 108).
- Income is derived not only from wages and salaries but also from self-employment (more than 15% of households), investments (30% of households), and increasingly, from retirement.
- They are cautious consumers with a focus on quality and durability.
- Comfortable with technology, more as a tool than a trend: banking or paying bills online is convenient; but the Internet is not viewed as entertainment.
- Economic outlook is professed as pessimistic, but consumers are comfortable with debt, primarily as home and auto loans, and investments.



Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by GfK MRI.



LifeMode Group: Family Landscapes  
**Soccer Moms**

4A

Households: 3,327,000  
 Average Household Size: 2.96  
 Median Age: 36.6  
 Median Household Income: \$84,000

Percent of  
 Pottawatomie County  
 Households  
**11.7%**

**WHO ARE WE?**

*Soccer Moms* is an affluent, family-oriented market with a country flavor. Residents are partial to new housing away from the bustle of the city but close enough to commute to professional job centers. Life in this suburban wilderness offsets the hectic pace of two working parents with growing children. They favor time-saving devices, like banking online or housekeeping services, and family-oriented pursuits.

**OUR NEIGHBORHOOD**

- *Soccer Moms* residents prefer the suburban periphery of metropolitan areas.
- Predominantly single family, homes are in newer neighborhoods, 36% built in the 1990s (Index 253), 31% built since 2000.
- Owner-occupied homes have high rate of mortgages at 74% (Index 163), and low rate vacancy at 5%.
- Median home value is \$226,000.
- Most households are married couples with children; average household size is 2.96.
- Most households have 2 or 3 vehicles; long travel time to work including a disproportionate number commuting from a different county (Index 133).

**SOCIOECONOMIC TRAITS**

- Education: 37.7% college graduates; more than 70% with some college education.
- Low unemployment at 5.9%; high labor force participation rate at 72%; 2 out of 3 households include 2+ workers (Index 124).
- Connected, with a host of wireless devices from iPods to tablets—anything that enables convenience, like banking, paying bills, or even shopping online.
- Well insured and invested in a range of funds, from savings accounts or bonds to stocks.
- Carry a higher level of debt, including first (Index 159) and second mortgages (Index 154) and auto loans (Index 151).



Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by GfK MRI.



# The Future Area

## APPENDIX C | EXISTING AREA REPORT



