Comprehensive Plan

Baldwin City, Kansas

February 2008

Prepared by:
Landplan Engineering, P.A.
Phillips & Associates

Published in The Baldwin City Signal on the 28 day of February, 2008

ORDINANCE NO. 1210

AN ORDINANCE APPROVING THE ADOPTION OF THE 2008 COMPREHENSIVE PLAN OF THE CITY OF BALDWIN CITY, KANSAS.

WHEREAS, the Planning Commission of the City of Baldwin City, Kansas is empowered to adopt a Comprehensive Plan pursuant to K.S.A. 12-747; and

WHEREAS, the Planning Commission of the City of Baldwin City has conducted the studies necessary to adopt and update the existing Comprehensive Plan of the City; and

WHEREAS, the Planning Commission of the City of Baldwin City, Kansas has published in the official newspaper a public notice pursuant to law on November 8, 2007; and

WHEREAS, the Planning Commission on December 11, 2007 conducted a public hearing to receive public comments on the proposed draft and on January 8, 2008 concluded that an updated Comprehensive Plan is necessary, desirable and in the best interests of the City, and recommended approval of same to the City Council; and

WHEREAS, K.S.A. 12-747 requires that the City Council approve any amendment to the Comprehensive Plan recommended by the Planning Commission before the same shall become effective.

NOW, THEREFORE, BE IT ORDAINED by the Governing Body of the City of Baldwin City, Kansas, that:

Section 1. Approval. The City Council of the City of Baldwin City, Kansas hereby approves the 2008 Comprehensive Plan of the City recommended by the Planning Commission, a copy of which, including the result of studies, is on file with the office of the City Clerk and is hereby incorporated as part of this Ordinance by reference.

Section 2. Publication. This Ordinance shall be in full force and effect from and after its passage, approval, and publication in the official City newspaper, all as provided by law.

ADOPTED AND APPROVED by the Governing Body of the City of Baldwin City, Kansas on this 18th day of February, 2008.

APPROVED:

Gary L. Walbridge, Mayor

ATTEST:

Darcy Higgins, City Clerk

APPROVED AS TO FORM:

Matt Hoy, City Attorney

CITY OF BALDWIN CITY
AD ASTRA
PER ASPERA
DOUGLAS CO. KANSAS

Affidavit in Proof of Publication

STATE OF KANSAS
Douglas County

Erika Gray of the Legal Dept. of the Baldwin City Signal being first duly sworn, deposes and says:

That this weekly newspaper printed in the State of Kansas, and published in and of general circulation in Douglas County, Kansas, with a general paid circulation on a weekly basis in Douglas County, Kansas, and that said newspaper is not a trade, religious or fraternal publication, and which newspaper has been admitted to the mails as periodicals class matter in said County, and that a notice of which is hereto attached, was published in the regular and entire issue of the Baldwin City Signal

Said newspaper is published weekly 52 weeks a year; has been so published continuously and uninterruptedly in said county and state for a period of more than five years prior to the first publication of said notice and been admitted at the post office of Baldwin in said County as second class matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for 1 consecutive weeks the first publication thereof being made as aforesaid on 02/28/2008 with publications being made on the following dates:

02/28/2008

Erika Gray

Subscribed and sworn to before me this 2-28-08

Notary Public

My Appointment expires: 3-15-2011

NOTARY PUBLIC
My Appt. Expires
STATE OF KANSAS

Publication Charges	$39.00
Notary And Affidavit	$0.00
Additional Copies	$0.00
	$39.00

(First published in the Baldwin City Signal, Thursday, February 28, 2008)

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Gary L. Walbridge, Mayor

ATTEST:
/s/ Darcy Higgins
Darcy Higgins, City Clerk

APPROVED AS TO FORM:
/s/ Matt Hoy
Matt Hoy, City Attorney

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SECTION 1:

Planning Goals and Policies

1.1 Introduction

In preparation of this comprehensive plan, it was important to understand what the residents of Baldwin City envision for their community. Questions we asked were, "what does Baldwin City want their comprehensive plan to accomplish, and what are the goals of the community as Baldwin City experiences growth?" An important function of the comprehensive plan is to provide a set of guidelines and policies for decision-making that will guide the future growth and redevelopment of Baldwin City.

The BSNF Intermodal facility at Gardner, Kansas is anticipated to become an aspect that influences future growth for Baldwin City, and may lead to increased demand for residential development. One of the directives of the Steering Committee was to ensure the land use plan contemplated suitable land area for new housing developments.

The plan should be a user-friendly document that provides the "Big Picture", meets the needs of the community, and shows "a quality of life" for Baldwin City. A broad goal statement sets forth the foundation for how the Planning Commission envisions planning, guiding, and creating Baldwin City's future. Following each of the goal statements is a listing of policies. These policies are intended to be instructive and provide direction when local officials are making decisions about how the community should grow or evaluate development proposals. They should also provide guidance for future city programs that influence community development, as well as funding for major capital projects. There are a total of thirteen comprehensive plan goal and policy elements:

- Land Use
- Neighborhood Preservation
- Downtown Baldwin City
- Residential Development
- Urban Reserve Area
- Urban Growth Area
- Commercial Development
- Industrial Development
- Transportation
- Community Design and Character
- Parks, Recreation, Trails & Open Space

- Historic Preservation
- Resource Conservation & Environment
- Economic Growth

1.2 Land Use

Goal 1: Support the compact, efficient, and orderly development of Baldwin City.

Policy 1.1 Ensure new developments meet all the requirements for adequate facilities including roads, sidewalks, potable water, sanitary sewer, solid waste, stormwater, and recreation and open space.

Policy 1.2 Incorporate the use of site design review in mixed-use developments, multi-family, commercial, and industrial development within the zoning and building permit review and approval process.

Policy 1.3 Manage town growth to prevent sprawl at the edge of the City's developed areas, to promote new development at urban densities and to encourage reinvestment in older areas of the City.

Policy 1.4 Support the concept of an Urban Growth Boundary and Urban Reserve Area for the orderly and planned growth of Baldwin City.

1.3 Neighborhood Preservation

Goal 2: Protect the integrity and long-term viability of residential neighborhoods and encourage the rehabilitation of older houses.

Policy 2.1 Ensure property maintenance, inoperable vehicles, and housing codes are enforced in residential neighborhoods.

Policy 2.2 Ensure public funds are reinvested in older neighborhoods to maintain or upgrade sidewalks, streets, storm drainage, street lights, water and sanitary wastewater systems.

Policy 2.3 Explore the feasibility of supporting neighborhood-based organizations by providing technical information, sponsoring meetings, offering micro-grants, and encouraging comments on issues facing a neighborhood.

Policy 2.4 Promote the rehabilitation and adaptive reuse of the older housing stock.

Policy 2.5 Maintain compatibility of new infill residential structures and rehabilitation of older houses with the prevailing appearance of

surrounding structures. This includes the following compatibility elements:

2.5.1 The principal structure shall be oriented on the lot the same way as surrounding principal structures.

2.5.2 Building materials shall match the prevailing building materials used on surrounding principal structures.

2.5.3 A porch shall be required where porches represent the prevailing style of surrounding principal structures.

2.5.4 The orientation of the roof and roof slope shall be compatible with the slope and orientation of roofs on surrounding principal structures.

2.5.5 Neighborhood open space patterns, and side, front, and rear yards should be visually preserved.

2.5.6 The building height should be compatible with the average height of homes in the neighborhood with particular attention paid to contiguous parcels.

1.4 Downtown Baldwin City

Goal 3: Create, maintain, and enhance Downtown as the core for retail, restaurants, government and professional services, and offices.

Policy 3.1 Encourage creative housing developments in and near downtown that complement and coexist with the physical fabric of Baker University and downtown.

Policy 3.2 Maintain and strengthen the character of downtown by preserving buildings of historic value or architectural interest.

Policy 3.3 Encourage the re-use of existing buildings to accommodate residential, office and retail space (mixed-use).

Policy 3.4 Explore creating a “Main Street Program” based on the National Trust for Historic Preservation’s four point program of organization, promotion, design, and economic restructuring.

Policy 3.5 Ensure safe and convenient vehicular traffic and pedestrian links connecting downtown with surrounding residential areas, Baker University, and Highway 56.

Policy 3.6 Ensure government, public, and cultural facilities remain in downtown.

Policy 3.7 Create attractive public gathering spaces to encourage people to congregate, relax, and enjoy the social life of downtown.

Policy 3.8 Ensure new or renovated commercial buildings in downtown reflect the historic architecture, massing, scale, materials, and placement of nearby structures in order to maintain the sense of human scale and a visually unified character.

Policy 3.9 Work with Baker University to develop a master plan to ensure future development supports the redevelopment of downtown.

Policy 3.10 Devise a common directional signage or wayfinding scheme to inform the public and visitors about the location of downtown.

1.5 Residential Development

Goal 4: Ensure new residential development contributes to creating a functional and harmonious living environment.

Policy 4.1 Provide housing opportunities for people ~~of~~ in all segments of the life cycle.

Policy 4.2 Promote new residential development projects that add to the diversity of housing types and price ranges.

Policy 4.3 Promote a greater degree of connection between new neighborhoods, as well as previously disconnected neighborhoods, through street design, use of sidewalks, and pedestrian trails.

Policy 4.4 Encourage developers to incorporate ideas from the older neighborhoods of Baldwin City when designing a new subdivision. This includes advocating these design principles:

4.1.1 Create a walkable neighborhood with a mix of housing sizes and types.

4.4.2 Encourage sidewalks with enough parkway to plant street trees to create an inviting civic space for pedestrians.

4.4.3 Rethink the extensive use of cul-de-sacs and curvilinear streets and promote an urban grid with homes set close to the street's edge.

4.4.4 Consider service alleys to provide access to detached garages versus attached garages.

Policy 4.5 Encourage new manufactured home parks to locate where adequate public facilities and community services are available. These parks should be located adjacent to areas with a comparable density of development, and in areas accessible to arterial or collector streets.

Policy 4.6 Encourage site design and architectural review of new multi-family developments to promote and ensure neighborhood compatibility, and ensure that adequate parking and buffering is provided.

Policy 4.7 Reduce the cost of housing, as well as municipal capital expenditures and operating expenses, by continuing to promote energy efficiency.

Policy 4.8 Protect residential neighborhoods from encroachment of incompatible land uses and traffic patterns.

Policy 4.9 Promote locating higher density housing and mixed-use developments along major arterials or in conjunction with a commercial retail activity center.

1.6 Urban Reserve Area Policies

Goal 5: Preserve rural areas surrounding the Urban Growth Area as areas for potential urban development beyond the 20-year planning period.

Policy 5.1 Explore with Douglas County the power to provide extra-territorial zoning and/or subdivision authority to Baldwin City.

Policy 5.2 Preserve the agricultural and rural character of the urban reserve area by restricting urban and non-farm development.

Policy 5.3 Support rural residential development in the urban reserve area in accordance with the Douglas County Subdivision Regulations authorizing residential development in the rural area of Douglas County.

1.7 Urban Growth Area Policies

Goal 6: Adopt an Urban Growth Area to encourage urban development and growth to locate where city services and infrastructure may be provided, and allow for the clustering of rural residential development and large parcel property divisions.

Policy 6.1 Ensure that urban residential, commercial and industrial development within the urban growth area is connected to municipal water and sanitary sewers.

Policy 6.2 Require that developments requesting municipal water and sanitary sewers are annexed into Baldwin City.

Policy 6.3 Promote maximum efficiency of land use and efficient extension of utilities within the urban growth area by encouraging a contiguous growth pattern.

Policy 6.4 Accommodate rural or suburban residential subdivisions to locate within the urban growth area in accordance with the Douglas County Subdivision Regulations authorizing cluster developments or large parcel property divisions in an urban growth area.

Policy 6.5 Encourage the connection of services when public sanitary sewer service exists within 1,320 feet (¼ mile) of a suburban residential lot, tract, or parcel, if the City of Baldwin City is capable and willing to serve.

Policy 6.6 Annexation should be required, or the landowner should agree not to contest annexation, when a suburban residential lot, tract, or parcel is connected to municipal water, electrical or sanitary sewer service.

1.8 Commercial Development

Goal 7: Create a diverse set of retail, service and office activities serving the needs of Baldwin City and surrounding rural areas.

Policy 7.1 Encourage new commercial development to locate within urban growth area at designated activity centers in order to discourage strip commercial development.

Policy 7.2 Ensure new commercial development is located and designed to be compatible with neighboring residential uses and provides vehicular and pedestrian connections.

Policy 7.3 Work with property owners to undertake improvements to upgrade the appearance of buildings and property in downtown and the Highway 56 corridor. (See Linda's comment)

Policy 7.4 Evaluate the adoption of design guidelines for new construction and redevelopment of buildings and property in downtown and the Highway 56 corridor.

Policy 7.5 Limit the existing linear commercial development pattern along Highway 56 to a defined boundary line.

Policy 7.6 Promote specialty uses for downtown and the Highway 56 corridor.

Policy 7.7 Encourage a balance of commercial and industrial development.

Policy 7.8 Amend the zoning code to require new commercial development and redevelopment to undergo a site plan review process.

Policy 7.9 Apply the following site plan review criteria when evaluating a new commercial or redevelopment proposal:

7.9.1 On-site landscaping (street trees, foundation plantings, screening of parking, landscaping within buffering zone, etc.).

7.9.2 Open space between right-of-way and parking lots.

7.9.3 Open space buffering zone bordering residential property.

7.9.4 Continuity of building placement with adjacent structures.

7.9.5 Internal sidewalks or pedestrian access.

7.9.6 Concrete curb and gutters and hard surfaced parking lots.

7.9.7 Roof-mounted HVAC screening.

7.9.8 Placement and screening of trash dumpsters.

7.9.9 Encourage ~~Pole~~ low-rise monument signs and discourage pole signs.

7.9.10 Screening of outdoor storage.

7.9.11 Joint vehicular access between properties.

7.9.12 Installing underground utilities.

Policy 7.9 Encourage infill development where existing commercial developments are found.

Policy 7.10 Ensure commercial development is designed to eliminate or minimize the negative impacts on surrounding residential uses.

1.9 Industrial Development

Goal 8: Promote a variety of safe and attractive industrial developments and mixed-employment areas in Baldwin City.

Policy 8.1 Encourage expansion of the Baldwin City Industrial Park and new industrial areas where adequate water and sanitary sewer infrastructure and utility capacity exist, and provide safe and convenient access to arterials and highways.

Policy 8.2 Encourage industrial uses located adjacent to residential or agricultural areas to include adequate buffering, screening, and landscaping to minimize adverse impacts.

Policy 8.3 Create industrial areas that have attractive buildings and grounds, screened outdoor storage, and present a positive image from the highway.

Policy 8.4 Discourage traffic generated by industrial businesses from driving through residential neighborhoods.

Policy 8.5 Ensure that safeguards are implemented to limit noise, dust, odor, vibration, or other impacts on residential neighborhoods.

Policy 8.6 Encourage a balance of industrial and retail development.

1.10 Transportation

Goal 9: Create a safe, coordinated and efficient multi-modal transportation system for Baldwin City

Policy 9.1 Develop a Capital Improvement Program which identifies new and existing street, sidewalk, and alley improvements.

Policy 9.2 Adopt "Access Management Design Criteria" to improve traffic flow and conflicts by addressing driveway spacing, alignment with other streets and driveways, width of driveway, and minimum sight distances.

Policy 9.3 Adopt "Transportation Design Guidelines and Construction Specifications" to address city standards for streets, sidewalks, recreation trails, and parking lots.

Policy 9.4 Design new streets according to the planned roadway classification and with adequate rights-of-way to accommodate sidewalks and street trees.

Policy 9.5 Upgrade existing streets when warranted by demonstrated volume, safety or functional needs.

Policy 9.6 Provide logical street networks to connect residential areas to commercial retail activity centers, arterial streets and Highway 56.

Policy 9.7 Provide attention to providing pedestrian and bicycle routes to parks, commercial retail activity centers, and schools.

Policy 9.10 Pursue with Kansas Department of Transportation officials an alternative route or bypass for truck traffic, or ~~lower~~ lowering the speed on Highway 56.

Policy 9.11 Carefully evaluate requests for "street vacations" to ensure that adverse impacts are not created on neighborhood or citywide circulation. Consider street closing when appropriate as an alternative to vacating the public right-of-way.

1.11 Community Design and Character

Goal 10: Promote development based on the principles of good, high quality community design to ensure Baldwin City's desirable image and sense of place remains.

Policy 10.1 Preserve and maintain the "small town character" of Baldwin City.

Policy 10.2 Retain the tree-lined streets, open space drainageways, and pedestrian scale of the older neighborhoods.

Policy 10.3 Encourage new residential development to consider ideas from older residential neighborhoods.

Policy 10.4 Work with local businesses to upgrade the image and appearance of existing and commercial business areas, including buildings, parking lots, signage, and the public right-of-way.

Policy 10.5 Adopt design guidelines and policies for new commercial development.

Policy 10.6 Coordinate with Baker University on their master planning to maintain the compatibility and design characteristics that integrate the college into the fabric of the community.

1.12 Parks, Recreation, Trails, Open Space, and Schools

Goal 11: Plan for new parks, trails and open space of various sizes and types to serve the community.

Policy 11.1 Ensure areas of new housing development have adequate parks through land reservations, donations, or acquisition.

Policy 11.2 Co-locate parks with new schools and trail systems, when possible.

Policy 11.3 Plan for new trails to create a network of pedestrian connections between neighborhoods, parks, schools, Baker University, retail centers, properties north of Highway 56, and open space.

Policy 11.4 Maintain and renovate existing city-owned parks and their facilities to ensure they meet the needs of the community and to maximize enjoyment by park users.

Policy 11.5 Evaluate and plan for improved bicycle and pedestrian access to existing city-owned parks and Baker University recreation facilities.

Policy 11.6 Work with the Kansas Department of Wildlife and Parks and Douglas County to coordinate how a municipal trail can connect to Douglas County State Lake.

Policy 11.7 Encourage the design of site plans and subdivisions to incorporate floodplains and riparian areas into a community open space

system, and act as natural flood storage and provide opportunity for a linear trail network.

1.13 Historic Preservation

Goal 12: Protect historic architectural, cultural and archaeological resources.

Policy 12.1 Identify, designate and protect historical buildings, sites, and structures.

Policy 12.2 Identify known archaeological sites within the planning area of Baldwin City.

Policy 12.3 Work with State organizations and other interested local groups to promote historic preservation, especially of local structures.

1.14 Resource Conservation and Environment

Goal 13: Preserve natural resources and minimize environmental impacts.

Policy 13.1 Protect riparian areas and streamways as natural drainageways and ecosystems.

Policy 13.2 Limit development of land within floodplains.

Policy 13.3 Encourage energy efficiency and use of renewable energy resources.

Policy 13.4 Update local land development codes to ensure proposed development activities protect and preserve steep slopes, wetlands, riparian areas, and floodplains.

Policy 13.5 Encourage site design and subdivision layout to minimize alteration to the existing natural topography.

Policy 13.6 Evaluate the feasibility of conservation easements to preserve natural resources.

Policy 13.7 Preserve and protect natural features by designing lot configurations, streets and utilities to minimize disruption through environmentally sensitive site design.

Policy 13.8 Support the continuation of agricultural uses in the urban growth and urban reserve areas as long as local farmers and landowners wish to continue farming.

1.15 Economic Growth

Goal 14: Promote a proactive responsible approach to growth, while maintaining the character of Baldwin City.

Policy 14.1 Encourage attractive residential, commercial, educational and recreational services for present and future community members.

Policy 14.2 Maintain quality educational opportunities through growth. Consistent annual growth in student enrollment will be necessary to maintain the same level of quality education.

Policy 14.3 Ensure infrastructure needs are being addressed to accommodate growth.

Policy 14.4 Continue to focus on areas that are important to community growth: residential and commercial planning, Baker University, recreation, and utilities.

Policy 14.5 Encourage the establishment of historic districts along 8th, 9th, and 10th Streets to provide incentive for revitalizing aging homes.

Policy 14.6 Attract small service and light industrial businesses.

Policy 14.7 Explore options for a joint business park between the City of Baldwin City and Douglas County.

Policy 14.8 Continued the partnership between the City of Baldwin City and Baker University.

SECTION 2:

Environmental Characteristics

2.1 Introduction

In order to make sound planning decisions within the primary growth area of Baldwin City, it is necessary to evaluate the possible limitations and constraints that can be placed on urban growth by the surrounding environment. It is essential to understand and address environmental constraints and opportunities as Baldwin City grows. By doing so, intelligent planning and realistic, cost-efficient development can occur. This section provides an overview of the environmental characteristics of the urban growth area surrounding Baldwin City.

2.2 Floodplain

One of the unique natural features of the primary growth area of Baldwin City is the amount of land located in designated flood hazard zones associated with East Fork Tauy Creek, Middle Fork Tauy Creek, and Spring Creek. Approximately 590 acres of 100-year floodplain lies within the urban growth area (see Environmental Characteristics Map for further details). A challenge facing the planning of the primary growth area is to reduce flood damage to the built environment by managing urban development in the floodplain. Since chronic flooding is a destructive environmental limitation to development, land use planning should respect the natural system and determine appropriate locations for both the encouragement and prohibition of development.

The Federal Emergency Management Agency (FEMA) breaks down flood zones into two categories: 100-year floodplain and 500-year floodplain. The 100-year floodplain is a statement referring to a "100-year storm," which is an indicator of a one-percent probability that a storm will occur in any year. It does not mean that such a storm will occur only once in a 100-year period.

Good planning and construction practices suggest that very little construction activity if any should occur within the 100-year floodplain. Limited construction may occur within the 500-year floodplain.

The City of Baldwin City has a section within the City Code that addresses development within the floodplain. Article 4 states, "That until a floodway has been designated, no development, including landfill, may be permitted within Zones A1-30 and AE on the City's FIRM unless the applicant for the land use has demonstrated that proposed use, when combined with all other existing and reasonably anticipated uses, will not increase the water surface elevation of the 100-year flood more than one foot on the average cross section of the reach in which the development or landfill is located as shown on the Flood Insurance Rate Study incorporated by reference : Section 16-403(c) (1) of Article 4" (Federal Administration's Flood Insurance Study, and illustrative materials dated, July 1979 as amended, and any future revisions thereto). Refer to Article 4- Floodplain Management of Baldwin City Code.

2.3 Soils and Slopes

The Soil Conservation Service Soil Survey for Douglas County provides the soil classification for the primary growth area for Baldwin City. Soil Classifications identified within the study area are:

Sogn Series
This series consists of shallow, somewhat excessively drained and moderately permeable soils on uplands. Slopes range from 5 to 20%. The soil type is moderately suitable for development and severe for sanitary facilities.

Kennebec Series
This series consists of deep, moderately well drained, and moderately permeable soils on bottom lands. Slopes range from 0 to 2 percent. The soil type is prone to frequent flooding. The soil type combined with flooding, rate the soil as severe for site development and sanitary facilities.

Basehor Series
This series consists of shallow, sloping to steep, well drained soils on uplands. Slopes range from 5 percent to 30 percent. The soil type combined with volatile slopes, rate the soil as severe for site development and sanitary facilities.

Gymer Series
This series consists of deep, sloping well drained soils on uplands. These soils form in loess. Slopes range from 1 percent to 3 percent. The soil type is rated as moderate for site development and severe for sanitary facilities.

Verdigris Series
This series consists of deep soils that are moderately well drained and have moderate permeability. These soils are on low terraces and flood plains. Slopes range from 0 percent to 2 percent. The soil type combined with severe flooding rate the soil as severe for site development and sanitary facilities.

Martin Series
This series consists of deep, moderately well drained, and slowly permeable soils on uplands. Slopes range from 2 percent to 11 percent. Due to high shrink/swell potential, this soil type is rated as severe for site development and sanitary facilities.

Oska Series
This series consists of moderately deep, well drained and slowly permeable soils on uplands. Slopes range from 3 percent to 6 percent. Due to flooding and shrink/swell potential, this soil type is rated as severe for site development and sanitary facilities.

Sibleyville Series
This series consists of moderately deep, well drained, and moderately permeable soils on uplands. Slopes range from 3 percent to 7 percent. The soil type is rated as moderate for site development and sanitary facilities.

Vinland Series
This series consists of shallow, somewhat excessively drained, and moderately permeable soils on uplands. Slopes range from 5 percent to 30 percent. The soil type combined with volatile slopes and shallow bedrock are rated as severe for site development and sanitary facilities.

Wabash Series
This series consists of deep,
very poorly drained, very slowly permeable soils on flood plains along tributaries of the Kansas River. These soils are formed in clayey alluvium Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

While many of the soils identified within the primary growth area are rated poor and severe for development, current engineering practices conducted during the construction phase ensure quality development. The primary constraint for development within the primary growth area will be floodplain restrictions, highly eroded slopes, and steepness of grade. Urban development can be very difficult and expensive to construct on slopes 15 percent or greater.

2.4 Stream Corridors, Woodlands, and Riparian Areas

There are four tributaries that contribute to the Marais Des Cygnes River, southeast of the Baldwin City study area. They are West Fork Tauy Creek, Middle Fork Tauy Creek, East Fork Tauy Creek and Spring Creek. All of the tributaries lie within the 100-year and 500-year floodplains. Existing large mature tree cover is dispersed throughout the tributaries. Tree cover is comprised of three main vegetative communities:

Oak Hickory Forest

Can be found on gentle to moderately steep slopes on uplands and valley sides. Typical species found within this community are:

- White Oak, Shagbark Hickory, Eastern Hophornbeam
- Eastern Redbud, Common Chokecherry

Mixed Oak Ravine Woodland

Can be found on ravines and valleys of rivers and major streams. Typical species found within this community are:

- Bur Oak, Chinkapin Oak,
- Eastern Redbud, Elm

Mixed Oak Floodplain Forest

Can be found within undulating floodplains. Typical species found within this community are:

- Bur Oak, Bitternut Hickory, Boxelder
- Silver Maple, American Elm

Cottonwood Floodplain Woodland

Can be found in floodplains near the Missouri River and its tributaries. Typical species found within this community are:

- Cottonwood, Black Willow,
- Boxelder, Green Ash

Ash-Elm-Hackberry Floodplain Forest

Can be found in near level bottoms and terraces along streams and rivers. Typical species found within this community are:

- Elm, Common Hackberry, Black Walnut
- Eastern Cottonwood, Pin Oak

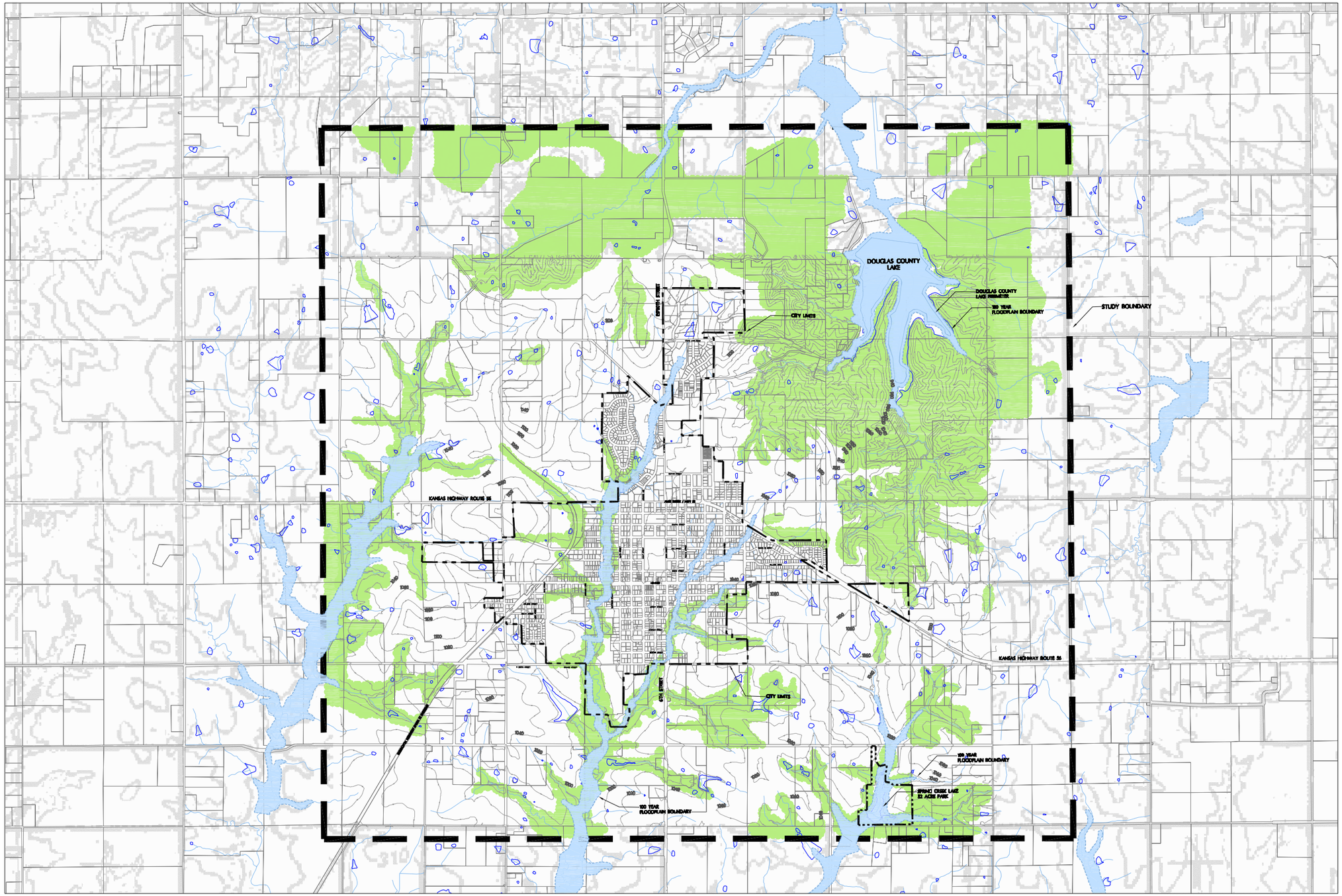
Maple Basswood Forest
Can be found on moderate to steep slopes on uplands and valley sides. Typical species found within this community are:

- Black Maple, Basswood, American Linden
- White Ash, Walnut

2.5 Hazardous and Contaminated Sites

A review of the State of Kansas Department of Natural Resources 2002 Annual Register of Hazardous Sites indicates that there were no known or abandoned hazardous sites in the primary urban growth area.

(Refer to Appendix A, Environmental Characteristics Map)



SOILS/SLOPES

Sogn-Vinland complex, 3 to 25 percent slopes
Kennebec silt loam, occasionally flooded
Kennebec silt loam, frequently flooded
Wabash silty clay loam, occasionally flooded
Basehor complex, 9 to 30 percent slopes
Gymer silt loam, 1 to 3 percent slopes
Martin silty clay loam, 1 to 3 percent slopes
Martin silty clay loam, 3 to 7 percent slopes
Martin soils, 3 to 7 percent slopes, eroded
Oska silty clay loam, 3 to 6 percent slopes
Sibleyville complex, 3 to 7 percent slopes
Sibleyville complex, 3 to 7 percent slopes, eroded
Sibleyville loam, 3 to 7 percent slopes
Sibleyville loam, 3 to 7 percent slopes, eroded
Vinland complex, 3 to 7 percent slopes
Vinland complex, 3 to 7 percent slopes, eroded
Vinland-Martin complex, 7 to 15 percent slopes
Vinland-Rock outcrop complex, 15 to 45 percent slopes
Leanna silt loam, occasionally flooded
Verdigris silt loam, occasionally flooded

ENVIRONMENTAL CHARACTERISTICS MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix A

PHILLIPS & ASSOCIATES

Landplan Engineering, P.A.

Civil Engineering
Landscape Architecture
Community Planning
Surveying

LEGEND

- STUDY BOUNDARY
- CITY LIMITS
- CONTOUR (20' INTERVAL)
- TRIBUTARY
- 100 YEAR FLOODPLAIN PERIMETER, FEMA 2001
- 100 YEAR FLOODPLAIN
- EXISTING VEGETATION

SCALE 1" =1000'

1000 0 500 1000 2000 FL

February, 2008

SECTION 3:

Population Characteristics and Growth

Baldwin City

Northeast Kansas has a handful of small communities with solid, diverse economies, plentiful local amenities, metro adjacency, a solid local workforce, and moderate level tourism. If Baldwin City is compared with other Kansas communities at the 2,400 +/– population level, the contrast is quite distinct – as indicated in Table 1.

The data in Table 3-1 are standard indicators (market drivers) of workforce development, quality of life, and economic/population vitality. The communities were carefully selected as examples and contrast of metro adjacency, deep rural economic domination, natural resources dependence, and other indicators. Each community mentions various marketing efforts as a "great small town."

Table 3-1
Indicators of Community Life Quality and Desirability

Community	Population 2000+ (Adjusted)	Median Family Income	Median Age	Pull Factor	Per Capital Sales Tax	Population Change % 1990 - 2003
Baldwin	3,637	$51,667	28.0	.61	$377.16	18.5
Wamego	4,237	$46,017	34.0	.78	$479.99	14.3
Valley Center	5,167	$50,683	35.0	.57	$349.35	7.2
Hiawatha	3,417	$46,310	41.0	1.08	$668.51	-5.2
Scott City	3,554	$48,750	40.0	.73	$453.00	0
Osawatomie	4,645	$37,172	34.0	.41	$251.73	4.2

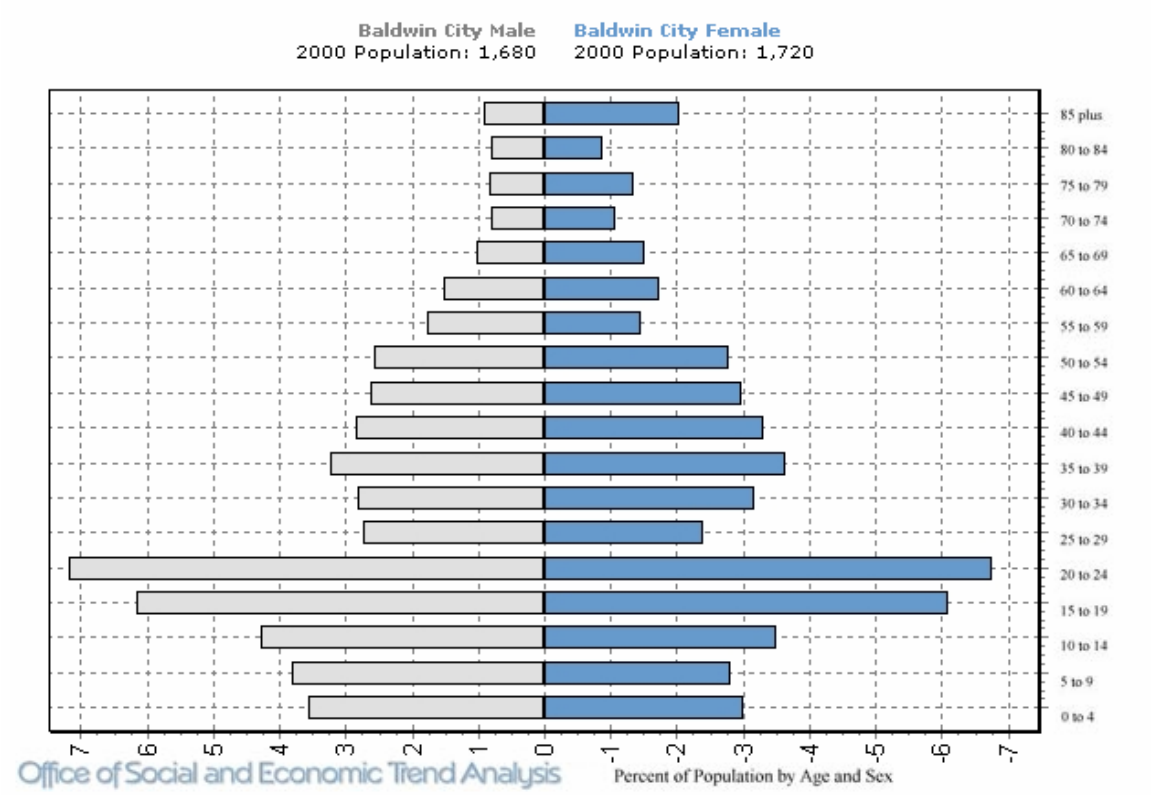
The population range of the selected communities is 3,554 to 5,167 persons. The median family income (which helps to adjust for the presence of college students in a community) is fairly consistent.

Baldwin City retains .61 cents of every dollar (the Pull Factor) and leaks .39 cents out to other cities and towns. This dollar retention is incredibly high for a small community in competition with about a 580,000 population metropolitan area on its door step. It indicates that almost all low order goods (day to day and normal household/auto purchases) are retained in the community. (Baldwin City's trade center is about 8.7 miles)

A long standing assumption is that a "growing place" has a dynamic set of market drivers. Baldwin City is no exception; it registered an 18.5 percent rate of population change from 1990 to 2000 (adjusted figures). This alone places it in the fast growing category at twice the state rate and 50 percent greater than the national rate. To add to its demographic vitality, Baldwin City maintains an exceptionally low median age. This is due, in a large part,

to the student population of Baker University, but the number of college students is not a sufficient explanation for the strength of its age vitality. Figure 3-1 is a population pyramid of Baldwin City, Kansas for the year 2000. Each bar represents a four year age group – males on the left and females on the right side. The horizontal length of the bar corresponds to the percent of (male or female) population. For instance, the males aged 10 – 14 equals about 3.5 percent of the total male population, and 4.2 percent of the total female population.

Baldwin City Population Structure – 2000 - Figure 3-1



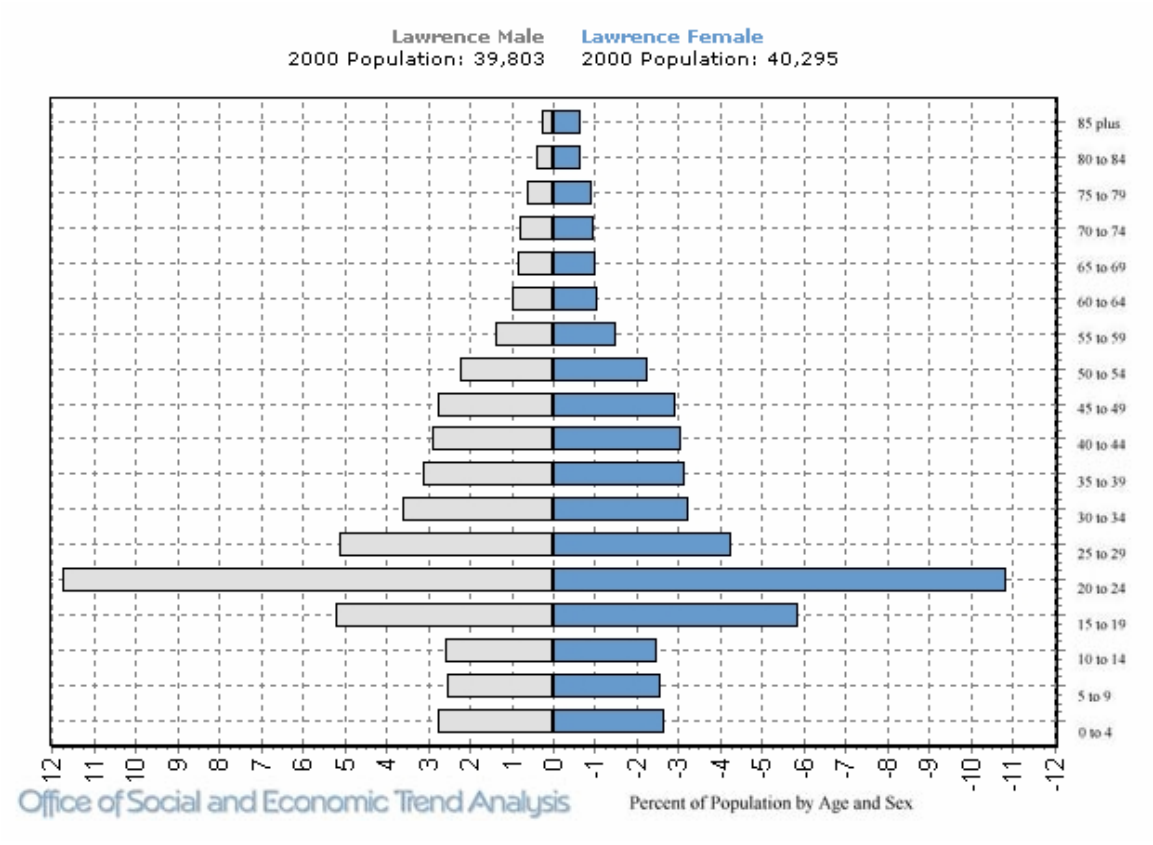
Compare the Baldwin City population graph to one for Lawrence in Figure 3-2. The shape of the graphs is very different simply because the percent of each age group to the total population is 20 times larger than Baldwin City. However, the relationships are the same. In Baldwin City, the 10 – 14 year olds comprise (approx.) 7.7 percent of the population; in Lawrence, the 10 – 14 year olds tally about 5.2 percent of the population.

The critical age groups necessary to maintain and sustain a vibrant population lie in the:

- 0 – 18 age groups (with the most important between age 9 – 16)
- The young, active adult groups between 28 – 39+ years
- The early middle years between 45 - 60

The elderly should never be marginalized because of their contribution to socialization, stability, and because they are living much longer than only 30 years ago.

Lawrence City Population Structure – 2000 - Figure 3-2



The 0 -18 age group theoretically does not remain in a modern American small community; they leave home, train or receive advanced education, or go directly to the metropolitan area for a first job. But, while they are living in a local community they form the underpinning of education resources, health benefits, purchasing power, and form the basis of "youth" in a society. Imbalance in the 0 - 18 age group is the mark of persistent decline in small, rural towns, and also inner cities, due to aging and low birth rates. To a certain extent, low birth rates resulting in a ripple through the 5 – 18 age groups is a phenomenon throughout the U.S. today. For Baldwin City:

- 0 - 18 year age group exceeds (33.40%) the Kansas mean – 29.35%
- The live birth – 4 year old group meets state benchmarks

The young adult age groups are classically absent in numbers in many Kansas small towns. Their importance is critical in two ways: this is the child bearing age group, and second, this group constitutes most new local business formations. This age group is defined in various categories, but the age 30 – 45 is a good compromise.

For Baldwin City:

- Baldwin City's stock of early middle age adults is standard at approximately 19.0% of the total population and rivals the state mean
- The 35 – 39 age groups is especially strong indicating the presence of a professional workforce

Demographers often claim that the middle age cohort (arguably aged 45 – 60) constitutes the bedrock foundation of a community's population base. This is generally the highest income age group, most productive, with strong leadership and service inclinations and, unfortunately the first to flee persistent, non-performing communities through the tactic of early retirement. One note of caution is in order! Because of extended lifetimes, and the need to work longer than age 65 – 66, the concept of elderly or "old age" is now often considered to begin at age 70 rather than 60 – 65. Baldwin City's middle age cohorts form a solid basis for a claim of vitality. Fifteen percent of the males/females in the community comprise this age group.

Comparative Advantage – Baldwin City

This section focuses on the demographic threats/weakness to Baldwin City and its associated township and environs. Most of these drawbacks are not quantifiable, and some have no reasonable alternative solutions. However, they serve to focus the analysis for future planning targets.

Transportation and Size/Scale

Baldwin City is not adjacent to a major interstate and *being close* is not an advantage when it comes to capturing motorist dollars for service. It also is not commuter preferred, as the two lane highways (56 & 59) are not safety improved or access controlled; this will lead to increased congestion due to a continuous proliferation of drive entrances as the sprawl line moves westward from the KCMO-KS metro area. In this case the advantage goes to Edgerton for strategic connectivity. The scheduled improvement of Highway 59 from the City of Ottawa to the City of Lawrence will enhance the commuter viability for connecting Baldwin City to the Lawrence job market.

Baldwin City's community size (city and township population plus environs) is sufficient to sustain and provide a full range of services for its inhabitants, but Baldwin City's *municipal size* (the tax and receipt entity) is several thousand persons less than necessary to provide the full community services for residents and potential firms. Paradoxically, the town is not yet large enough even though the township/city duality crosses the 5,000+ inhabitants. The 5,000 municipal population carries no magic, however, there is strong evidence to support the supposition that communities in the 5,000 – 10,000 range have sufficient finances and "will" to impose better land use controls, perform annexations to capture "free riders" that use municipal services and amenities without paying municipal taxes, and to extend the necessary services to promote external growth.

Lawrence/Douglas County Metropolitan Statistical Area (MSA)

This MSA is a two edged sword for Baldwin City. The MSA provides a smorgasbord of goods, services and benefits for Baldwin City residents. It can provide everything that Baldwin City cannot, at reasonable prices, and within a modest commuting range that will provide a hedge against energy price inflation. At the same time, unless the city prompts (or maintains) an aggressive entrepreneurial stance, the incentive to innovate, compete, and grow or recruit new firms, the complacency of dependency on Lawrence will eventually cap efforts to expand the small measure of economic independence now enjoyed by the residents.

External Economic Threats

Baldwin City enjoys a certain amount of resource and "space" independence. It controls (economically owns) its own corridor (Highway 56) and enjoys near complete freedom from intra-county competition (except, of course, the City of Lawrence). The Highway 10 Corridor apparently does not compete with Highways 59 and 56. The communities of De Soto and Eudora do not appear to exchange many commuters or migrants with Baldwin City, and the three economies are sufficiently different to assume that they do not exchange shoppers since Lawrence is the major economic attractor. As noted, Edgerton is not positioned to compete with Baldwin City as a full service community, but may preempt some housing and highway service opportunities because of their Interstate adjacency.

The obvious regional threat is Gardner, since it is the nexus of several major corridors and is the progenitor of a phenomenal growth explosion over the past 20 years. At Gardner's present rate of economic/population growth, Gardner will compete with other more mature communities in southern Johnson County for market share and dominance during the 21st Century. It also poses a direct threat to Baldwin City as a stronger economic competitor, housing supplier, and supplier of goods and services that may rival some aspects of Lawrence's economy by 2030.

These considerations should be tempered by the inevitable results of rapid growth (outer-suburb) communities along highway corridors. Gardner does not retain much of the small town charm that might have resulted had the town developed at the same pace as Baldwin City. Gardner's new growth is by and large disconnected from the community's historic center and follows transportation routes rather than landforms. Gardner's historic amenity area, Lake Gardner appears to be fully developed and does not offer the larger amenities of the Douglas County State Lake.

Table 3-2
Regional Benchmark Population Change

City	1970	1980	1990	2000	2006 Est.	1990-2006 Number Change	1990-2006 Percent Change
Baldwin City	2520	2829	2961	3440	4145	703	23.7%
Palmyra Twsp	3798	4471	4736	5815			22.8%
Edgerton	513	1214	1244	1440	1600	356	28.6%
Gardner	1619	1839	3292	9673	12937	9645	293%
De Soto	1839	2061	2,291	4,438	5070	2097	131%
Eudora	2071	2934	3,006	4,187	5119	2113	70.3%

Source: U.S. Census Bureau, Population and Housing Units, Kansas 12/17/92 - 2002 Final Adjustment Counts; estimates by SETA Social & Economic Trend Analysis http://www.seta.iastate.edu/census/city/index. Various data points do not agree within officially published sources.

Baldwin City decision-makers should consider concentrating their future planning and economic development efforts around the following suggestions:

- View Gardner as the direct competition to Baldwin City – focus on the nature of the two communities and devise planning and economic development policies around the core values of Baldwin City.

- Retain the marketing strategy and image of Baldwin City as a "small town" that will retain their small community look and feel.

- Do not encourage new housing development that is disconnected from the City – take whatever regulatory steps possible to protect the town from development seeking to use the community's assets without contributing to local well being.

- Do not encourage community barriers (Highway 56) – either make a full connect with "north and south Baldwin City" or restrict/control the flow of development to the north.

- Do not permit new development to make any aesthetic and "small town design" break with the 20th Century Baldwin City community – strictly enforce a Traditional Neighborhood Design (TND) scheme.

City of Lawrence and Douglas County

The estimated current (2005) population of Lawrence, Kansas is 81,873 and apparently adds about 350 persons per year within the current city boundaries. The population of the metropolitan area (current 2005 estimate) is 102,786, which is, of course, also the total population of Douglas County (the MSA). The estimate is not based on Bureau of the Census, since their 2001 estimate of a 34 person increase over 2000 is highly suspect. The probable population of the City of Lawrence and their environs (not including Eudora and Lecompton) is approximately 89,000 persons if one includes parts of the unincorporated areas in Wakarusa, Grant, Lecompton and Kawaka Townships.

Table 3-3 is an overview of population data from Douglas County and surrounding counties that are associated economically with the MSA. The data is fairly clear in this table. Douglas and Leavenworth Counties clearly benefit from their strategic locations in the Urban Region, while Franklin and Miami Counties obviously gain their micropolitan status from the larger counties. A quick glance shows that Douglas County is unmistakably linked to the high growth pattern in Johnson County (the fastest growing county in Kansas). Both counties exceed the average annual population growth rate of the United States of 13 percent.

Table 3-3
Neighboring County Population Growth 1970 - 2000

County	1970	1980	1990	2000	% Change 1970-80	% Change 1980-90	% Change 90-2000
Franklin	19,936	21,994	21,994	24,784	10.32	0.00	12.69
Douglas	57,963	67,641	81,798	99,962	16.75	20.93	22.21
Jefferson	11,906	15,167	15,905	18,426	27.39	4.87	15.85
Miami	19,197	21,538	23,466	28,351	12.19	8.95	20.82
Leavenworth	53,322	54,789	64,371	68,291	2.75	19.49	6.71
Osage	13,355	15,318	15,248	16,712	14.70	-0.46	9.60
Johnson	220,073	270,269	355,021	451,086	22.8	31.4	27.1

SOURCE: Bucher, Willis & Ratliff Corp.; N:/2003-068/WPC/wpc/demographics/ franklincounty-demographicreport.doc; U.S. Census Bureau, General Characteristics of the Population, Kansas, 2000

Table 3-4 offers a comprehensive data set for Douglas County and associated townships and towns. Precise counts on MCD (Minor Civil Divisions – such as townships) often vary due to listing error by Census workers). Minor Civil Subdivisions provide important data for a demographic analysis. Simply put, Palmyra Township *is* Baldwin City – persons living within 4 – 5 miles of a community (a Midwest township is usually 6 miles square) have the same local phone, mailing address as the major town in the subdivision; attend the same religious organizations; vote in the same precincts; and attend the same schools.

Two important data are immediately evident; First, Douglas County is a rapid growth area – nearly three times the national average and ranked in the top 20 small SMAs nationwide. Three of the townships, Wakarusa, Eudora and Palmyra are among the top 10 fastest growth (non-incorporated) areas in Kansas. It does not take a great deal of analysis to predict solid, steady growth for these townships in the near and mid-range future.

Table 3-4
Growth Characteristics of Area Communities and Townships in Douglas County 1960-1980-2000

Place	1960	1970	1980	1990	2000	% Change 1960-2000
Douglas County	43,720	57,963	67,641	81,798	99,962	128.6
Baldwin City	1877	2520	2829	2961	3,400	81.0
Eudora	1526	2071	2934	3006	4307	182.2
Lecompton	304	434	576	647*	608	100
Township						
Clinton		439	275	354	531	21.0
Eudora		2868	3821	4011	5571	94.2
Grant		490	430	440	442	-9.0
Kanwaka		646	704	1017	1317	104.0
Lecompton		1032	1250	1501	1761	70.6
Marion		557	600	662	836	50.1
Palmyra		3798	4471	4736	5760	51.7
Wakarusa		1665	2246	1665	2237	34.4
Willow Springs		739	1105	1131	1409	90.7

Source: U.S. Census Bureau, Census 2000; U.S. Census Bureau, Characteristics of the Population, Counties and County Units, 1990 @ 2000. Phillips & Associates 2006. Data often does not agree with published sources due to estimate errors in Douglas County data.

* The data indicates loss in Lecompton City and strong gain in Lecompton Township - data sources should be questioned concerning this discrepancy.

- Clinton Township's growth is not related to metropolitan overspill or adjacency to Lawrence. About 40% of the township is covered by Clinton Lake, flowage easements and inaccessible areas. About 11,000 acres surrounding the lake are open to hunting and fishing. New population growth per decade is very low (about 203 persons per decade and is attributable to second homes (1960 – 1975 period) and older housing restoration. No further growth of any significance is anticipated.

- Growth in Lecompton Township is due to urban adjacency and the attraction of a small town (historic) atmosphere in Lecompton City. Prior to 1995 Interstate access to

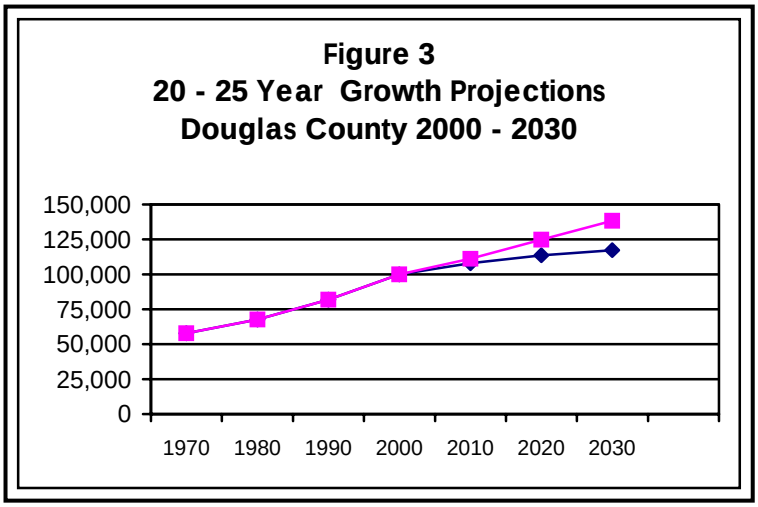
Lecompton was via Lawrence and secondary roads. Within the past ten years a new exit on the Kansas Turnpike opened and provides direct access to Lecompton City and adjacent areas. The Township and City is expected to grow at slow but steady pace of about 500+ persons per decade.

- Willow Spring and Marion Townships are both metropolitan overspill and non-incorporated sprawl that is disconnected from urban services in Douglas County. Both townships owe their appeal to exurban/rural amenities within a reasonable distance to Lawrence, Baldwin City, and Gardner. Population change is similar to Lecompton Township and will probably continue to grow at the same 200+ persons per decade. Since there is no central town to service township residents, growth will come from rural subdivisions and large lot settlement.

- Eudora and Palmyra are both fueled by metropolitan adjacency and highway corridors. Eudora Township is characterized as a "reluctant small town" captured by the adjacency to two metropolitan areas and the Highway 10 transportation link between Olathe and Lawrence. Population came to Eudora Township not because it was drawn there by a small town, but rather pushed there by the metropolitan search for affordable housing and easy commuting distances. Palmyra offers a different model than Eudora. In the case of Baldwin City and their associated township area, population is pulled there by an attractive small town and high level amenities in the vicinity – such as the Douglas County State Lake. Baldwin City offers a true small town opportunity with associated employment opportunity, but lacks the high speed access of Eudora on Highway 10.

Figure 3-3 offers population forecasts for Douglas County as a whole. One warning should be noted. Counties tend to implement growth control measures when an inordinate amount of the township growth is due to large lot, rural housing subdivisions. This type of growth is expensive to support, not sustainable, and very difficult to properly service. Therefore, future non-connected growth is subject to a rapid downturn and must be considered as a variable in population forecasts.

Two forecasts are offered for Douglas County. The first is based on a simple linear forecast with the base year set at 1960. The forecast assumes that the past 40 years reflect the population change over the next 30 years. This is not an unreasonable assumption, but does belie the fact that a major segment of the (non-educational) employment workforce for Douglas County lies in Johnson County – Olathe and Overland Park, specifically.



The data show that the linear forecast places the Douglas County population at 148,000+ in 2030. The total County growth rates from 1980 to 1990 and 1990 to 2000 certainly support the benchmark 148,000 population level in 25 years.

The second forecast is based on the "global insight" model used by the *Kansas Center for Economic Development*. The Global Insight Model rests on an analysis of economic driver variables of the micro economy (Douglas, Leavenworth and

Johnson Counties) economy by providing projections supply, demand, and conversion modules of NEMS (The National Energy Modeling System.) Details are found at http://www.eia.doe.gov/oiaf/aeo/overview/ macroeconomic.html (accessed 5/30/06). This forecast yields a benchmark population of 118,000 – 120,000 for 2030 – far short of the 148,000+ of the linear model. The tendency is to think that the Global Model does not accurately reflect the high level appeal of Douglas County as a migration-destination and retirement area. Douglas County offers a highly versatile and diverse economic profile and ready appeal at the conjunction of two metropolitan areas.

Woods and Poole and the Kansas Water Office offer independent forecasts for Kansas Counties. The KWO (Kansas Water Office) forecasts are based on benchmark data from water consumption per capita (per person) over the past several decades. Unfortunately, water consumption and population growth are not linear, meaning that water consumption tends to increase even if population growth does not. The KWO forecasts a 20,000 person per decade population change based on their consumption analysis. This results in a target population of 161,000 persons by 2030. It is the consultant's opinion the figure is inflated. Woods & Poole is a commercial data source that uses low level population and demographic data to project county population. Their forecast is 150,700 persons by 2030.

Population Vitality

Typically, there is an intense focus on the population vitality of a Kansas county. The reason is that most Kansas Counties, are rapidly growing older (median age), with very low birth rates, and in persistent decline. This is not true for Douglas county; its population is young, university dominated, and the rapid aging of a significant percent of the population is not present. It is one of five Kansas counties with sufficient population vitality to thrive throughout the 21st Century. The median age of the population is 26.4 years as compared to 36 for Kansas and 34 for the United States. Obviously, this is a result of 20 percent of the population aged 20 – 24, but reflects the youth of the MSA as a whole. Without the university-age population, the median age is 32.8 years.

Assessment

The strategic assessment the Lawrence/Douglas County MSA (Douglas County) is straightforward with clear indications for county and community decision makers.

1. Douglas County is peered with a group of 10 counties in the Greater Kansas City Urban Area (three MSAs) that have a strong economic component ranking them the top 20 U.S. areas most attractive to new migration and labor force start-ups.

2. The Douglas County (MSA) is both a gateway to the Greater Urban Area and, at the same time, a strong attractor of new growth because of its linking position of the western end of the Urban Area.

3. Douglas County represents the best opportunity for "quality of life" market drivers between the KCMO-KS Urban Area and Denver, Colorado. Topeka, Manhattan/Junction City and Hays offer quality opportunities, but are not sufficiently positioned to gain a competitive advantage over Douglas County.

4. Douglas County is not Interstate dependent, even though it is Interstate adjacent. The Highway 10, 59 & 56 Corridors offer strong alternatives to enter the metropolitan area without over dependence on Interstate Highway 70.

5. During the 21st Century, Douglas County will be only one of five Kansas counties to withstand the threats of low birthrate, aging, energy constraints from over commuting, high median ages, and the weakness of lower paying service jobs.

Forecasts, Projections and Conclusions

In formulating a set of forecasts for Baldwin City's future population, the following factors were used to create the population model in an Excel® formula using algorithms based on the variables discussed throughout this chapter.

1. Palmyra Township and Baldwin City's population count is increasing at very nearly the same rate (20 – 22) percent per decade. The current ratio for Palmyra Township is 3,664/1,151 (5815 township total), or 3/1.

2. Based on economic data 40% + / – 9% of all goods and services dollars leak from the Township.

3. The popular vitality is at and above replacement level for births/deaths/ out-migration.

4. The average family size is 3.10 persons with 1.39 equivalents as children for each new household – average.

5. The total number of students enrolled per year in the school districts is cycling at an average increase of 29 students per year.

6. Enrollment at the main campus of Baker College is estimated at 900 students. The number will be reduced to 750 for the model to account for part time enrollment (FTEs)

7. The peak-time, full equivalent resident population of Baldwin City is 3,664 persons: 2,792 permanent full time residents; 608 group quarter students and 66 persons institutionalized.

Table 3-5
Population Forecasts for Baldwin City/Palmyra Township 2010 - 2030

Model	2000	2010	2020	2030
Linear[1]	5815	6351	7023	7655 - 7800
Linear[2]	3664	3852 - 3955	4541 - 4788	4900 - 5125
Woods & Poole	3664	3889	4609	5400
Global Power	3664	3807	4405	5300
Kansas Water Office	3664	4436	5184	5931

Table 3-5 presents a summary of population forecasts for Baldwin City. Linear -1 is a step-wise model of the population for Palmyra Township/ Baldwin City by Phillips and Associates and represents a best estimate (+/– 7%). It assumes no change to economic conditions, the same step-wise (yearly increment) rate of growth, new school enrollment, and a slow, but constant supply of new housing (40 dwellings units per year). The Linear -2 model is also by Phillips and Associates for Baldwin City only with total resident and non-resident population, a yearly 4% student increase, and a marginally increasing rate of growth per annum. It

assumes no significant change in economic conditions. At this point, we consider this the best estimate given the rate of net migration and natural increase.

Woods & Poole and Global Power are both proprietary database companies that use statistical profiles to forecast future population. Woods & Poole uses birth/death and migration as a factor. Woods & Poole relies heavily on the rate of growth of the host county. The Woods and Poole and Global Power forecasts are sufficiently similar to be considered equivalent.

The Kansas Water Office provides yearly population forecasts for 40 years in the future based on water consumption/demand. In this particular case, their estimate may be more valid than the more conservative forecasts because of the volatility of economic and demographic indicators at the urban fringe – which is no more than 12 miles from Baldwin City.

The 2010 census pre-list for Douglas County's population count begins late in 2007. By early 2009 preliminary population figures will be available for townships in eastern Kansas and the first official figures should be available to County government in July of 2010. If the linear population estimates fall within the population corridor for the township/city (about 200 persons +/ -), then no particular adjustments should be necessary until about 2014 for the population change rates of this plan. However, if the forecasts fall outside the corridor (greater or upward) then the assumption is that the metro influence is approaching at a more rapid pace than expected. If this is true, then the market indicators used in this analysis should be adjusted.

SECTION 4:

Economic Analysis

Introduction

There are several important indicators of economic change (growth and decline) and community vitality available at the local and regional levels. These data are more readily available for larger geographic areas, such as counties, and for medium to large sized cites because of their comprehensive employment systems, their ability to capture large trade areas, and the strength of their financial engines.

Small cities and towns have the same types of indicators, but interpretation of the data requires a more careful analysis, with a greater chance of error, than their larger counterpart. There are five data "gold standards" to measure town prosperity and each can be used, with caution, to compare long term performance with other similar communities. These standards, among others, are in no particular order:

- Employment levels
- Occupations and Industries
- Community trade, commerce and tax flow
- Incomes
- Market participation and capture

The most important cautionary note concerning a local economic analysis is that "one size does not fit all." Some smaller communities (population 15,000 and under) possess highly specialized economics that evolved over the past century. On the other hand, most of the economic data for some towns appears to be "satisfactory" and even prosperous, but the industry and occupation data from the Economic Census might indicate that community employment and income is highly concentrated in one sector. This lack of diversification can wreak havoc when economic downturns, shortages, or interest rates change. One of the most notorious examples of employment concentration occurs in towns based on tourism and recreation, or in the so-called "company town" that is virtually and vitally dependent on a single, long term industry.

Employment, Occupations and Industries

Employment simply indicates participation in the general workforce; employment data is segregated into occupations and industries. There is no one comprehensive measure for "best" employment pattern by occupation or industry. Generally speaking, a good distribution across the employment spectrum is more desirable than concentration in any one industry. However, it should be acknowledged that communities built around certain industries – i.e., education, farming or manufacturing for instance, will have much higher concentrations of labor in one or more areas. The most important point to remember is that employment data by occupation and industry is reported for individuals *without respect to their place of*

employment. In other words, the data do not reflect where one works; the data only indicate the type of job.

Table 4-1
Occupation and Industry of the Employed For Selected Kansas Cities - 2003

Geographic Area	Percent Distribution by Occupation						Percent in Selected Industries		Percent Govt. Workers All Levels
	Manage-ment, profess-sional & Related Occupations	Services	Sales & Office	Farm Forestry	Const-ruction, extrac-tion & mining	Produc-tion, trans-portation, material moving	Agri.	Manufac-turing	
Kansas	33.9	14.4	25.8	1.0	9.9	15.0	3.3	15.0	15.5
Baldwin City	31.1	18.8	25.7	0.1	9.9	14.3	0.3	13.3	21.9
Eudora	25.0	26.5	16.7	0.3	13.9	17.6	1.3	16.1	16.8
DeSoto	30.2	16.0	24.6	0.4	12.6	16.1	0.7	13.9	17.1
North Newton	43.5	18.2	23.5	0.0	3.9	10.8	0.8	11.4	10.7
McPherson	16.6	27.8	21.7	0.2	9.4	24.2	0.6	28.7	13.2
Fort Scott	24.1	17.2	25.7	0.8	8.4	23.8	0.8	20.7	12.7
Gardner	33.6	13.1	27.7	0.4	11.2	14.0	0.9	17.5	10.4
Edgerton	22.5	17.1	24.9	0.4	13.9	21.1	1.3	21.5	11.1
Group Average	28.3	19.3	23.8	.32	10.2	17.7	.83	17.8	14.2

GCT-P13: Occupation, Industry, and Class of Worker of Employed Civilians 16 Years and Over: 2000; Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

Comparison and peer communities were selected for several reasons:

- Presence of small college
- Metropolitan adjacency
- Recent growth
- Communities in the same vicinity with similar market drivers

Baldwin City can either be compared to the mean for the State of Kansas, or more appropriately to the mean of the comparison group. Baldwin City, with its small town economy, commuting population, and location within a metropolitan area, but without interstate adjacency, presents a very favorable local financial picture. Only two of the data points are out of range: employment in manufacturing and the percent of government workers. An excessive number of government workers is sometimes indicative of isolated, declining economies in rural areas. It indicates that private sector jobs are declining and that the largest employment sectors are in public service – the school system, local government and state employment. This cannot be the case in Baldwin City: it is due to a segment of the population commuting to nearby public education systems, local and county government jobs, and other public sector employment within a 30 mile region.

Table 4-2 Employed Civilian Population 16 Years & Over	Persons 3,015	Percent 100
OCCUPATION		
Management, professional, and related occupations	1,069	35.5
Service occupations	449	14.9
Sales and office occupations	750	24.9
Farming, fishing, and forestry occupations	18	0.6
Construction, extraction, and maintenance occupations	306	10.1
Production, transportation, and material moving occupations	423	14

Source: DP-3: Profile of Selected Economic Characteristics: Census 2000

Implications

Sector employment and occupation data for Baldwin City indicates a diversified and healthy workforce. Strong employment in service, education, managerial and the public sector offers some degree of immunity to quick economic shifts and downturns in the state and regional economy. There is an assumed "soft employment spot" in manufacturing – to be expected in a small town economy based on service, retail and education – but nevertheless, points to some local loss of opportunity to capitalize on import dollars for value added manufacturing jobs. However, there are 413 persons actually employed in some sector of manufacturing making it largest sector by industry but, this is a distant second to the 913 persons employed in professional health and education sector.

Incomes, Earning and Financial Data

Table 4-3
Selected Household and Individual Economic Characteristic – Douglas County Townships – 2000 Data (Unadjusted)

Township	No. Households	Median Income $*	Median Family Income $	Mean Retirement Income $	Non-family Household Income $
Eudora Township	2,069	38,956	54,337	15,994	26,298
Lecompton Township	625	40,022	57,344	15,568	22,308
Palmyra Township	1,952	40,682	57,875	33,348	26,579
Wakarusa Township	802	40,781	68,100	17,847	39,167
Kansas	---------	36,188	49,624	16,030	23,002

* Median Income – full time – year around workers 2000 - males
Source: QT-P33: Income in 1999 by Selected Household, Family, and Individual Characteristics: 2000 Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

Table 4-3 contains data for selected economic variables for Douglas County's townships. The data is not adjusted for inflation (2005 dollars) from the 2000 Census to prevent a distortion of high/low incomes in the past six years. Total dollar increases for salaries were modest over the past six years (2000 – 2006) and therefore a peer comparison of local townships with the State of Kansas is more appropriate. Also, township data tends to reflect the real trade area economy of the local town.

Table 4-4 Palmyra Township Incomes in 2000 by Household		
Households	**1,952**	**100**
Less than $10,000	99	5.1
$10,000 to $14,999	74	3.8
$15,000 to $24,999	234	12
$25,000 to $34,999	211	10.8
$35,000 to $49,999	353	18.1
$50,000 to $74,999	491	25.2
$75,000 to $99,999	297	15.2
$100,000 to $149,999	101	5.2
$150,000 to $199,999	42	2.2
$200,000 or more	50	2.6
Median household income (dollars)	50,212	(X)

Source:
DP-3: Profile of Selected Economic Characteristics: Census 2000

Douglas County is a metropolitan area and the high range of incomes in the selected townships certainly reflect this situation. All townships surveyed, with the exception of Eudora Township, are well above the Kansas mean for individual and family income. The individual mean income and the median household income in Palmyra Township are perhaps lower than might be expected, but this is surely due to the presence of students (in non-family households) counted in the 2000 Census.

Implications

Palmyra Township (Baldwin City) performs at and above the expected level in terms of earnings and income per family and household. An obvious strength is the high level of aggregate retirement income. A great deal of this income is spent for consumption within the local area without being banked or sent out of township for investment. Local decision-makers should evaluate the potential of Baldwin City and its environs as a retirement destination with appropriate housing opportunities.

Table 4-5 Employed Persons 16 Years and Over Commuting to Work Palmyra Township 2000		
Workers 16 years and over	**2,955**	**100**
Car, truck, or van -- drove alone	2,193	74.2
Car, truck, or van – carpooled	337	11.4
Public transportation (including taxicab)	0	0
Walked	255	8.6
Other means	13	0.4
Worked at home	157	5.3
Mean travel time to work (minutes)	22.2	(X)

Kansas Department of Transportation and Douglas County traffic counts were used to garner a general model of the mobility of the workforce in Palmyra Township. On average, about 54 percent of the full time labor force commutes outward on a daily basis. This figure is calculated from the 3,780 (east); 3,566 (north/rural road) and 4,560 (west) average daily vehicle trips originating in Palmyra Township. Based on the same data, about 24 percent of the total labor force in Baldwin City commutes inward from all directions on any given workday, but the length of the trip cannot be computed. According to the data in Table 10, 75 percent of the commuters from Palmyra Township drove from their residence to their place of work alone.

The only way to determine the actual direction of commuting, and the eventual place of work, is to perform a real time community survey. However, traffic count data indicates that the clear majority of those commuting outward each day from Baldwin City drive east to I-35 and beyond. About one-third of the commuters drive west and eventually turn towards Lawrence or Ottawa. The remainder distribute themselves on north/south rural roads.

Implications

A significant part of the Baldwin City's workforce commutes outward each workday. Although it is not valid to characterize Baldwin City as a "bedroom community" because of local employment opportunities, none the less, the community has a larger than state-average dependency on external jobs. Two conclusions can be drawn from the data. First, Baldwin City benefits from a portion of any new job created within about a 25 – 30 mile commute. Second, nearly any improvement for traffic flow on Highway 56, and surrounding rural roads, has the potential of increasing job opportunities and thus population (see taxable sales information at the end of this chapter).

Local Wealth and Public Sector Cash Flows

Local wealth and cash available for public expenditures is usually measured in valuation, taxation and tax take (ratable). The data is used to compare the relative wealth of one county or city in relation to other areas and other regions. As a general rule, metropolitan counties have a more favorable stock of public goods than rural areas but, there are a number of exceptions for small, metro adjacent that are chronically cash poor.

Table 4-6
2004 – 2005 Sales and Tax Collections for Douglas & Leavenworth Counties

Douglas County	Total Taxable Sales 2005	Sales Tax Receipts 2005	Trade Area Capture Pop.	Sales Tax Per Capita	Pull Factor
Baldwin City	$27,132,368	$1,438,016	2,184	$377.16	0.61
Douglas Unincorp.	$59,564,005	$3,156,892	4,232	$224.36	0.36
Eudora	$22,698,994	$1,203,047	1,604	$202.91	0.33
Lawrence	$1,100,018,324	$58,300,971	90,520	$684.25	1.11
Lecompton	$1,039,697	$55,104	107	$108.25	0.18
Douglas Co. Total	$1,210,453,388	$64,154,030	98,647	$594.85	0.96
Leavenworth County	**Total Taxable Sales 2005**	**Sales Tax Receipts 2005**	**Trade Area Capture Pop**	**Sales Tax Per Capita**	**Pull Factor**

Basehor	$17,219,087	$912,612	1,238	$281.66	0.46
Bonner Springs	$1,402,341	$74,324			
Easton	$1,443,314	$76,496	121	$234.38	0.38
Lansing	$62,574,227	$3,316,434	5217	$422.20	0.68
Leavenworth Unincorp.	$45,577,044	$2,415,583	3,309	$104.76	0.17
Leavenworth	$317,489,162	$16,826,926	26,614	$516.83	0.84
Linwood	$1,731,966	$91,794	137	$222.19	0.36
Tonganoxie	$38,070,961	$2,017,761	2,962	$565.23	0.91
Leavenworth Co. Total	$485,508,104	25,731,929	39,598	$372.83	0.60
This is a study of retail activity based on FY 2004 sales tax data from the KS Dept. of Revenue. This study was completed April 25 of 2005 SOURCE: David L. Darling for more information, at www.agecon.ksu.edu/ddarling. Several towns were omitted from this analysis because of Johnson County's market domination.					

Table 4-6 is a compilation of county and city retail sales and sales tax collections for fiscal years 2004 – 2005. The table also contains comparative data to evaluate local incomes, the strength of retail businesses, and cash flows available for municipal and county expenditures.

Column 2 in Table 4-6 shows the total taxable sales for areas in Douglas and Leavenworth Counties for 2005 (including the unincorporated territory) and column 3 has the total tax dollars derived from those sales. Eudora Township (including Eudora City) has about 100 more households than Palmyra Township (including Baldwin City), but Baldwin is able to generate nearly $5 million more in taxable sales. This is almost certainly due to the presence of an indigenous market from Baker University and a greater percent of dollars captured in Palmyra Township as opposed to Eudora Township – simply put, the proximity of Lawrence to Eudora exacts a heavy toll on this municipality's total taxable sales.

Column 3 has data for the trade area capture population. The trade area is region based on distance from a particular market to adjacent markets and the strength or completeness of the retail sector in a community. The model does not assume that all persons living in the capture area will shop at local retail establishments. In reality, the capture population represents the potential number of people that could purchase goods if the price, variety, and retail stock were all equal. The actual capture is much more accurately shown in column 6 – *the pull factor*.

The *pull factor* equates sales per person in the town (or township) with sales per person in the state. This datum is a good representation of how much sales tax is paid per person/per year on the local level as compared to the state as a whole. A pull factor of 1.00 indicates that a local market is "pulling" sales from its target area at full potential, while a factor above 1.00 shows that a particular locale is actually pulling people from other capture areas. To illustrate, Baldwin City has a pull factor of .61, which means that 39 percent of the potential taxable sales and tax dollars are going to other areas: i.e., Lawrence, Gardner, Ottawa and the Kansas City Metro Area in general. Eudora, with a population 1,000 persons greater than Baldwin City, is only able to retain .33 percent of its sales.

Of the two counties and 11 municipalities shown in Table 4-6, only Lawrence is able to pull more sales into the city than it sends out to other areas (pull factor of 1.11). In fact, only Leavenworth (with more than 10 times the population of Baldwin City) and Tonganoxie (with a booming housing and commercial economy) are able to exceed Baldwin's .61 factor.

In rural counties, pull factors of .60 and below indicate increasing weakness in local economies. Lost sales and revenues eventually sap the economic life from small (and some larger) communities that are in chronic population decline. Small town and small cities in metropolitan areas, on the other hand, cannot offer the opportunities consumers demand in urban level inventories, varieties, and the most competitive prices and thus also have lower pull factors.

Baldwin City, as a small, metropolitan adjacent community, cannot hope to be competitive (at its current level) with the greater opportunity offered by larger markets. Tonganoxie is counter culture to this assessment because of its rapidly increasing share of the flow of metropolitan population and economic activity. However, Baldwin City is certainly competitive at their level and Baldwin City's economy will grow or shrink relative to its capture population potential in the coming decades. Increased sales are certainly possible as retail markets adjust for price and competition, but only if local merchants and decision-makers are aggressive and insightful.

Implications

On the whole, Baldwin City's local wealth and cash flows from taxable commerce should be classified as "satisfactory" with the caveat that there is some, but probably not a great deal, of room for improvement above the .70 pull factor level. As population increases in Palmyra Township, new markets will emerge in Baldwin City, but only to the extent that these markets are competitive with easily accessed neighbors. Larger and more robust markets in Lawrence, Gardner and Olathe make it difficult to establish dependable "high dollar" sales for high order goods (motor vehicles, consumer electronics, luxury goods, and the like).

There are other economic implications in store for the Baldwin City of the future. One of the most important is the ease and cost of transportation. Efforts to reduce travel time and costs (road improvements, market swings in the price of petroleum, and decreased commuting times) all work against a local market as opportunities increase in adjacent areas. Local leaders might do well to recognize that some degree of isolation from the interstate highway and the fast growing suburbs is a greater benefit than it is a burden.

SECTION 5:

Housing and Residential Development

Housing Unit Types

Understanding the inventory of the existing housing stock provides a great deal of insight into community character. In 2000, there were a total of 1,167 housing structures in Baldwin City. Detached single-family homes made up 73% of the total housing inventory. The second largest housing type in Baldwin City was mobile homes, which comprised 6% of the housing inventory. Since Baldwin City is home to Baker University, on-campus housing, along with fraternities and sororities, comprises approximately 6% of the housing inventory in Baldwin City.

Table 5-1
Housing Units by Structure, 2000
Comparison of Baldwin City and Douglas County

	Baldwin City		Douglas County	
Units in Structure		% of Total		% of Total
1-unit, detached	846	72.5%	21,816	54.2%
1-unit, attached	54	4.6%	2,760	6.9%
2 units	60	5.1%	2,140	5.3%
3 to 4 units	26	2.2%	3,147	7.8%
5 to 9 units	39	3.3%	2,550	6.3%
10 to 19 units	27	2.3%	2,659	6.6%
20 to 49 units	42	3.6%	1,312	3.3%
50 or more units	0	0	1,711	4.3%
Mobile Home	73	6.3%	2,125	5.2%
Boat, RV, van	0	0	30	0.07%
Total	1,167		40,250	

Source: Census 2000 Summary File 3, H30 Units in Structure

Age of Housing

The age of houses in a community can be an indicator of local housing conditions. Houses can be subject to deterioration over time, unless homeowners reinvest in property maintenance and upgrades. Approximately 26% of the city's housing stock was over 50 years old in 2000. Based on an informal windshield survey of various neighborhoods in Baldwin City, it is apparent that some of the older houses near Baker University have been carefully maintained and/or restored. The decade of the 1990's was a significant period of new residential construction with 288 new structures.

Table 5-2 Age of Housing Stock, 2000 Comparison of Baldwin City and Douglas County				
	Baldwin City		Douglas County	
Year Structure Built		% of Total		% of Total
1990-1999	288	24.7%	10,876	27.0%
1980-1989	96	8.2%	6,661	16.5%
1970-1979	261	22.4%	8,101	20.1%
1960-1969	129	11.0%	4,936	12.3%
1950-1959	84	7.2%	3,405	8.5%
1940-1949	32	2.7%	1,251	3.1%
1939 or earlier	277	23.7%	5,020	12.8%
Total	1,167		40,250	
Source: Census 2000 Summary File 3, H34 Year Structure Built				

Tenure and Vacancy

Housing tenure provides insight into whether units are owner or renter occupied. In 2000, 68% of the occupied units were owner-occupied, while 32% were renter occupied. Of the total 1,077 housing units in Baldwin City, 7.5% were vacant. Approximately 36% of the vacant units were rental units and 18% were for sale only.

Information regarding the number of persons living in group quarters is also presented. The 2000 census data reveals that 542 students lived in college dormitories. This translates into 16% of the total Baldwin City population residing in various Baker University dormitories. Listed below are the Baker University residential facilities:

- Denious Hall - 718 Dearborn
- Gessner Hall - 513 Dearborn
- Horn Apts. - 301 6th Street
- Irwin Hall - 810 Dearborn
- Jolliffe Hall - 606 Dearborn
- Markham Apts. - 305 6th Street

Table 5-3 Occupied Housing Units by Tenure, 2000 Comparison of Baldwin City and Douglas County				
	Baldwin City		Douglas County	
Total Housing Units		% of Total		% of Total
Occupied	1,077	92.5%	38,486	95.6%
Vacant	88	7.5%	1,764	4.4%
Total	1,165		40,250	
Occupied Housing Units		% of Total		
Owner occupied	728	67.6%	19,972	51.9%
Renter occupied	349	32.4%	18,514	48.1%
Total	1,077		38,486	
Vacancy Status				
For Rent	32	36.4%	745	42.2%
For Sale only	16	18.2%	509	28.9%
Rented or sold, not occupied	3	3.4%	183	10.4%
Seasonal use	9	10.2%	141	7.9%
Other vacant	28	31.8%	186	10.5%
Total	88		1,764	
Group Quarters Population				
Nursing Homes	66		489	
College dormitories	542		7,872	
Correctional institution	0		94	
Total	608		8,714	
Source: Census 2000 Summary File 3, H3; H4; H5 and Summary File 1, P37				

New Residential Development

Baldwin City has seen several new residential subdivisions developed since the late 1990's. Listed below are several of the more recent residential subdivisions in Baldwin City.

Table 5-4
Baldwin City, Kansas
Inventory of Final & Preliminary Plats, 1996-2006

Name of Subdivision	Year Approved	Number of Total Platted Lots	Number of Un-built Lots
1. Irvine-Walters	2004	5	5
2. Parkside	2002	15	8
3. Signal Ridge	2002	71	35
4. Marshall's West Add. #2	2002	2	0
5. Brittany Ridge	2003	42	13
6. Signal Oak	1995	19	0
7. Heritage Add. Phase I	1998	17	0
8. Heritage Add. Phase II	2002	35	7

9. Firetree Estates Phase I	1998	12	4
10. Firetree Estates Phase II	2003	45	3
11. Firetree Estates Phase III	2001	48	2
12. Firetree Estate Phase IV	2004	57	15
13. Firetree Estate Phase VI	2006	42	42
14. Murphy's First Add.	1992	2	2
15. Silverleaf	2003	24	8
Total		436	144

Fire Tree Estates

Fire Tree Estates features two residential phases currently under development which began in 1999. In Phase II, homes range from 1,800 to 3,200 square feet in one and two-story designs. Prices range from $180,000 to $220,000, and custom homes are also available. Phase III features homes similar in size and style with prices ranging from $130,000 to $275,000. Lots are still available in both phases. An added feature of Fire Tree Estates is Silver Leaf Village, which offers duplex townhomes in a maintenance-free retirement community. Homes start at $129,900 for 1,300 square feet of living space.
Source: Baldwin City Chamber of Commerce

Heritage Addition

Heritage Addition began development of its first phase in 1998 and work is beginning now on homes in Phase II. Homes are available from 1,400 to 2,500 square feet in one story, split-level and two story designs. Many also feature finished walkout basements. Prices range from $130,000 to $170,000.
Source: Baldwin City Chamber of Commerce

Brittany Ridge

Brittany Ridge began development in 2000 and offers a mix of duplex town homes and single-family residences. Home prices range from $138,900 to $210,000 for 1,450 to 2,500 square feet.
Source: Baldwin City Chamber of Commerce

New Residential Construction

During the ten year period of 1996-2005, the annual average number of single family building permits has been 35 new dwelling units per year. The year 2001 was the slowest year of construction activity, most likely due to the nationwide economic slowdown. The rebound from 2002 through 2005 has been strong and reveals the strength of the housing market in Baldwin City.

Table 5-5 Baldwin City, Kansas Inventory of Building & Demolition Permits, 1996-2005			
	Single Family		
Year	New Construction	Demolition	Manufactured Home
1996	24		
1997	19		
1998	25		
1999	32		
2000	39		1
2001	22	3	
2002	36	3	
2003	52	2	
2004	48	0	
2005	54	4	
TOTAL:	351	12	1

Tax Credit Housing

The Low Income Housing Tax Credit (LIHTC or Tax Credit) program was created by the Tax Reform Act of 1986 as an alternate method of funding housing for low- and moderate-income households, and has been in operation since 1987. Tax credits must be used for new construction, rehabilitation, or acquisition and rehabilitation. A project must comply with a requirement that 20 percent or more of the residential units in the project are both rent restricted and occupied by individuals whose income is 50 percent or less of area median gross income *or* 40 percent or more of the residential units in the project are both rent restricted and occupied by individuals whose income is 60 percent or less of area median gross income. The tax credits can provide as much as 55-60 percent of the total development cost, which reduces the amount of debt financing in affordable rental housing developments. Below is a list of tax credit housing projects in Baldwin City.

Baldwin City Villas
800 Deer Ridge Court
2005 Housing Tax Credit
32 Elderly Units

Firetree Villas
Crimson Court
1998 Housing Tax Credit
12 total Elderly Units (4 HTC and 8 at market rate)

Firetree Villas (Phase II)
307 Silver Leaf Lane
2000 Housing Tax Credit
4 Elderly Units

Vintage Park
321 Crimson Avenue
1999 Private Activity Bond
32 Elderly Units

Household Growth and Characteristics

Various household characteristics for the City of Baldwin and Douglas County are presented in Table 6. A few of the key points are highlighted below:

- The decade of the 1990s saw the formation of 246 new households in Baldwin City. This converts into an average annual increase of approximately 24 new households.
- The 2000 median household income for Baldwin City was $43,269, which compared with Douglas County median income of $37,457.
- The 2000 census reveals that 58% of the households in Baldwin City were married couples; 4% were headed by a male householder; 10% were headed by a female householder; and 28% were non-family households.
- The 2000 census indicates that 68% of the household tenure was owner-occupied, while 32% were renter occupied.

Table 5-6
Household Growth and Characteristics, 2000
Comparison of Baldwin City and Douglas County

	Baldwin City		Douglas County	
Households	Total	Average Annual Change	Total	Average Annual Change
1990	831		30,138	
2000	1,077		38,486	
Population per Household	Average	% Change	Average	%Change
2000	2.59		2.37	
Household Income (2000)	Total	% of Total	Total	% of Total
<$25,000	268	24.7%	12,766	33.1%
$25,000-$49,999	353	32.6%	11,496	29.8%
$50,000-$74,999	269	24.8%	7,288	18.9%
$75,000-$99,999	127	11.7%	3,494	9.1%
$100,000 or more	67	6.2%	3,482	9.0%
Median	$43,269		$37,457	
Household by Type (2000)	Total	% of Total	Total	% of Total
Married couple family	623	57.8%	16,590	43.1%
Children under 18	320	29.7%	7,673	19.9%
No Children	303	28.1%	8,917	23.2%
Male householder	39	3.6%	1,304	3.4%
Children under 18	25	2.3%	701	1.8%

No Children	14	1.3%	603	1.6%
Female householder	112	10.4%	3,265	8.5%
Children under 18	81	7.5%	2,170	5.5%
No Children	31	2.9%	1,095	2.8%
Nonfamily households	303	28.1%	17,327	45.0%
Householder over 65	237	22.0%	5,423	14.1%
Householder over 75	139	12.9%	2,766	7.2%
Household Tenure (2000)	Total	% of Total	Total	% of Total
Owner Occupied	728	67.6%	19,975	51.9%
Renter Occupied	349	32.4%	18,511	48.1%

SECTION 6:

Existing Land Use and Zoning

6.1 Introduction

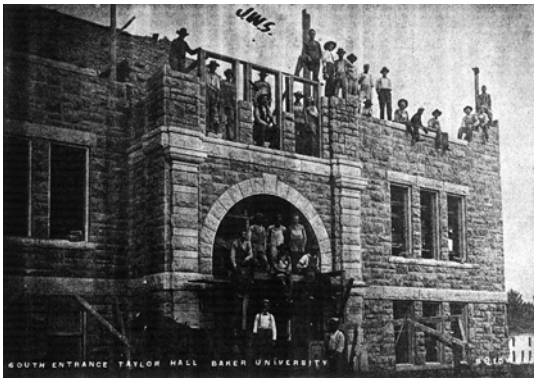
Existing land uses within the City of Baldwin City and Primary Growth Area were inventoried to assess the existing land use mix. Table 6.1 presents a complete breakdown of the land use pattern, while Map 6.1 shows the existing land use configuration.

6.2 Historical Context

Palmyra Township was surveyed in 1857. Businesses catered to the Santa Fe Trail traffic (wagon, harness, blacksmith shops, post office and hotel). Elementary education was extremely important and higher education became a priority. Money was provided to buy land south of the township to be given to the Methodist Episcopal Church if they would start a college nearby. The Methodist Church accepted and named the college Baker University after Bishop Baker.

Baker University, a small private liberal arts university, was established in 1858 along the Santa Fe Trail and is the oldest university in Kansas. Baker's three schools serve more than 2,000 students at various campuses: the College of Arts and Sciences at the main Baldwin campus, the School of Nursing at Stormont-Vail Regional Health Center in Topeka, and the School of Professional and Graduate Studies in Overland Park, Topeka, Wichita, and Lee's Summit, Missouri.

Three of Baker's buildings are listed on the National Historical Register: Old Castle Museum, Case Hall, and Parmenter Hall. Pulliam Hall is listed on the Methodist Register. The Old Castle Complex consists of a museum, a cabin and a post office. The Kibbee cabin and Palmyra Post Office are reproductions of originals that related to Baker's history.



To further the plan, Palmyra wrote John Baldwin of Berea, Ohio, a wealthy farmer and owner of grist and saw mills and a believer in higher education. Palmyra requested he bring the mills to the new town site where business was prospering and in return, the new town would bare his name, thus Baldwin City was founded (1870).

Gradually, the businesses in Palmyra moved to the new town site, and gave way to Baldwin City's prosperity. Baldwin City now incorporates Palmyra north of Highway 56, and Media (1906), around the old Santa Fe train depot.

The Maple Leaf Festival is an event held every year during the third full weekend in October. It was started in fall of 1956 as a way to celebrate a successful harvest, and to view Baldwin City's fall foliage, especially that of the numerous maple trees. Today, it is the largest fall family event in the area. Included in the festivities are a parade, arts and craft show, quilt show, theatrical performances, history tours of the area, and train rides on the Midland Railway.

The Clarice L. Osborne Memorial Chapel was brought to Baker from England in 1995 and reassembled on campus. The chapel was first built in 1864 and was used by former British Prime Minister Lady Margaret Thatcher's father, who preached there in the 1930s as a lay minister. The building's stones were packed in 200 crates and traveled more than 5,000 miles by boat, train and truck.

About three miles east of town near US 56 is the site of the Battle of Black Jack – the first skirmish between opposing armed groups that preceded the Civil War. This event took place on June 2, 1856, when Abolitionist John Brown and his men attacked pro-slavery advocate Henry Clay Pate and his men. Eventually, Pate's group surrendered to Brown's group. Adjacent to the site is the Ivan Boyd Prairie Preserve, home to an old log cabin, and wagon wheel ruts left from the Santa Fe Trail – the route of westward migration from Missouri to Santa Fe, New Mexico between 1825 and 1875. Settlers hung lanterns at night and flags by day from the top branches of the old oak tree that once sat at the top of Santa Fe Ridge, overlooking the Vinland Valley. The signals warned settlers from other communities of approaching invaders during the "Bleeding Kansas" days. The oak tree died in 1914, but a marker and plaque remain to tell visitors about a piece of Kansas history

Midland Railway is a non-profit organization chartered in 1982. Midland purchased the rail line from Baldwin City to Ottawa, Kansas from the Atchison, Topeka and Santa Fe Railway in 1987, and began running excursion trains on part of the line later that year. Total length of the railroad is 11 miles. Midland operates a demonstration historic railroad. The base of operations for the Midland Railway is the depot built in 1906 by the Atchison, Topeka and Santa Fe Railway at 1515 High St. in Baldwin City. This building was added to the National Register of Historic Places in 1983. Starting in 2004, excursion trains are run from Baldwin City to Ottawa.

6.3 Land Use Categories and Definitions

Landplan Engineering and Phillips & Associates performed a windshield survey of Baldwin City to identify existing land uses. The land use survey used the following categories:

- **Agricultural:** Land used for production agriculture (crop, pasture, livestock, etc.).
- **Rural Estates:** Land used for single-family residences on platted lots between 2-10 acres. Individual on-site septic systems or private lagoons typically serve the lot or parcels.

- **Single Family Residential**: Land primarily used for single-family or duplex dwelling units, accessory buildings to the dwelling units, and common pedestrian areas around the dwelling units.

- **Multi-Family Residential:** Land used for garden apartments, townhouses, or tri-plex units. Also includes land used for congregate care housing or clustered units for senior citizens.

- **Commercial:** Land used to support the sale of services or merchandise. In addition, land used to support professional activities such as medical and dental practices, attorney practices, and financial institutions. Examples: storage facilities, shopping centers, automobile dealership, restaurant, bank, medical office building, bed and breakfast, and hotel.

- **Industrial:** Land used to support manufacturing of goods. Examples: bakery products manufacturing, light manufacturing, commercial printing, and cement manufacturing.

- **Transportation:** Transportation uses can include land used for railroad transportation, automobile transportation, right-of-way (private and public), and parking.

- **Institutional:** Land occupied by governmental facilities and utilities, hospitals or other health centers, educational facilities, places of worship, and buildings used by community organizations and social services.

- **University:** Baker University

- **Parkland:** Land used primarily for public recreation. Also includes private golf courses or other private recreational activities.

- **Vacant**: Undeveloped land in unplatted tracts or parcels.

Table 6-1
Primary Growth Area Existing Land Use Summary, July 2007

Land Use	City of Baldwin City		Unincorporated Portion of Urban Growth Area		Total Urban Growth Area	
	Acres	% of Total	Acres	% of Total	Acres	% of Total
Agriculture	132	10	2,305	65	2,437	49.5
Rural Estates	128	9	1,252	35	1,390	28.2
Single Family Residential	430	32	0	0	430	8.7
Multi-Family Residential	53	4	0	0	53	1.1
Commercial	51	3.7	0	0	51	1.0
Industrial	37	2.7	0	0	37	.8
Institutional	187	13.7	0	0	187	3.8
University	45	3.3	0	0	45	.9
Parkland (Mostly Undeveloped)	247	18.2	0	0	247	5.0
Vacant	46	3.4	0	0	46	1.0
Total	1,356	100	3,557	100	4,923	100

6.4 Summary Overview of Existing Land Use

Residential

- Single Family Residential persists throughout the town of Baldwin City.
- All Multi-Family Housing is generally located within the Baldwin City limits, predominantly surrounding Baker University Campus.
- The most recent development of housing during the 1990's has generally occurred north of Highway 56.
- Rural Estates development is located on the far north end of town and outside the city limits.

Commercial

- **Downtown Baldwin City** is the historic commercial core district, as defined by age of structures. The downtown retail district is generally limited to the vicinity of High Street and Eighth Street. The downtown retail mix includes restaurants, general retail, professional offices and services. Baldwin City, City Hall, Public Works, Library and Police Department are also located in downtown.
- The **Highway 56** commercial strip has a variety of commercial land uses predominant along the corridor, such as general retail, restaurant, automobile service and repair, and storage facilities.
- Located outside the City of Baldwin City on Highway 56 (west edge of the city) is a small pocket of retail activity (southwest corner of Highway 56 and Lawrence Street).

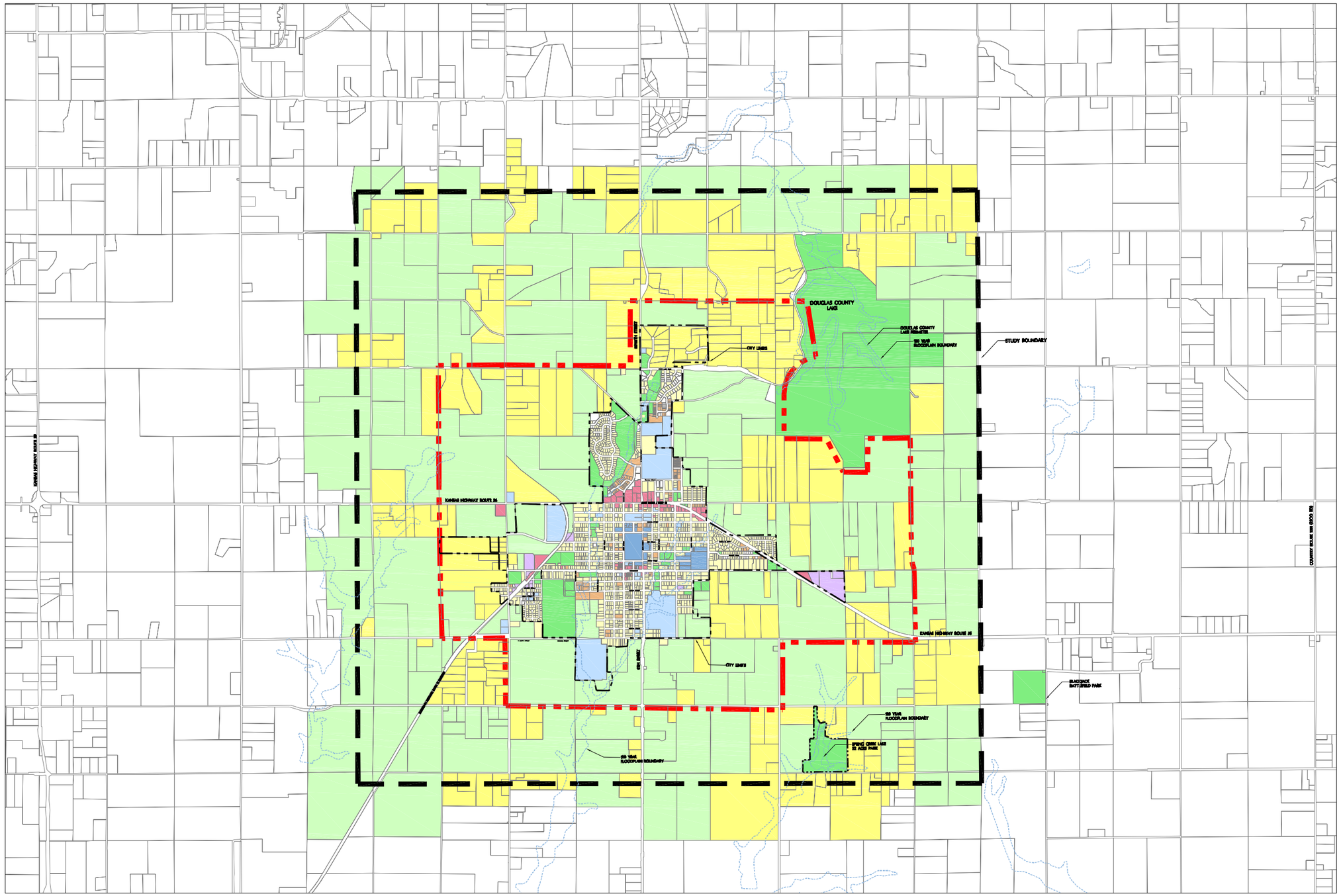
Industrial

- The Baldwin City Industrial Park to the east along the north side of Highway 56 is the largest existing industrial development in Baldwin City. The largest tenant as of 2006 is the John Deere dealership. The remainder of the park is undeveloped.
- Other industrial uses are arranged near the old BNSF railroad tracks located west of Downtown (Old town of Media). This general area represents the original industrial base of the community.

Institutional

- The Baldwin City School District located north of Baker University and north of Highway 56, and property located west of 12th Street and south of Highway 56 is planned for future expansion.
- Religious institutions and places of worship are generally located in the original town area along South Street, 5th and 6th Street, and along Highway 56.

(Refer to Appendix B, Existing Land Use Map)



LEGEND

- AGRICULTURAL 2,437 ACRES
- COMMERCIAL 51 ACRES
- INDUSTRIAL 37 ACRES
- INSTITUTIONAL 187 ACRES
- BAKER UNIVERSITY 45 ACRES
- RURAL ESTATES 1,390 ACRES
- SINGLE FAMILY 430 ACRES
- MULTI FAMILY 53 ACRES
- PARKLAND 247 ACRES
- VACANT 46 ACRES

EXISTING LAND USE MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix B

LEGEND

- STUDY BOUNDARY
- CITY LIMITS
- PARCELS
- 100 YEAR FLOODPLAIN, FEMA 2001
- DOUGLAS COUNTY LAKE PERIMETER

SCALE 1" = 1200'

1200 0 600 1200 2400 FT.

February, 2008

PHILLIPS & ASSOCIATES

Landplan Engineering, P.A.

Civil Engineering
Landscape Architecture
Community Planning
Surveying

6.5 Zoning

Zoning Classifications

- A-1 Agricultural District 354 acres
- C General Commercial District 67 acres
- CB Central Business District 165 acres
- C-P Planned Neighborhood Shopping District 0 acres
- I University District 46 acres
- FP Floodplain District 68 acres
- R Single Family Dwelling District 329 acres
- R-1 Single Family Dwelling District 359 acres
- R-2 Two-Family Dwelling District 26 acres
- R-3 Multi-Family Dwelling District 43 acres
- R-P Community Unit Plan District 0 acres
- M-P Mobile Home Park District 4 acres
- I-P Industrial Park District 28 acres
- L-I Light Industrial District 17 acres
- R-E Single Family Dwelling District 90 acres
- R-S1 Single Family Dwelling District 0 acres
- R-S2 Single Family Dwelling District 0 acres

(Refer to Appendix C, Existing Zoning Map)

Residential Districts

There are seven residential zoning classifications in the zoning code crafted to allow several housing types within the community at various lot size and density requirements. These districts cover single-family structures, two-family structures, multi-family units, and mobile homes. Table 6-5 shows the residential districts in the Baldwin City zoning code. There are five residential zoning districts drafted to support various housing types in an urban setting. The districts adhere to a basic format of accommodating single-family, two-family, and multiple-family dwelling structures. There are two zoning codes for detached single-family structures on different lot sizes. The R-2 and R-3 districts permit the mixing of different housing types. For example, the R-2 district allows single-family structures and two-family structures, while the R-3 district allows single-family, two-family, and multi-family structures. This encourages the development of mixed-housing developments without a rigid zoning separation.

Table 6-5
Inventory of Residential Zoning Classifications

R	Single-Family Dwelling District
R-1	Single-Family Dwelling District
R-2	Two-Family Dwelling District
R-3	Multiple-Family Dwelling District
R-P	Community Unit Plan District
M-P	Mobile Home Park
R-E	Single Family Dwelling District

R-E, Single Family Dwelling District

The R-E, Single Family Dwelling District is intended to accommodate rural estate housing at a very low density established at a minimum 3-acre lot size. There are several rural estate housing subdivisions located on the northern edge of Baldwin City. An important community development issue common to rural estate subdivisions is the level of service required for infrastructure. To illustrate, if a rural estate subdivision is allowed to be platted inside the city limits should the subdivision be required to connect to municipal water and/or sanitary wastewater systems. If the municipal utilities service lines do not extend to the land proposed to be subdivided (and presumably the city and subdivider do not want to pay for extending the service lines), the issue arises if the subdivider should be allowed to seek water service from a Rural Water District and permit individual septic tanks or package plant for wastewater treatment.

The Baldwin City subdivision regulations address these issues by requiring the subdivider to present evidence that the water lines and pressure are in compliance with city standards for fire protection. In those instances where public water is supplied and distributed by a rural water district, construction and installation of the water system serving the subdivision shall be the developer's responsibility. The water system shall be in compliance with the standards and specifications of the rural water district to meet domestic needs, as well as the standards and specifications of the rural fire district. The subdivision codes do require connection to the municipal sewer wastewater system, provided the lots are less than 10 acres. If lots are 10 acres or larger, they are allowed to be served by individual septic tanks.

Recommendations

1. Consider revised construction and subdivision design standards for large-lot subdivisions regarding streets, sidewalks, storm drainage. The intent is to acknowledge a rural neighborhood character, as opposed to a traditional urban character.

2. Consider implementing a public walking trail as part of a rural estate subdivision, thus allowing pedestrian connection to the overall urban fabric of Baldwin City.

3. Consider adopting specific policies stating when municipal utilities and infrastructure are required.

4. Consider revisions to accommodate cluster development or conservation subdivision design.

5. Consider strengthening the design standards for protecting riparian stream buffers.

R-1 Single Family District

The R-1 Single Family District generally applies to the older residential neighborhoods of Baldwin City. Critical issues common to this district is to enable reinvestment into the existing housing stock. The zoning code should not create undue hardships to allow homeowners to rebuild or construct additions to their homes. For example, homeowners should be able to add square footage to their homes to accommodate today's lifestyles, such as a home office. Another example is the need for a two-car garage. A growing issue facing

older neighborhoods is the capability to accommodate accessory apartments or dwelling units for elderly parents or relatives.

Of equal importance is the need to ensure that new construction or home additions are sensitive to the historic character, architecture and established bulk and height standards of the surrounding homes. For example, a growing number of cities are adopting design standards for older neighborhoods to ensure new construction is compatible with the historic character.

Of note is the fact that the R-1 district could also be used to accommodate smaller lot sizes for new subdivisions, instead of the R district.

Recommendations

1. Consider a site plan and building permit review to evaluate the impact of new construction on historic neighborhood character.

2. Consider adoption of design guidelines for new construction in established, older or historic neighborhoods. This could be done with an overlay district or as standards specific to the R-1 District.

3. Consider rules for accessory apartments.

4. Consider updating the home occupation regulations.

5. Consider reducing the 25-foot street side, side yard setback to 15 feet or the established setback based on adjacent properties.

6. Consider a maximum lot coverage requirement for both principal and accessory structures.

R Single-Family Dwelling District

The R Single-Family District is predominantly being used for contemporary subdivisions and new home construction in Baldwin City.

Recommendations

1. Consider updating rules for residentially-designed manufactured homes to ensure greater compatibility with site-built homes.

2. Consider the following uses: child day care; adult care facility; and group homes.

3. Consider how to accommodate zero-lot line housing.

4. Consider a maximum lot coverage requirement for both principal and accessory structures.

R-P Community Unit Plan District

The R-P Community Unit Plan District is intended to promote the clustering of housing and some non-residential uses. This code section should be revised to a section setting forth site plan standards and requirements. Some cities create a “P” Planned district designation that the Planning Commission can impose on moderate and high density residential

developments, as well as commercial and industrial developments. The intent is to afford the Zoning Administrator, Planning Commission, and City Commission greater review in site planning related issues and concerns. A contemporary site plan review procedure for Baldwin City would permit increased evaluation on issues such as site ingress/egress, building placement, open space, buffering, and screening, landscaping and signage, and parking lot design and layout.

Granted, Section 16-2,180A of the current Code does set forth provisions for site plans for "any proposed construction of any nonresidential building or multi-family dwelling unit. The Planning Commission may also require the submission of a conceptual site or development plan with the application for rezoning which is filed by any property owner." To make site plan review more formal and with a clear and defined procedural expectation, a thorough rewriting of site plan review is needed.

TND Traditional Neighborhood Development District

City officials may want to consider adopting a TND, Traditional Neighborhood District. The general intent is to encourage new development that provides compact, mixed-use developments using traditional small town development principles. More specifically, this means having developers pay increased attention to creating a pedestrian-friendly environment, neighborhood parks, and how architecture contributes to social interaction and can contribute to encouraging people to walk.

Table 6-6 compares the different residential districts according to bulk, setback, and building height requirements.

Table 6-6
Bulk, Setback, and Height Comparison of Residential Districts

	Minimum Lot Area					Side Yard			
	Per Lot	Per Dwelling Unit	Minimum Lot Width	Minimum Lot Depth	Front Yard	Interior Lot	Corner Lot (street side)	Rear Yard	Building Height
R, Single-Family Dwelling District	8,400 sq.ft.		70 feet		30 feet	6 feet	30 feet	30 feet or 20% of depth	35 feet
R-1, Single-Family Dwelling District	7,200 sq. ft.		60 feet		25 feet	6 feet	25 feet	25 feet or 20% of depth	35 feet
R-2, Two-Family Dwelling District	6,000 sq. ft.	3,500 sq. ft.			25 feet	5 feet	25 feet	25 feet or 20% of depth	35 feet
R-3, Multiple-Family Dwelling District	5,000 sq. ft.	3,000 sq. ft. 2,000 sq. ft.			25 feet	5 ft <35 ft height 8 ft >35ft. height	25 feet	25 feet or 20% of depth	45 feet
R-E, Single Family Dwelling District	3 acres		250 feet		40 feet	15 feet	40 feet	40 feet or 20% of depth	35 feet

Commercial and Industrial Districts

The zoning regulations consist of three commercial districts and two industrial districts.

Table 6-7 Inventory of Commercial & Industrial Zoning Classifications	
C-P	Planned Neighborhood Shopping District
C	General Commercial District
CB	Central Business District
I-P	Industrial Park District
I-1	Light Industrial District

C-P Planned Neighborhood Shopping District

The intent of the C-P district appears reasonable, but the question to be asked is why would a developer seek the C-P district over the C district? In most instances, the C district offers less restriction on setbacks, screening, etc. The City should make it clear that all new commercial development must go through a site plan review process, and there needs to be a set of clearly defined development standards addressing parking, screening, landscaping, outdoor lighting. If the community wants to begin addressing building design, then design standards should be included in the zoning code.

Recommendations

1. Consider offering flexibility in setbacks, based on site design features. The current yard regulations may act as a disincentive to rezone property to C-P, when compared to the C district.

2. Pedestrian and vehicular connectivity to nearby residential neighborhoods needs to be stressed in the site planning process.

3. Consider a set of site design guidelines identifying community expectations for building placement and orientation, architecture to complement the small town feel and look of Baldwin City.

C General Commercial District

The C General Commercial District represents the vast majority of commercially zoned property in Baldwin City. The commercial land along Highway 56 is zoned C General Commercial. There needs to be a basic level of consistency between the C and C-P district for new development. A uniform set of site plan procedures is necessary to ensure that a basic set of community expectations are being met, regardless of the zoning classification.

Recommendations

1. Consider instituting a site plan review process for new commercial development. This will enable city officials to ensure greater compatibility with existing and planned development, as well as promote aesthetically suitable development.

2. Consider preparing design guidelines for the Highway 56 corridor as an overlay district. The intent is to guide redevelopment of existing buildings or sites to achieve acceptable levels of development in matters such as open space, landscaping, signage, etc.

3. Consider development standards for screening for outdoor storage (i.e., tire repair shops, sheet metal shops, service stations, plumbing shops)

4. Consider development standards for storage or temporary display of merchandise.

5. Consider an increased buffer zone and screening when located adjacent to a residential zoned tract. This could include the planting of landscaping trees, in addition to a fence.

6. Consider development standards for outdoor lighting.

7. Consider landscaping standards for site plans.

8. Consider, as an alternative strategy, making certain uses in the C district obtain a special or conditional use permit. This way as new uses are introduced into the community, city officials can pay closer attention as opposed to all uses going through a site plan review process. The idea is to selectively impose a site plan review.

CB Central Business District

The CB district applies to the historic downtown of Baldwin City. There are several key issues important to this district. First, the zoning code should ensure that the historical architecture and civic space of downtown is preserved, and that new development respects the past. Secondly, there needs to be an appropriate mix of business types and uses that contribute to making downtown a preferred place for shopping and living.

Recommendations

1. Consider design guidelines for rehabilitation of existing structures, as well as new construction.

2. Consider making some current uses, such as body shops, automobile repair shops, as conditional uses.

3. Consider special sign regulations for downtown in order to ensure business signage is compatible in design with the historic character and architecture.

4. Evaluate the parking requirements for new development in downtown. Some cities impose less new parking requirements for housing. This can act as an incentive for new housing assuming there is ample parking to meet the current and projected demands.

5. Consider a more detailed staff review of the building permit to ensure that rehabilitation or additions comply with design guidelines.

I-P Industrial Park District Recommendations

1. Consider development standards for outdoor storage.

2. Consider minimum setbacks for parking and structures when a lot is adjacent to Highway 56.

3. Consider making some uses permitted by right as conditional uses, such poultry storage or slaughtering.

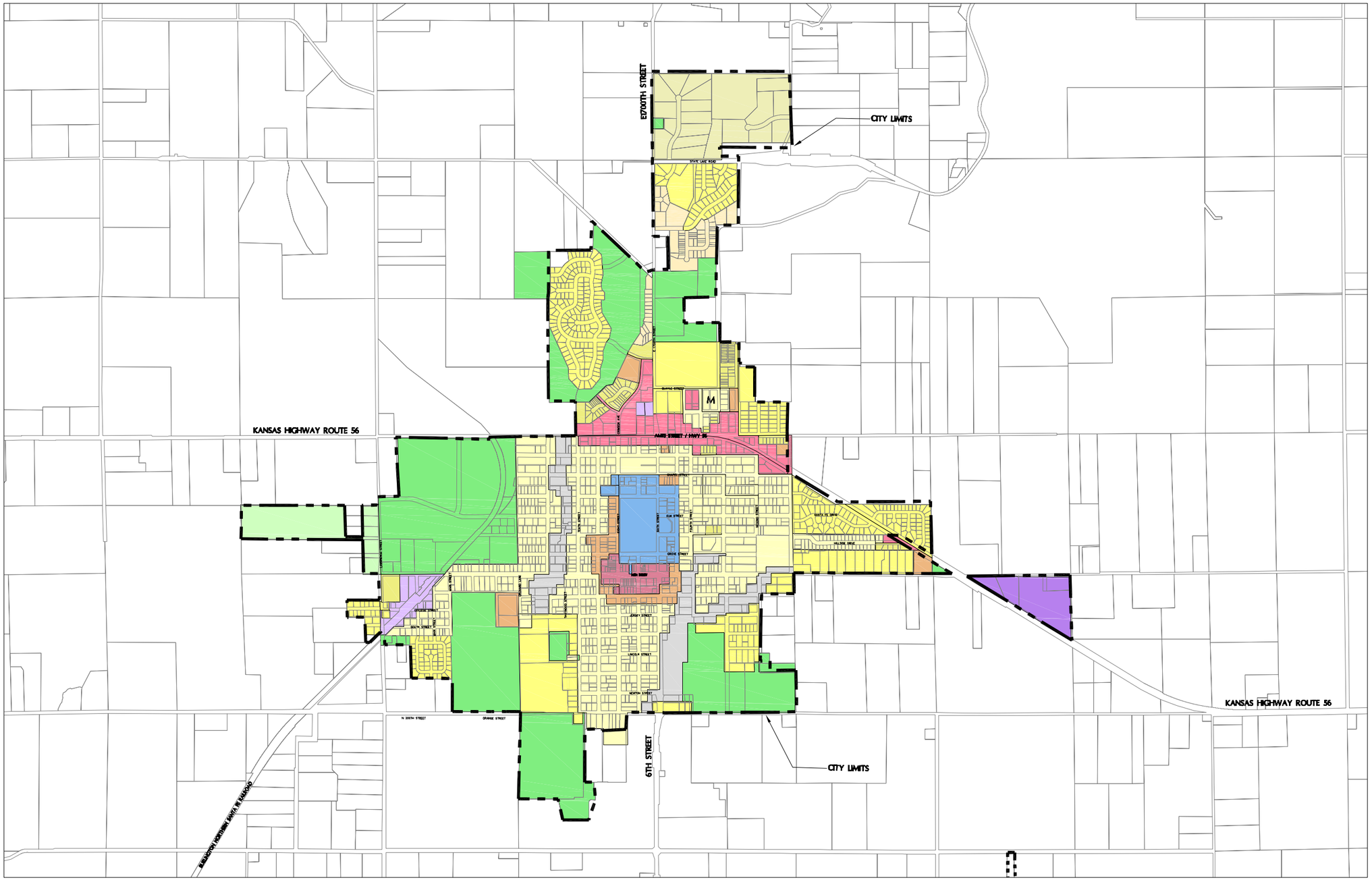
Parking Regulations Recommendations

1. Consider updating parking facilities design standards to cover the following: grading, drainage, surface materials, curbing, striping, landscaping, cross access, and stacking spaces for drive-through facilities.

2. Include parking space and aisle standards.

3. Include physically disabled parking standards.

4. Update the parking requirements for specific uses.



LEGEND

- A AGRICULTURE DISTRICT (COUNTY) 94 ACRES
- A-1 AGRICULTURE DISTRICT 294 ACRES
- C-GENERAL COMMERCIAL DISTRICT 63 ACRES
- CB CENTRAL BUSINESS DISTRICT 16.5 ACRES
- C-P PLANNED NEIGHBORHOOD SHOPPING DISTRICT 0 ACRES)
- I- UNIVERSITY DISTRICCT 46 ACRES
- I-P NDUSTRIAL PARK DISTRICT 28 ACRES
- I-L LIGHT INDUSTRIAL DISTRICT 17 ACRES
- RE-RURAL ESTATE DWELLING DISTRICT 90 ACRES
- R-SINGLE FAMILY DWELLING DISTRICT 301 ACRES
- R-1 SINGLE FAMILY DWELLING DISTRICT 372 ACRES
- R-2 TWO-FAMILY DWELLING DISTRICT 33 ACRES
- R-3 MULTI-FAMILY DWELLING DISTRICT 39 ACRES
- R-P COMMUNITY UNIT PLANNED DISTRICT 33 ACRES
- M M-P MOBILE HOME PARK DISTRICT 4 ACRES
- FP FLOOD PLAIN DISTRICT 68 ACRES)

EXISTING ZONING MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix C

LEGEND

CITY LIMITS

SCALE 1" = 600'

600 0 300 600 1200 Ft.

February, 2008

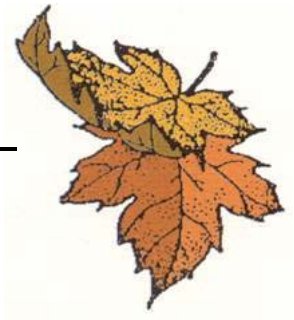
PHILLIPS & ASSOCIATES

Landplan Engineering, P.A.

Civil Engineering
Landscape Architecture
Community Planning
Surveying

SECTION 7:

Transportation



7.1 Introduction

Baldwin City is a community that is experiencing a healthy rate of growth. One of the consequences of growth can be the strain on the existing roadway network. Evaluating the existing and proposed transportation classifications within the community can aid in understanding current traffic patterns and potential impacts that future roadway improvements will have on the City of Baldwin City.

7.2 Functional Classification

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. There are three highway functional classes: arterial, collector and local roads. All streets and highways are grouped into one of these classes, depending on the character of traffic (i.e., local or long distance) and the degree of land access that they allow.

The Street Functional Classification Map for the City serves two main functions. The first is the administration of the federal-aid transportation program. The classification map designates major streets within the urbanized area boundary that are possibly eligible to receive federal funds. The second function is to guide the development of both streets and abutting land. Standards for the design of the street itself and allowable access from the street will be assigned to each type of street classification.

The land use plan map for the City of Baldwin City contained in the 1996 Comprehensive Plan classifies existing and proposed arterials and collector streets.

The City of Baldwin City's current Subdivision Regulations classifies public streets in three categories as arterials, collector and local streets. The regulations require 100-foot right of way widths for arterial streets and 80-foot right of way for collector and local streets. The regulations require minimum of 80-foot right of way for rural developments. As noted, rights-of-way reflect the current subdivision regulations. As the City begins the process of updating their subdivision regulations, proposed rights-of-way should take into consideration Douglas County's street classifications and proposed rights-of-way in order to maintain consistency.

The City of Baldwin City references American Public Works Association (APWA) design roadway standards for Arterials, Collectors and Local streets. See Section 7.5 for Planning Standards.

Continued growth within the Baldwin City community will probably lead to the need of future roadway improvements for the existing roadway network and future development of new roadways to support the growth.

7.3 Street Classification

The following list is a description of the Street Classification system.

State and Federal Highways
Highways are intended to provide the highest degree of mobility, second only to Interstate serving potentially large traffic volumes and long trip lengths linking communities together. U.S. Highway 56 bisects the town of Baldwin City running east and west. U.S. Highway 56 intersects U.S. Highway 59 approximately 4 miles west of Baldwin City. U.S. Highway 59 is a major highway that runs north and south with main destinations to Lawrence and Ottawa. U.S. Highway 56 is a mid major highway with destinations to Edgerton, Gardner and Olathe to the east.

Arterial Streets
Major Arterial: Streets that serve the highest traffic volume corridors and the longest trips. Provides travel between business districts and outlying residential areas and connects communities to major state and interstate highways. No or limited access is allowed from residential streets. Access is usually partially controlled. Spacing of major arterial streets is generally from one mile to five miles. U.S. Highway 56 and 6th Street have been identified as major arterial streets.

Minor Arterial: Streets that interconnect and augment the major arterial streets. No or limited access is allowed from residential lots. Accommodate trips of moderate length at a lower level of travel mobility than major arterial streets. Spacing of minor arterial streets is generally from one-half mile to three miles. High Street and East 200 Road have been identified as minor arterial streets

County Roads: County Roads are a major contribution to the circulation patterns for Baldwin City. County Route 1055 functions as a major arterial that runs north and south and conveys traffic from K-10 Highway (Lawrence/Eudora) and from Interstate 35 (Wellsville/Gardner).

Collector Streets
Major Collector: Streets that collect traffic to and from commercial or industrial areas and distribute it to the arterial streets.

Minor Collector: Streets that collect traffic to and from residential areas and distribute it to the arterial streets. Limited access is allowed from residential lots. Desirable maximum ADT = 3,000 for residential collector streets.

County Roads: County Roads are a major contribution to the circulation patterns for Baldwin City. County road Route 1061/1057, functions as a collector/minor arterials that run north and south, and conveys traffic from K-10 Highway (Lawrence/Eudora).

Local Streets
Residential Local Streets: Streets that only carry traffic having its origin and destination within the immediate neighborhood. Desirable maximum ADT = 1,000 for local streets. (ADT = ten trips per day per typical single-family residence)

Residential Access Streets: Streets that carry traffic between residential lots or residential collector streets. Residential access streets usually carry no through traffic and include short loop streets, cul-de-sacs, and courts. Desirable maximum ADT = 200 for cul-de-sacs and 400

for loop streets. Maximum length of cul-de-sacs = 500 feet and 1,000 feet for loop streets. (ADT = ten trips per day per typical single family residence.

7.4 Future U.S. Route Highway 59/56 Interchange

Construction of future highway improvements at the Highway 59/56 intersection, known as Baldwin Junction is planned for 2009-2011. Improvements consist of: four-lane alignment along U.S. Highway 59, and new interchange at the intersection of U.S. Highway 56 and U.S. Highway 59. These improvements will create higher commuter efficiency between Ottawa, Baldwin City, and Lawrence, Kansas.

7.5 Future Roadway Improvements

As the City of Baldwin City continues to experience growth, and dependent upon the rate of growth, roadway improvements will be necessary within the current and future city limits of Baldwin City. Potential future roadway improvements could include: arterial street and collector street networks and possible alternate truck route (bypass) along the south side of the City.

Arterial streets are generally spaced between one-mile and five miles, depending upon traffic volumes and access. The Future Transportation Map recommends one-mile intervals.

Collector streets generally are spaced between ½ mile and ¾ mile depending upon traffic volume and access.

Increased traffic volumes along U.S. Highway 56 could warrant the need for an alternate truck route (by-pass) and/or reduced speed limit along the highway with Baldwin City's city limits.

Recently completed Improvements to Sixth Street have upgraded the roadway to serve as a major arterial.

7.6 Planning Standards for New Roadways

	Major Arterial	Minor Arterial	Industrial/ Commercial Collector	Residential Collector	Residential Local	Residential Access
Number of Through Traffic Lanes	4-6	3-4	2-4	3	2	2
Minimum Width of Traffic Lanes (Excluding curb & gutter).	12 ft.	12 ft.	12 ft.	11 ft.	12 ft.	10.5 – 12 ft.
No. of Parking Lanes	0-2	0-2	0	0-2	0-2	0-1
Width of Parking Lanes	8 ft.	8 ft.	0	8 ft.	8 ft.	8 ft.
Width of Median	16 ft.	0 – 16 ft.	0	0	0	0
Min. R/W Width	*100 – 150 ft.	*80 ft. **100 ft.	*60 – 80 ft. ** 80 ft.	*60 ft. ** 80 ft.	*50 ft. (2) *45 ft. (1) ** 80 ft.	*40 ft.
Min. Design Speed mph	50	40	35	30	25	20
Minimum Stopping Sight Distance	400 – 475 ft.	275 – 325 ft.	225 – 250 ft.	200 ft.	150 ft.	125 ft.
Min. K Crest Vertical. Curve	110 – 160	60 – 80	40 – 50	30	20	10
Min. K Sag Vertical. Curve	90 – 110 (55 w/lighting)	60 – 70 (35 w/lighting)	50 (27 w/ lighting)	40 (20 w/ lighting)	30 (14 w/ lighting)	20 (9 w/ lighting)
Min. Radii Horizontal Curves	1,091 ft. (2% Super-elevation)	700 ft.	500 ft.	300 ft.	185 ft.	100 ft.
Min. Horizontal Sight Distance	(Per AASHTO Requirements)					
Sidewalks	2	2	2 Comm. 1 Industrial	2	1 – 2	0 – 1
Maximum Grade	6%	7%	6%	8%	10%	12%
Minimum Grade	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Curb Return Radius	35 – 50 ft.	35 ft.	30 ft. Comm. 50 ft. Indust.	25 ft. 35 ft. Desirable	20 ft. 25 ft. Desirable	20 ft. 25 ft. Desirable
Min. Distance from Intersection of R/W to Driveway Curb-cut	250 ft.	200 ft.	150 ft.	100 ft.	25 ft.	25 ft.
Intersection Sight Distance	(See Article 5203.9)					
Maximum Grade at Intersection w/stop	---	---	---	3% (within 75 ft.)	5% (within 50 ft.)	5% (within 25 ft.)
Minimum Spacing of Similar Roadways	See Section 5202)			¼ mile	200 ft.	175 ft.

*AASHTO Requirements
**City of Baldwin City Subdivision Regulations

NOTES:

1. At end of cul-de-sacs, minimum design speed = 10 mph, with corresponding minimum horizontal radius = 25 ft., minimum stopping sight distance = 75 ft.; minimum K Crest = 3, and minimum K Sag = 5 (2 w/lighting).

2. All street design is subject to local governing agency approval.

3. K values for crest and sag vertical curves may be determined in accordance with AASHTO – A Policy on Geometric Design of Highways and Streets. Figure III-41 and III-43. The upper range K value shall be used unless otherwise approved by the local governing agency.

4. Consideration should be given to providing a 15 ft. minimum wide utility easement along each side of the right-of-way for residential access streets and 10 ft. wide utility easements for all other streets.

5. Absolute maximum grade = 10% for residential collectors, 13% for residential local streets, and 15% for residential access streets.

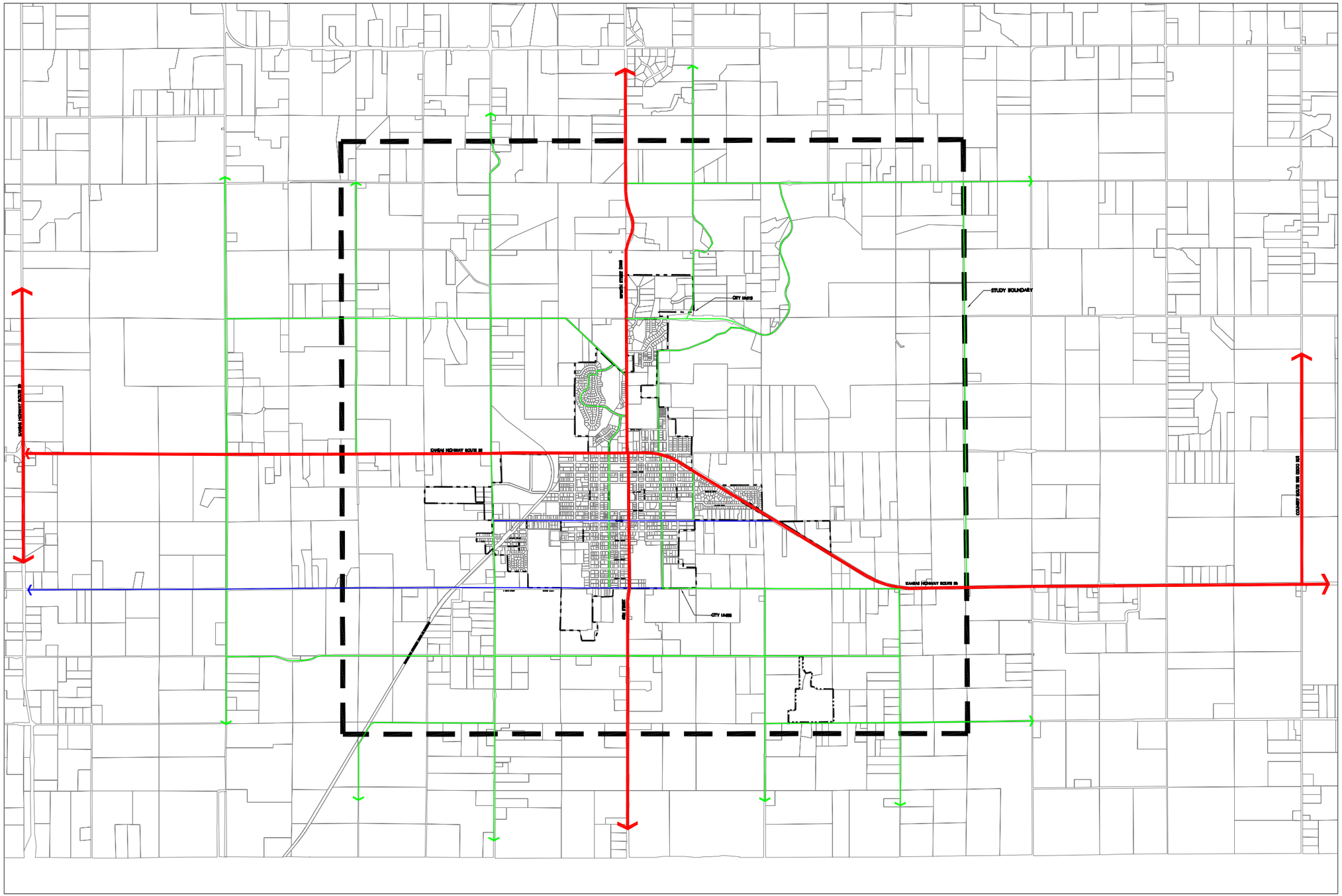
6. Absolute minimum grade = 0.8% and should only be used for relatively short distances.

7. The 10.5 ft. lane width for residential access streets shall only be used in a planned development where a minimum of four off-street parking spaces are provided for each dwelling unit.

8. 30 mph design speed with corresponding horizontal and vertical curve design criteria may be used for industrial commercial collector streets under special conditions when approved by the City Engineer.

9. The minimum radii shown are based on the AASHTO design for low-speed urban streets with no super-elevation except for major arterials. The minimum radii for major arterials are based on 2% super-elevation.

(Refer to Appendix D, Existing Transportation Map and Appendix E, Future Transportation Map)



LEGEND

- STUDY BOUNDARY
- CITY LIMITS
- ARTERIAL STREET (MAJOR)
- ARTERIAL STREET (MINOR)
- COLLECTOR STREET
- LOCAL STREETS

SCALE 1" = 1200'

1200 0 600 1200 2400 FT.

February, 2008

EXISTING TRANSPORTATION MAP

BALDWIN CITY, KANSAS

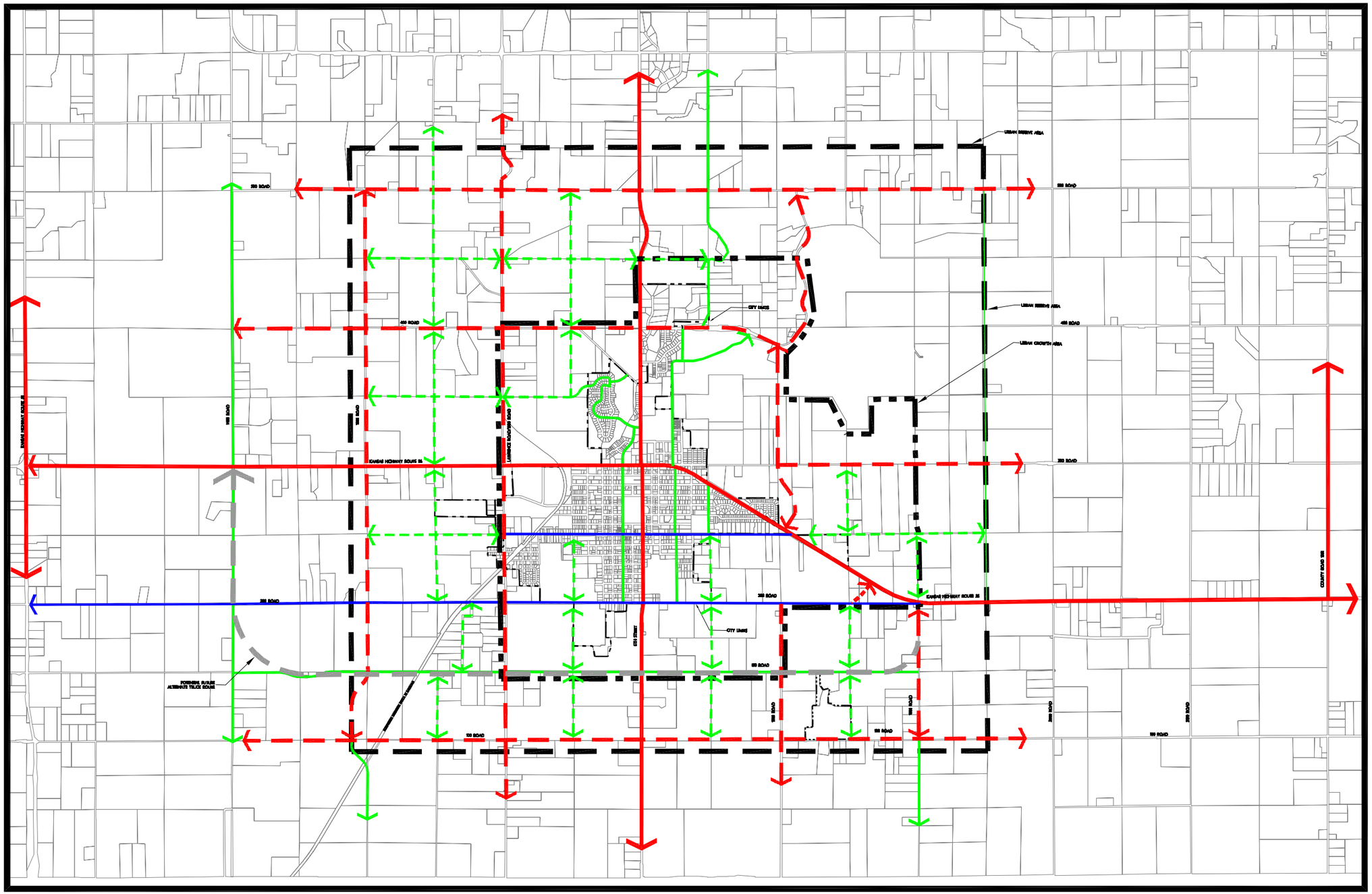
COMPREHENSIVE PLAN

Appendix D

PHILLIPS & ASSOCIATES

Landplan Engineering, P.A.

Civil Engineering
Landscape Architecture
Community Planning
Surveying



FUTURE TRANSPORTATION MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix E

LEGEND

- URBAN RESERVE AREA
- CITY LIMITS
- URBAN GROWTH AREA
- ARTERIAL STREET (MAJOR)
- ARTERIAL STREET (MINOR)
- FUTURE ARTERIAL STREET
- COLLECTOR STREET
- FUTURE COLLECTOR STREET
- POTENTIAL FUTURE ALTERNATE TRUCK ROUTE
- LOCAL STREETS

SCALE 1" = 1200'

1200 0 600 1200 2400 FT.

February, 2008

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SECTION 8

Infrastructure

8.1 Introduction

This section includes an evaluation of existing sanitary sewer collection and water line distribution systems for the community of Baldwin City. As growth continues within Baldwin City, it is important to evaluate current and future improvements to existing infrastructure because this will determine if the City has the capacity in place for currently planned and anticipated future growth.

8.2 Existing Sanitary Sewers

Currently the existing sanitary sewer collection system covers approximately 80-percent of the city limits. Existing pipe materials are clay tile, ductile iron and PVC. At this time it has been determined through a Draft Relief Sewer Study (BG Consultants, Inc., 2006) that there is a need for eliminating the High Street and Firetree Lift Stations. The plan is to create a relief sewer that would run parallel to the existing interceptor on 10th Street. This would address the current surcharging and thus increase capacity for the City of Baldwin City as it continues to grow.

The limits of the current sanitary sewer collection system are:

- North end of the City: Existing sanitary sewer terminates just south of State Lake Road.
- South end of the City: Existing sanitary sewer terminates at the existing wastewater treatment plant.
- East end of the City: Existing sanitary sewer terminates approximately 500 feet east of the intersection of Hillside Drive and U.S. Highway 56.
- West end of the City: Existing sanitary sewer terminates approximately 500 feet west of the intersection of Lawrence Road and College Street.

Anticipated extensions of the existing sanitary sewer collection system to the north and northeast are needed. The relief sewer on the west should open up the area to the north and northwest of town. Extensions are needed to support anticipated future growth. Some planning has been conducted with the City of Baldwin City to determine where sewer system expansion is needed. Refer to draft of Relief Sewer Study, by BG Consultants, May 31, 2006.

At the time of this report, the City is currently working on a Sanitary Sewer Capacity Study for the East side of Baldwin City. The study is being conducted by BG Consultants, Inc. and currently, there is activity for development in the northeast that requires increased sewer capacity.

8.3 Existing Treatment System

A Facilities Plan for Baldwin City Municipal Wastewater Treatment Facilities was conducted in October of 2000 by BG Consultants, Inc. The study looked at capacity of the existing facilities and provided recommendations for expanding the facilities to increase capacity. The study recommended expansion of the facilities to provide for .90 MGD. The study concluded that expansion would allow the City of Baldwin City to grow to an approximate population of 8,000. The existing wastewater treatment plant which is located on the south side of the City was upgraded as recommended and completed in May, 2003. Currently the wastewater treatment plant operates at approximately 350,000 gallons per day, utilizing more than 40-percent of available capacity. The site was built to allow for the addition of a third clarifier, if necessary in the future.

8.4 Future Improvements

The goal of the Relief Study, by BG Consultants, Inc., is to provide relief sewer along Eleventh Street that would run parallel to the existing sewer main on Tenth Street (interceptor) and will allow the Eleventh & High Street, and Firetree lift stations to be eliminated, and provide for future sewer needs of the watershed study area.

Watershed No. 1 – Total area is approximately 1,542 acres and is currently sixty percent developed as residential. Projected improvements would allow the majority of the watershed that is developable to develop as residential. Approximate boundary of Watershed No. 1 is West of city limits, North of U.S. Highway 56 to 500 Road, and South of 150 Road.

Watershed No. 2 – Total area is approximately 335 acres and is currently ten percent developed as residential. Future sanitary sewer will directly flow to the Wastewater Treatment plant. Approximate boundary of Watershed No. 2 is west of Watershed No. 1 and runs south to the existing wastewater treatment plant.

Watershed No. 3 – Total area is approximately 425 acres and is currently undeveloped. Projected improvements would allow the majority of the watershed that is developable to develop as residential. Approximate boundary of Watershed No. 3 is west of Watershed No. 1 and No. 2 and south of U.S. Highway 56.

Phase one and two construction of new 21” and 24” interceptor lines will run parallel to the existing sewer main (east-west) along Tenth Street and will provide capacity for the developable areas within Watersheds No. 1 and No. 3 consisting of approximately 1,967 acres.

Relief Sewer Study calculated population growth for watershed areas is based on ten people per acre. Refer to draft of Relief Sewer Study, by BG Consultants, May 31, 2006.

8.5 Existing Water Supply

The limits to the existing water supply for the City of Baldwin City are:

- North end of the City: Existing water lines terminate along the south side of State Lake Road.

- South end of the City: Existing water lines terminate at the Wastewater Treatment plant. No water line exists south of the treatment plant.

- East end of the City: Existing water lines terminate at the intersection of High Street and Highway 56.

- West end of the City: Existing water lines terminate at the Lawrence Street tower.

At this time, there are no known future improvements to the existing water distribution system within Baldwin City. Although, there are plans for improving the pipelines on the northern end, and moving the pipelines out of the Baker Wetlands approximately one-mile east and 1.5 miles south of existing pipeline.

The City of Baldwin City currently obtains water from the following;

1. Purchases water from Kansas Water Office, 316 million gallons per year. Agreement is good through December 2017.
2. Pays City of Lawrence, Kansas to treat water. Agreement good through 2017.
3. The City sells approximately half of water allocation to City of Edgerton, Kansas and Wellington, Kansas. Agreement for Edgerton is good through 2017 and agreement with Wellsville, Kansas is good through March, 2018.

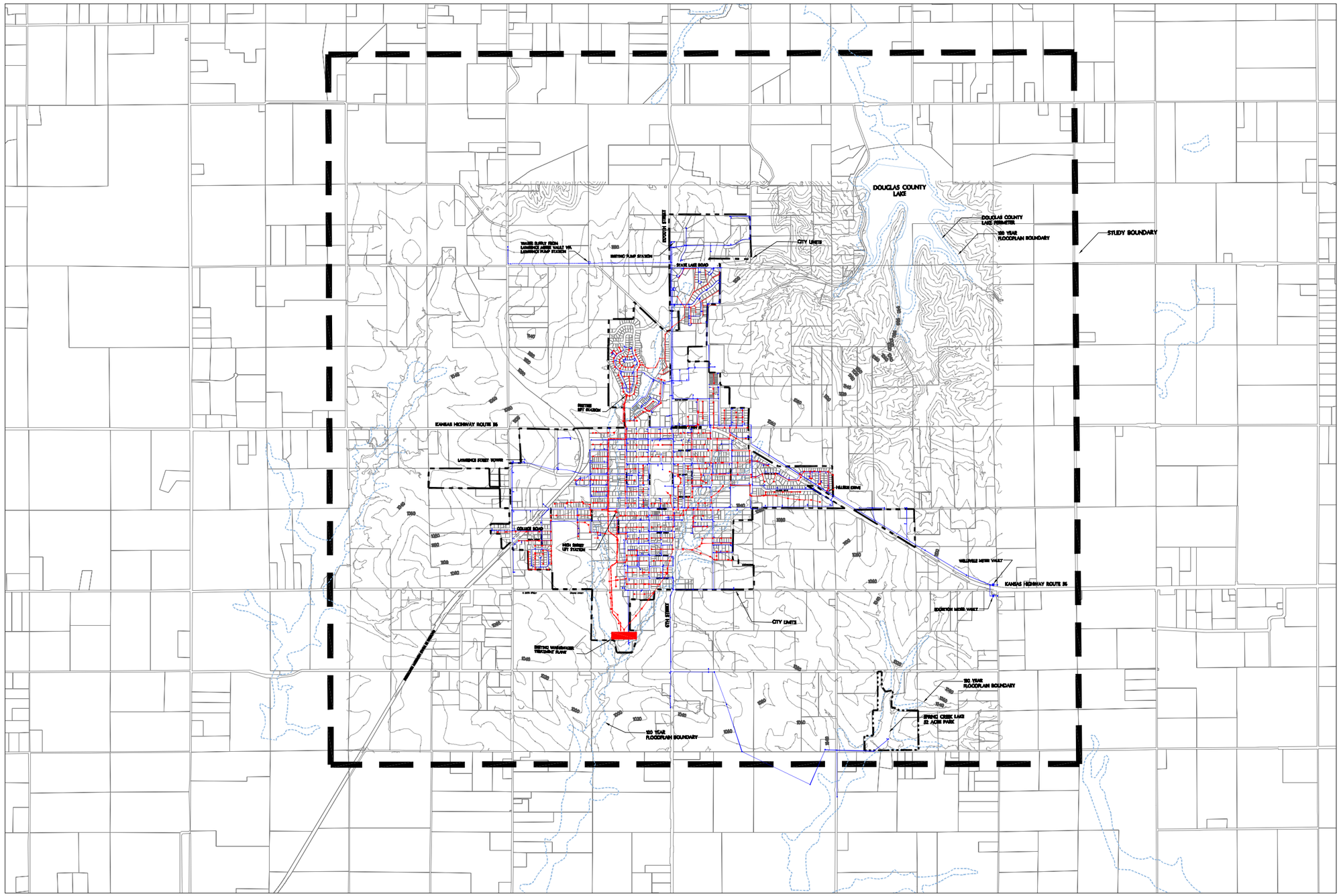
8.6 Rural Water Districts

Two Districts provide water supply to the Baldwin City area. Rural Water District No. 4 serves rural residential properties north of Baldwin City and Franklin No.5 serves rural residential properties south of Baldwin City. The City has an agreement with Douglas County Rural Water District No. 4 for wholesale supply, and maintain a connection to Franklin county Rural Water District No. 5 for emergencies only.

8.7 Water Storage/Distribution

Upgrades resulting in two (2) 750,000 gallon tanks were completed in 2004. The addition of the two tanks will serve the City of Baldwin City needs through at least 2017.

(Refer to Appendix F, Existing Infrastructure Map)



LEGEND

- STUDY BOUNDARY
- CITY LIMITS
- PARCELS
- CONTOURS (20' INTERVAL)
- EXISTING SANITARY SEWER
- EXISTING WATERLINE
- FUTURE WATERLINE
- FUTURE SANITARY SEWER MAIN
- 100 YEAR FLOODPLAIN

SCALE 1" = 1000'

1000 0 500 1000 2000 Ft.

February, 2008

EXISTING INFRASTRUCTURE MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix F

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SECTION 9:

Park, Recreation, Open Space and Schools

9.1 Introduction

This section includes a brief evaluation of existing parks, recreation and open space facilities within the community of Baldwin City. As growth continues within Baldwin City, it is important to evaluate current and future parks and recreation needs that the community of Baldwin City will require.

Table 9.1 presents an inventory of existing parkland in Baldwin City.

Table 9.1
Baldwin City Public Parks and Walking Trails, 2006

Name of Park	Acreage	Park Facilities	Parking
Spring Creek Lake Park	52 acres	Lake, fishing docks, picnic areas, and shelters.	Yes (unpaved)
Allen Park	1.5 acres	Play areas, shelters, ballfield, basketball court and benches.	Yes
West Park	3 acres	Two play areas, one shelter, picnic areas, and one basketball court.	Yes
Grove Park	4.7acres	Municipal Pool, play area, primitive trail system	Yes
Kapella Park	63.6	Golf Course (9-Hole)	Yes

Baldwin City shows within their city limits approximately 242 acres of parkland: 61 acres of existing parks consist of (Spring Creek Lake accounts for 52), 63.6 acres of Golf Course and 117.3 acres of potential parkland, not yet developed. Baldwin City's existing parks account for approximately 50 percent of total parkland mapped within the City limits.

The City does not own or maintain any athletic fields (baseball, softball, soccer or football). The City utilizes the elementary and high school facilities as well as Baker University's sport facilities.

9.2 Park System Classification and Standards

Table 9.2 presents the National Recreation and Park Association (NRPA) classification for local recreation open space. These standards are intended to guide the city in creating a citywide system of parks. As with any national standards, local officials need to be flexible when designing a park system. Privately owned park and recreation facilities have not been included in the classification. However, commercial recreation operations can provide important facilities to a community. Their contribution to meeting local recreation and leisure needs should be accounted for when park facilities and park size are being determined.

Table 9.2
National Recreation & Park Association Classification System

	Use	Service Area	Desirable Size
Recreation Nodes	Similar to a neighborhood park with both active and passive facilities designed for a specific purpose. Facilities are based upon public input, facilities can include playgrounds, scenic areas, and lunchtime seating areas.	Less than ¼-mile radius in a residential neighborhood, accessible by way of interconnecting trails, sidewalks, and low volume residential streets.	Up to 5 acres
Neighborhood Park	Basic unit of the park system in meeting the active and/or passive needs of the neighborhood. Create a sense of place for a wide variety of ages living in the service radius. Neighborhood parks can be for active or passive recreation or a combination of both. Facilities can include ball fields and game courts picnic and sitting areas, play equipment, trails and passive areas with natural features.	¼ to ½-mile service radius uninterrupted by non-residential roads and other physical barriers accessible from throughout its service radius by way of interconnecting trails, sidewalks, or low volume residential streets.	5 to 10 acres minimum
Community Park	Meets the broader recreational needs of several neighborhoods. Provides for both active recreation and preservation of unique landscapes. Allows for group activities neither desirable nor feasible in neighborhood parks.	½ to 3 mile service radius, served by arterial and collector roads and accessible from throughout its service area by way of interconnecting trails.	30 to 50 acres
School/ Community Park	Combines the resources of two public entities to allow for expanded recreational, educational, and social opportunities in a cost-effective manner. Development should be based upon the criteria of other park classifications. If athletic fields are developed, they should be oriented towards youth than adults.	Based on the distribution of the schools. The location can guide how it fits into the park system classification. Service area depends upon the type of use of the site.	Depends on intended use.
Athletic Complex	Consolidates heavily programmed athletic fields and associated facilities in fewer sites to allow for economy of scale, improved management, greater control over	Strategically located community-wide facilities within reasonable driving times; near non-residential uses if possible.	Depends on intended use.

	impacts to neighborhood and community parks such as over-use, traffic congestion, parking, and domination of facilities by those outside the neighborhood.		
Special Purpose Facility	Parks and recreation facilities that are oriented toward a single purpose use such as historic landscapes, social sites, cultural features, indoor recreational facilities, golf course or any other single purpose facility.	Strategically located facilities versus serving well-defined neighborhoods or areas of the community.	Facility requirements determine the size.
Natural Resource Area/Preserve	Parks and recreation facilities that are oriented toward the preservation of significant natural features, open space, special landscapes, buffering and visual aesthetics.	Areas that, when preserved, can enhance the livability and character of the community by preserving as much of its natural features as possible	Dependent upon quality and extent of the resources and opportunity for preservation
Greenways	Linear trail corridors that tie park system components together to form a continuous park environment allowing for safe uninterrupted pedestrian movement between the parks and around the community and provide people with a desired outdoor recreation opportunity. Greenways emphasize use to a greater extent than natural resource areas.	Most desirable location is in conjunction with trail system planning.	25' minimum in a sub-division; 50' standard; and 200'+ desirable

Source :Park, Recreation, Greenway and Open Space Guidelines, National Recreation and Park Association, 1996

9.3 Park Classification Applied to Baldwin City

Comparing the existing parks in Baldwin City with the National Recreation Park Association park classification suggests the following findings:

- In terms of total parkland acreage, Baldwin City does meet national standards for providing a "Community Park". The location of the Spring Creek Lake Park, however makes access to and from the community very difficult and is under-utilized by the community..
- The distribution of "neighborhood parks" in residential neighborhoods is insufficient.
- A continuous trail network system throughout the City is lacking.
- Baldwin City provides School/Community Park by utilizing school facilities. This may work in the short-term, but as Baldwin City continues to grow, a centralized independent Community Park would benefit the community.

9.4 Park & Recreation Opportunities

- The old BNSF railroad right-of-way may create an opportunity north of U.S. Highway 56 to extend the walking trail system and contribute to the increase of greenways.

- The floodplain land in Baldwin City presents an opportunity to work with landowners and developers to use floodplain property for recreation, greenway, wildlife preserve, open space, or trails.

- The topography and natural streambeds in the planning area provide an opportunity to create "greenways" within the community and incorporate the pedestrian trail system.

9.5 Projecting Future Parkland Needs

The projections in Table 9.3 are based on average standards. Both the type of parks or recreation areas listed in Table 9.3 are typically required for a growing community such as Baldwin City.

The "Linear 1" model taken from the population growth and characteristics section (table 3.5) of this plan were used to calculate the estimated parks and acreage needs. The high projection was selected because the model provides the best estimate for forecasting and a large number of persons live near Baldwin City in the unincorporated portion of Douglas County, and Palmyra Township. These families use Baldwin City's services, including local parks and recreational facilities.

From 2006 until 2030 the projections suggest that Baldwin City will need to utilize approximately between 65-76 acres of 117 acres identified as potential parkland that is undeveloped and under-utilized, for small neighborhood parks, greenways and a community park that is centrally located.

The concept of recreation and leisure has changed dramatically over the past 30 years – and is still changing. A number of reputable studies indicate that the public places a high value on recreation and open space. So, it is reasonable to assume that the expected level of service will change in Baldwin City as the population increases.

Table 9.3
Estimated Parks and Acreage Needed For Recreation 2006 - 2026

Year	Type of Facility (ies)	Number Needed	Acres Needed	Pop. Served
2006	Small Neighborhood Park	1	5	5,815
2010	Small Neighborhood Park	1	3	6,351
2020	Small Neighborhood and Linear Park	1	6	7,023
2030	Community Park Linear Trail	1	62	7,800
Totals		4	76	

Source: National Recreation and Park Association Guidelines; Landplan Engineering, P.A. 2007

A Comprehensive Park Master Plan is recommended after completion of the comprehensive plan update to provide further detailed inventory, evaluation, citizen survey, community

input, funding alternatives, recommendations, and implementation for Baldwin City's parks and recreation system.

9.6 Schools

In 2007, the Baldwin School District completed Demographic, Facility Planning, and, Enrollment Reports, which were prepared by RSP & Associates. The following is a brief summary of the findings from the three reports.

Demographics Report

The Demographics Report, 2007 (by RSP & Associates) indicates that the current population estimate for the School District is over 7,500 people. District enrollment history concludes:

- Since 1992-1993, the average annual growth has been 17 students.
- Growth has ranged from a decrease of 29 students in 2002-2003 to an increase of 59 students in 1994-1995.
- Annual enrollment is expected to be stable to a slight decrease each year over the next decade.
  (Refer to Baldwin School District Facility Demographic Report, 2007, fast facts)

Housing trends and characteristics play a role in school enrollment. Currently, the School District has a diverse selection of housing types (farm house, single-family, and duplexes). According to the report, there are over 2,800 dwelling units within the Baldwin School District community and currently 30 units are under construction and will be completed in 2007. Residential building activity is expected to remain flat over the next five years. (Refer to Baldwin School District Demographic Report, 2007, page 5)

Factors that directly impact residential construction activity within the Baldwin School District community are:

- Development costs are less expensive than in other areas of Douglas County.
- Infrastructure enhancements/improvements within Baldwin City limits.
- Access to I-35 and the City of Lawrence.
- The quality of life and experience, when locating to this area of the County.
  (Refer to Baldwin School District Demographic Report, 2007, page 5)

Facility Planning Report

According to the Facility Planning Report, 2007 (by RSP & Associates): "The purpose of the 2007 Baldwin School District Facility Planning Report is to provide the District with long-term enrollment information that will assist with planning future facilities and/or the expansion of facilities and potential grade configurations." "Currently, the District is approximately 15% built-out with many future residential projects at various stages in the development process, so the potential for future enrollment growth is immense, but will not happen overnight." "Infrastructure availability and market trends will dictate the speed at which new construction will be built." (Refer to Baldwin School District Facility Planning Report, 2007, page 1 of 16)

Recommendations to be considered are:

- Create a School Site Needs Analysis Guideline Policy.
- Encourage continued involvement with development activity in the community.
- Continue annual monitoring of residential growth and its impact on future enrollment.

The Facilities Planning Report indicates that "building activity is expected to remain slow for 2007 and 2008". "The regional Intermodal Railroad in Gardner, Kansas may create opportunities for non-residential uses to be built". "In order for growth to occur, infrastructure enhancements that are currently being planned must be completed". (Refer to Baldwin School District Facility Planning Report, 2007, page 3 of 16)

The report (2007, by RSP & Associates) conducted a Build-Out Analysis Modal. The results of the analysis shows:

- Ultimate Residential Development Potential – "Over the next twenty years there likely will be between 2.8 and 3.7 square miles of land (1,400 and 2,400 acres) potentially available for residential development." This could provide between 4,340 and 12,240 new housing units. (Refer to Baldwin School District Facility Planning Report, 2007, page 12 of 16)
- The School Facility Need Analysis projects that over the next twenty years there could be the need for between one to two new elementary facilities in addition to the existing four, between one to two new middle schools in addition to the existing one, and possibly a second high school. (Refer to Baldwin School District Facility Planning Report, 2007, page 13 of 16)

- The report states: "while there is considerable land available for development, it is unlikely all the developable land within the District would be developed within the next 25 years." (Refer to Baldwin School District Facility Planning Report, 2007, page 13 of 16)

Enrollment Report

The summary of the report states: "Enrollment will stabilize with statistical likelihood for enrollment decreases." The majority of new student enrollment pressure will come from the newer areas of town, which are generally concentrated in the NW area of Baldwin along North 6th Street and the east area of Baldwin around 56 Hwy."

"It is recommended that if any facilities are consolidated that future sites be determined and purchased ahead of new development being constructed."
(Refer to Baldwin School District Enrollment Report, 2006/07, page 20)

SECTION 10:

Future Land Use Plan

10.1 Introduction

A future land use plan is a general guide to assist local leaders, business interests, and citizens to make informed decisions on growth, efficient use of land, and changes to the already developed areas of the community.
The future land use plan must adapt to community needs over time and undergo yearly review. The land use plan is the "heart" of the community's comprehensive plan and must form the basis for all development and redevelopment decisions. Therefore, it must represent the "best practices" available to decision-makers and be supported by a set of policies to achieve a vision of what the community is becoming over the next two decades.

Finally, a land use plan reveals a commitment to the future. The plan becomes a road map to a future destination. The land use plan is not a blueprint of the future; it is a journey based on the idea of democratic choice and an obligation to the values of the community's welfare. A community achieves its goals through leadership, vision and determination. The future land use plan is one source that illustrates a community's vision.

The future land use plan illustrates how different areas of the community should function and relate to one another. In general, the future land use map portrays a pattern of various commercial retail activity centers, industrial/business park, parks and the inter-relationships with surrounding neighborhoods.

This chapter also addresses a framework for town growth and management over the next two decades. Here the plan identifies the logical areas where urban growth should occur during the planning period, and also addresses the land use pattern beyond the 20-year planning period by including an urban reserve area.

10.2 Urban Growth Area

The urban growth area is an area where municipal water and sewer service can readily be extended. This is the area where urban infrastructure is extended first and the logical development of Baldwin City is encouraged. The intent is to direct urban development to areas where basic services, such as sewers, water, and police and fire protection can be efficiently and economically provided. The extent of land area placed within the urban growth area is based on a sufficient quantity of land to accommodate projected population growth. The urban growth area is expected to sometime in the future be annexed by Baldwin City.

Table 10-1 ESTIMATED TOTAL LAND DEMAND FOR 2030				
Year	Total Population	Person Increase	Number of Households	Estimated Future Total Land (acres) Needs
1990	2,961			
2000	3,664	703	227	
2010	3,955	291	94	106 - 115
2020	4,788	833	269	304 - 328
2030	5,125	337	109	123 - 133
Total:		2,164	699	533 - 576

Table 10-1 shows the total land area for residential, commercial, and industrial uses. A range between 533 – 576 acres is the estimated amount of land needed to accommodate the projected population growth of Baldwin City. The Linear[2] population forecast was selected along with an anticipated household size of 3.10 persons. A conversion using 1.13 – 1.22 acres per household provided the total estimated acreage.

The Urban Growth Area Boundary Map shows the land identified as the logical growth area for Baldwin City. The map clearly reveals that unincorporated land situated contiguous to the city limits is considered the preferred locations for urban growth and development. The land area of the urban growth area is approximately 4,285 acres. This includes the total amount of land located outside the city limits of Baldwin City and the defined boundary of the urban growth area. The amount of land designated as agriculture within the unincorporated area of the urban growth area is approximately 292 acres. Based on the estimated future total urban land needs in Table 10-1, the urban growth area contains 3,993 acres forecasted for urban growth. The reason for the difference is that the timing and location of development relies on a willing seller of land. There may be instances where a landowner decides to not sell, thus forcing a developer to search for another tract of land. An excess inventory of land within the urban growth area ensures market competition for land prices and accounts for landowners not interested in selling their property.

10.3 Urban Reserve Area

The urban reserve is an area outside of the urban growth area and is not envisioned to accommodate urban development during the 20-year planning period of this planning document. The land classified as urban reserve is viewed as the long-range urban growth area and considered the logical planning area of Baldwin City. Urban growth is expected to occur and fill in the urban growth area before municipal utilities are extended into the urban reserve area. One of the objectives of defining an urban reserve area is to inform landowners and Douglas County about the long-term vision and intent of the City of Baldwin City. The intent is to not prohibit rural large-lot housing in the urban reserve area, but to ensure land use decisions by Douglas County consider the long-term implications, because of the conflicts created, if and when urban services and development are extended.

The urban reserve area is a visible symbol of the city's commitment to conserve and maintain rural use and character surrounding Baldwin City. Difficult planning issues are associated with rural areas surrounding cities. One of the most difficult is to balance the desire to protect agricultural lands against the desire or economic necessity of rural landowners to convert land to suburban/non-farm uses. This situation is compounded by the demand of urban households seeking a small tract of land in the country to build their suburban home. The challenge in land planning has always been striking a balance between private property rights and public policy. The urban reserve area is intended to limit the encroachment of scattered non-farm housing or premature urban activities.

10.4 Land Use Categories

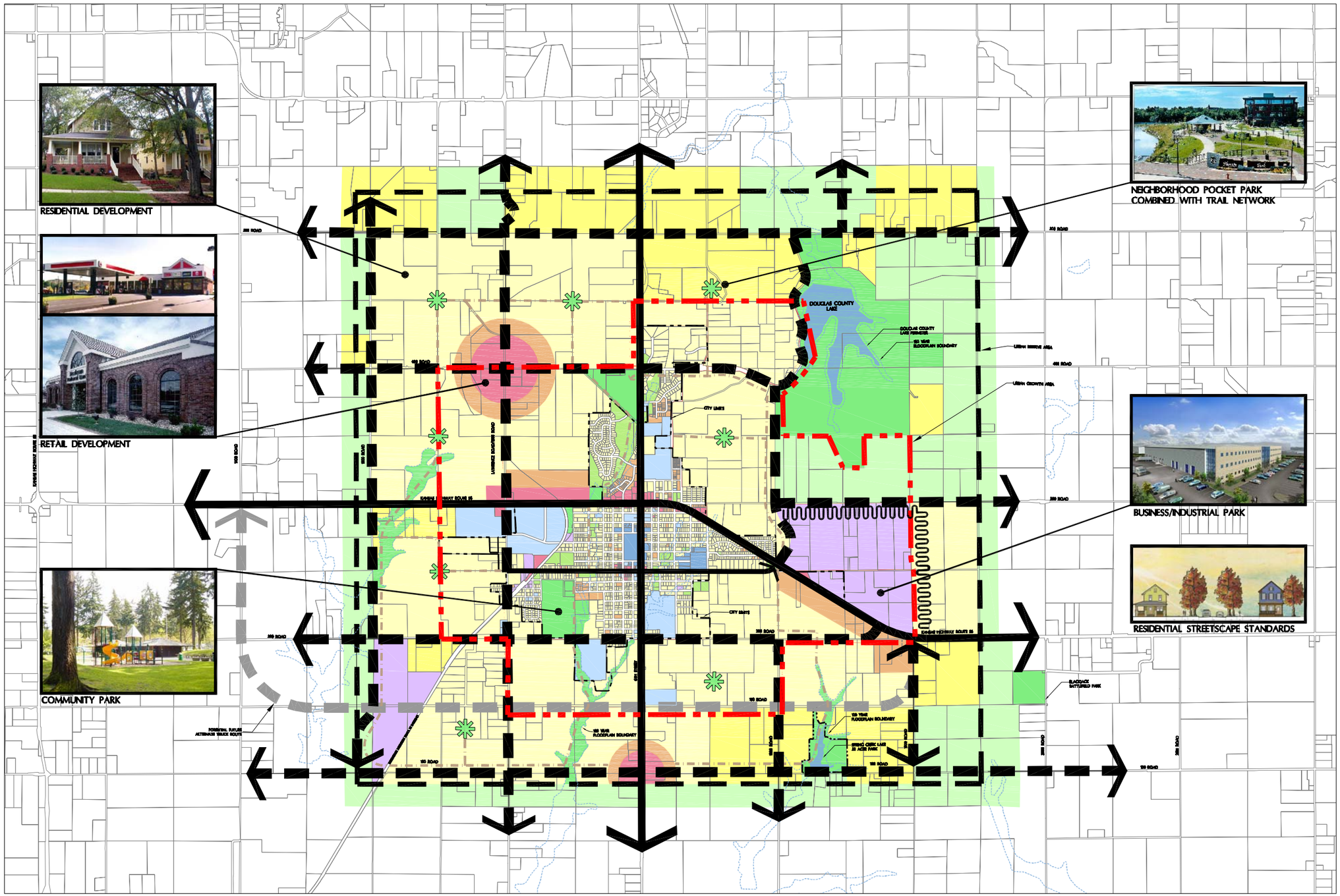
Table 10-2
Summary of Future Land Use Categories

Land Use Category	Range of Density/Acreage	Typical Land Uses
Rural Estate	Minimum acreage can be 3 acres, if minimum road frontage and County sanitation requirements are met. County provides two options for cities with defined Urban Growth Areas. Option A – Cluster Developments – 40 acre maximum, and Option B– Large Parcel Property Division – 40 acre minimum.	Development can include a sell-off for a single lot or a large-lot platted residential subdivision. Usually located in the urban fringe and generally not served by municipal utilities, but need to comply with the County regulations for access management standards, minimum/maximum lot sizes, sanitation code requirements, access to rural water districts and roadway standards.
Single-Family Residential	Density begins with dwelling units on less than one acre up to a density of six homes per net acre.	A variety of low-density housing can develop in this category. ■ Conventional subdivision layouts accommodating detached single-family homes. ■ Planned developments in the neo-traditional approach offering a variety of housing types combined with commercial and community uses in a compact, walkable plan. ■ Clustering of homes to permit the preservation of land in a natural state and minimize visual and environmental impact ■ Single-family attached homes often called a duplex or triplex. To achieve a single-family detached image, careful architectural design and proper massing is required.
Multi-Family Residential	A density range of between 7-19 dwelling units per net acre.	A variety of moderate to high density housing can develop in this category. ■ Small lot single family, duplexes, or four-plexes. ■ Townhouses, garden apartments,

		■ Mixed housing types and densities.
Commercial	Typically requires a site of approximately 5-8 acres, but may vary, ranging from as small as 1-3 acres to as large as 10-15 acres. The radius of the service area can range from ¼ to one mile.	Primary uses consist of retail stores that provide personal services, such as dry cleaning, video rental, florist, banks, insurance, and personal care. Grocery stores, drug stores, convenience stores (with gasoline sales), restaurants, and offices can also locate in commercial.
Industrial	The goal is to encourage industrial parks that are planned, developed, and operated as an integrated facility for a number of individual uses. Acreage varies depending on market intent and design criteria.	A variety of light and heavy manufacturing, warehousing and distribution operations can occur in this category.
Institutional	Not Applicable	Non-profit, religious, or public use, such as a church, library, public or private school, hospital, or government owned or operated building, structure, or land used for public purpose.
Parkland	Depending upon park criteria, parks typically need 10 acres, but may vary, ranging from as small as 1-3 acres to as large as 30-50 acres.	■ Recreation Node ■ Neighborhood Park ■ Community Park
Open Space	Generally includes property located in the floodplain or has been preserved through a purchase, donation, or conservation easement.	The purpose is to provide space for neighborhood or scenic parks, trails, or habitat preserves.

Table 10-3 **Future Land Use Distribution**		
Land Use Category	**Acreage within Urban Growth Area**	**Percent**
Agriculture	292	5.9%
Commercial	180	3.6%
Industrial	472	9.6%
Institutional	326	6.6%
Baker University	45	0.9%
Rural Estates	19	0.4%
Single Family	2,936	59.7%
Multi Family	284	5.8%
Parkland	369	7.5%
Open Space	N/A	N/A
Total	4,923	100%

(Refer to Appendix G, Future Land Use Map)



LEGEND (ACREAGES WITHIN URBAN GROWTH AREA)

AGRICULTURAL	EXIST: 2,437 ACRES PROPOSED: 292 ACRES	RURAL ESTATES	EXIST: 1,380 ACRES PROPOSED: 19 ACRES
COMMERCIAL	EXIST: 51 ACRES PROPOSED: 180 ACRES	SINGLE FAMILY	EXIST: 430 ACRES PROPOSED: 2,936 ACRES
INDUSTRIAL	EXIST: 37 ACRES PROPOSED: 472 ACRES	MULTI FAMILY	EXIST: 53 ACRES PROPOSED: 284 ACRES
INSTITUTIONAL	EXIST: 187 ACRES PROPOSED: 323 ACRES	PARKLAND	EXIST: 247 ACRES PROPOSED: 369 ACRES
BAKER UNIVERSITY	EXIST: 45 ACRES PROPOSED: 45 ACRES	VACANT	EXIST: 46 ACRES PROPOSED: 0 ACRES

FUTURE LAND USE MAP

BALDWIN CITY, KANSAS

COMPREHENSIVE PLAN

Appendix G

LEGEND

- URBAN RESERVE AREA
- URBAN GROWTH AREA
- CITY LIMITS
- PARCELS
- 100 YEAR FLOODPLAIN, FEMA 2001
- PROPOSED ARTERIAL
- EXISTING ARTERIAL
- PROPOSED PEDESTRIAN/BICYCLE NETWORK
- BUFFER
- NEIGHBORHOOD POCKET PARK

SCALE 1" = 1200'

1200 0 600 1200 2400 Ft.

February, 2008

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SECTION 11

Community Development Guidance Principles

11.1 Introduction

What follows is a set of "guiding principles" to help Baldwin City continue to develop, but also express how the community is envisioned to grow. These guiding principles are also intended to establish a framework for the future land use plan and policies. Each of the guiding principles describes several planning concepts intended to aid community decision-makers in ensuring that future change and development contribute to the livability and sustainability of Baldwin City.

Community Development Guidance Principles:

- Balancing Town Growth and Preserving the Past
- Creating Livability by Building Traditional Neighborhoods
- Connecting People: Land Use & Transportation
- Strengthening Downtown as the Core
- Promoting Community Design
- Focus on Gateways and Highway 56 Corridor
- Recognize Environmental Stewardship
- Provide Recreational Facilities and Open Space
- Accommodate Annexations for Town Growth

11.2 Balancing Town Growth and Preserving the Past

The City of Baldwin City understands that growth and change will continue to occur over the next twenty years (2007-2027). Population growth, new service demands and jobs creation is viewed as a positive state of community affairs. Attracting new homeowners, retailers, and firms brings benefits, diversity, and stability to the community. But, town growth also brings changes that may not be considered as favorable by some people because of their image of Baldwin City as a livable small town.
One of the desired outcomes of this planning document is to manage town growth in a manner that maximizes its benefits and minimizes its negative impacts. The intent is to guide the growth of Baldwin City by creating new neighborhoods and retail centers that are well-planned. Further, the intent is to protect and enhance the quality of life within established residential neighborhoods. To achieve a proper balance between accommodating a growing community with the need to preserve small town character, the City of Baldwin City intends to:

- Accommodate new growth in a fiscally responsible and environmentally sensitive manner.

- Encourage new growth to locate adjacent to existing developed areas where infrastructure exists or can be provided efficiently.
- Promote community character and livability through historic preservation of important community structures, downtown revitalization, neighborhood preservation, linking open spaces and community parks, and emphasizing pedestrian connectivity within and between new and old residential neighborhoods.

11.3 Creating Livability by Building Traditional Neighborhoods

The City of Baldwin City desires to create a "physical fabric" where the older residential neighborhoods, historic downtown, and Baker University south of Highway 56 and the new housing developments north of U.S. Highway 56 and elsewhere work together to create a sense of an integrated community. This plan seeks to encourage new housing and commercial development to transpire within the framework of accessible and walkable neighborhoods. This requires developers and city officials to shape individual development projects to fit together and form a unified and cohesive city. Accordingly, new land uses should be situated to reinforce neighborhood integrity, convenient access connected to one another, and provide vehicular and pedestrian linkages to the historic core areas of Baldwin City. To achieve a sense of community and livable neighborhoods, the City of Baldwin City intends to:

- Emphasize single-family neighborhoods as the dominant land use, while avoiding becoming a "bedroom" community to Lawrence and Johnson County. A mix of suburban and traditional neighborhoods will be encouraged and viewed as acceptable forms of town growth.
- A mix of suburban and traditional neighborhoods will be encouraged and viewed as acceptable forms of town growth.
- Promote a land use pattern that accommodates a mix of housing options, along with neighborhood and community retail and services, and places for recreation.
- Encourage more intense retail and service businesses to locate in planned developments along major roads or within the U.S. Highway 56 corridor.
- Accommodate planned, mixed-use developments as a way to strengthen a sense of neighborhood and place retail and services in close proximity to residential access to encourage walking.
- Promote "Historic Downtown Baldwin City" as the center and focus of social, commercial, and community life.

11.4 Connecting People: Land Use and Transportation

The City of Baldwin City recognizes the importance of integrated land use and the network of roads, trails, and sidewalks serving the community, as well as the significance of U.S. Highway 56 linking the city to the surrounding regions (i.e., Lawrence, Gardner, Edgerton, etc.). As the community grows and traffic volumes increase, a greater importance should be placed on using the road hierarchy to reflect future demands based on the changing land use pattern. Properly classifying roads and adhering to these classifications of local streets, collectors and arterials (thoroughfares) promotes proper planning and efficient vehicular/pedestrian flow for mobility and access. This plan seeks to identify a well conceived functional roadway classification system to help ensure that future and existing roads provide an efficient and interconnected road network. To achieve this desired outcome, the City of Baldwin City intends to:

- Encourage new subdivisions to provide interconnected street networks to improve vehicular and pedestrian connections between developments, while discouraging cut through traffic.
- Promote proper access management along U.S. Highway 56 and Sixth Street and other major arterials to ensure mobility of traffic in a safe and efficient manner while allowing access to surrounding developments.
- Encourage the Kansas Department of Transportation to consider a Highway 56 bypass/alternate truck route around the southern edge of Baldwin City, as increased traffic volumes warrant.

11.5 Strengthen Downtown as the Core

The City of Baldwin City values the historical, social, and economic significance downtown plays in creating a livable, small town character. The downtown district is viewed as an integral component of community life, where people live and shop, gather to visit and socialize, recreate, conduct civic events, and access government services. It is essential to smart growth and time tested principles of city planning to ensure that downtown remains the center focus of community life and retail activities in Baldwin City. As the community grows and attracts new retail developments, it is an imperative to ensure downtown remains a viable place to attract local residents and visitors to shop. To achieve this desired outcome, the City of Baldwin City intends to:

- Encourage mixed-use buildings with retail on the ground floor and offices or housing above.
- Ensure new buildings have a sense of compatibility with the historic architecture of downtown, both in terms of appearance, setbacks, and materials.
- Promote entertainment and cultural activities within downtown.
- Enhance the pedestrian connections to downtown, as well as local roads with continuous sidewalks linking Highway 56 to downtown to ensure people can conveniently walk and drive to downtown.

11.6 Promoting Community Design

The City of Baldwin City acknowledges the importance that community design plays in creating a pleasant place to live and attract business. The visual appearance of Baldwin City is considered a critical element in making Baldwin City a community a “place of choice”. To this end, the central mission of Baldwin City’s leadership must be to retain and continue to create a vital, cohesive, well-designed and well-maintained community in order to preserve and enhance the small town character of Baldwin City. The focus on community design as expressed in this guiding principle is to ensure local decision makers pay attention to how new buildings and subdivision layout relate to their surrounding environment, and how well site design and architecture compliments the overall visual harmony of Baldwin City. To achieve this desired outcome, the City of Baldwin City intends to:

- Ensure that new residential subdivisions contribute to creating a sense of neighborhood.
- Ensure quality site design, architecture, and landscaping to enable new development to successfully integrate with the existing town pattern and visual character.

- Promote tree-lined streets with lighting and where appropriate create a network of sidewalks, trails, and streets to facilitate the movement of pedestrians, cars, and bicycles.

11.7 Focus on Gateways and Highway 56 Corridor

Highway 56 creates much of the "passby impression" that citizens and visitors have of the City of Baldwin City. The view from the highway creates the curb appeal of the community, as well as the east and west entrances to the city acting as a "front door". The current visual image of the highway corridor presents a varied impression, ranging from desirable to one with areas needing attention. There is room for enhancement to the public facilities within the public right-of-way and to developments on private property. New development or rehabilitation of existing structures within the corridor should be planned for compatibility with creating a "sense of place" or an identity that upholds what the community desires. To achieve this desired outcome, the City of Baldwin City intends to:

- Enhance the Highway 56 gateways.
- Improve the pedestrian movement within the corridor by creating an appealing streetscape with sidewalks, ornamental lighting, decorative walls and public sign monumentation.
- Adopt design guidelines for new development and rehabilitation of existing structures and sites by identifying landscaping, signs, site design, lighting, and architectural elements.
- Limit the extent of strip retail development to defined boundaries.
- Encourage redevelopment of outdated uses into more modern uses that are attractive and useful to the community and its visitors.

11.8 Recognize Environmental Stewardship

Baldwin City is located in a beautiful natural setting with several environmental amenities and natural features worthy of preserving or at least incorporating into responsive site design. This includes protecting natural drainageways or tree-lined stream corridors and when feasible, utilizes these natural settings as pedestrian linkages with trails between land uses or neighborhoods. Environmental stewardship is a balance between protection of ecological and natural systems and the desire to accommodate economic development and the citizen well being. The principles of stewardship are to provide sustainable and manageable design of the site and buildings that promotes energy and water saving design. The practice of environmental stewardship seeks to create a sustainable future, be responsive to the environment, and to be as efficient as possible with resources available. The City of Baldwin City understands the importance and benefits of environmental stewardship, and will actively work to:

- Encourage infill development where large, vacant sites can be developed, as well as the downtown district.
- Conserve existing greenway buffers along streamways or woodlands.
- Coordinate with county planning officials to ensure conservation of productive agricultural lands.
- Coordinate with county officials on the sustainable management of Douglas County State Lake and the open lands surrounding the lake.

11.9 Provide Recreational Facilities and Open Space

Baldwin City understands that investing in recreational facilities and preserving open space is a vital part of creating an enjoyable place to live and raise a family. This plan seeks to capitalize on the existing park amenities in Baldwin City, while at the same time plan for new park opportunities. Making the financial commitment to purchase land in advance of new subdivision growth is a sign of progressive planning and foresight. This plan hopes to instill a community vision where parks and open space contribute to the small town character and market attractiveness for new families. By working in tandem with school officials, opportunities will present themselves to coordinate community recreation facilities with educational facilities. Another key recreation and open space asset valuable to Baldwin City is the Douglas County State Lake. Every effort should be explored to create a joint city/county/state collaborative strategy to create linkages and shared facilities. To achieve a proper mix of recreational facilities and open space, the City of Baldwin City intends to:

- Encourage a citywide trails network, a network that provides pedestrian connectivity between the north and south sides of Baldwin City
- Encourage the placement of small neighborhood parks, as new residential neighborhoods develop.
- Explore the possibility of converting the existing golf course into a community parkwith greater variety of uses and provide a more central location for residents.
- Explore the development of linear greenways within existing riparian /floodplain areas.
- Coordinate with County and State officials as to the type of recreational amenities Douglas County State Lake park offers, to eliminate duplication and competition.
- Explore parkland ordinance that provides dedication of parkland or impact fees by developers.
- Encourage parkland to serve the northeast portion of the city as development continues.
- Support the development of a Recreation Center.

11.10 Accommodate Annexations for Town Growth

The City of Baldwin City needs to develop and adopt a set of annexation policies to guide local decision-makers about when annexation should be required, based on the provision of municipal water, electricity, roads, or sanitary sewer service. In addition, the city should prepare an annexation plan outlining the long-term thinking of the City regarding where city officials envision unincorporated property eventually being annexed into the City of Baldwin City. The annexation plan should adhere to the KSA 12-520 service extension plans and outline how municipal services would be extended to an area contemplated for annexation.

SECTION 12

Plan Implementation

Coordination of Town Growth

	Implementation Programs	Desired Outcome	Timeline for Completion	Responsible Organization
1.1	Implement a joint City/County meeting to investigate the county authorization of extra-territorial zoning and/or subdivision regulation authority.	Open a dialogue with the Board of County Commissioners to determine the feasibility of extra-territorial land use authority.		City Administrator and City Council.
1.2	Conduct an annual meeting between City and County Officials to discuss planning and infrastructure issues in the urban fringe and extra-territorial area.	Create and maintain channels of communication to coordinate planning and development within the urban growth boundary.	Ongoing	City Administrator, Zoning Administrator, Planning Commission and City Council.
1.3	Conduct annual meeting between Chamber of Commerce officials, School Board, local bankers, builders and developers to discuss issues related to potential new developments and how local government can improve communication and relationships to promote economic development.	Create and maintain channels of communication between public and private sectors on how to facilitate new development, as well as redevelopment.	Ongoing	City Administrator and City Council
1.4	Participate in regional economic development organizations and strategic planning forums to keep informed about changes, opportunities, and threats affecting Baldwin City.	Ensure local officials are involved and informed on regional economic development issues and opportunities.	Ongoing	City Administrator, City Council and Chamber of Commerce
1.5	Participate in the Lawrence-Douglas County Metropolitan Planning Office efforts, including the 2030 Transportation Plan	Ensure local officials are involved and informed on regional planning issues and opportunities.	Ongoing	City Administrator, City Council and Chamber of Commerce

Urban Growth Management

	Implementation Programs	Desired Outcome	Timeline for Completion	Responsible Organization
2.1	Require property owners seeking municipal utility services to apply for annexation before city utilities are extended or provided.	City Council to adopt by ordinance an official policy of the city regarding annexation standards and practices.		City Administrator and City Council
2.2	Ensure the Baldwin City Planning Commission reviews and approves all subdivision and rezoning requests within the Urban Growth Area to ensure conformance with the comprehensive plan.	Adoption of an Interlocal agreement with Douglas County to facilitate and accomplish joint planning and consistent land use development regulations within the urban growth area.		City Administrator, Zoning Administrator, and City Council
2.3	Ensure the Baldwin City zoning and subdivision regulations accomplish the Lawrence-Douglas County Comprehensive Plan (Horizon 2020)goals and policies for land use development within the urban reserve area. This assumes that Douglas County grants the City of Baldwin City extra-territorial authority.	Adoption of amended zoning and subdivision regulations that ensure preservation and protection of the County's natural resource lands and accommodate rural or non-farm housing consistent with Horizon 2020.		City Administrator, Zoning Administrator, City Council, and Planning Commission
2.4	Ensure road right-of-way and construction standards within the urban growth boundary are coordinated between the county and city.	A component of the Inter-local agreement should be to ensure cooperation and coordination between the County and City on road design and construction.		City Administrator and City Council
2.5	Ensure adequate industrial and commercial land is available to support continued development.	Amend the future land use map, or rezone property,		City Administrator, City Council, and Planning Commission
2.6	Investigate opportunities for new business development or expansion on vacant land, or buildings, and development of a city complex.	Create a strategy for business development/expansion in downtown.		City Administrator, Zoning Administrator, City Council, and Planning Commission

Historic Downtown Core District

	Implementation Programs	Desired Outcome	Timeline for Completion	Responsible Organization
3.1	Design attractive directional signage from Highway 56 to downtown.	Employ an architect/designer to create directional signage.		City Council/Chamber of Commerce
3.2	Create an outreach plan for City Council members, Planning Commission members, downtown merchants, Baker University, property owners, and the public on the importance of an economically viable downtown.	Create and maintain channels of communication to begin the process of strengthening the civic, social, and economic importance of downtown.		City Council initiates a dialogue with interested groups to begin discussing how to ensure a vibrant core downtown district.
3.3	Create a unified voice representing downtown merchants and property owners through a formal downtown association.	Create a "Downtown Baldwin City Association."		Downtown merchants and property owners.
3.4	Arrange for a series of roundtable discussions on downtown redevelopment with key stakeholders to prepare a strategic action plan. The intent is to establish a community vision for downtown and build consensus regarding how to foster redevelopment action steps.	Identify a shared vision for downtown that the entire community supports. Identify specific tasks, projects, or improvements to downtown.		City Council, Baker University, and Chamber of Commerce provide funding to prepare a strategic action plan for Downtown.
3.5	Create a formal communications relationship with Baker University to better ensure cooperation on downtown/university issues to attract students, faculty, staff and visitors to shop and dine in downtown.	Include a representative from Baker University in the Downtown Baldwin City Association		Downtown Baldwin City Association
3.6	Inventory historic structures or cultural resources survey of downtown.	Employ a consultant to prepare a cultural resources survey to guide preservation and redevelopment efforts.		City Council/City Administrator
3.7	Inventory commercial and retail space, vacancy levels and underutilization.	Create a database specifically for downtown commercial space.		Chamber of Commerce / Downtown Baldwin City Association

3.8	Hire a consultant to prepare a "Community Market Analysis" with a focus on opportunities for downtown.	Employ a national market analysis firm to assess and identify potential new business products and services suitable for locating in downtown.		City Administrator and City Council
3.9	Develop a set of "Downtown Design Guidelines" to guide rehabilitation and renovation of buildings, as well as new construction.	Employ an architectural /planning firm to prepare "Downtown Design Guidelines" and recommend amended land use regulations.		City Council/Planning Commission
3.10	Evaluate the creation of a "Main Street Program	Create an organization devoted to promoting downtown revitalization.		City Council/Chamber of Commerce/Downtown Baldwin City Association
3.11	Evaluate the creation of a business improvement district to finance enhanced maintenance, marketing, and business development.	Investigate the feasibility regarding a business improvement district (BID).		City Council/Chamber of Commerce/Downtown Baldwin City Association
3.12	Contact officials at the Post Office to ensure steps are taken to keep the current or a new facility in downtown.	Inform and reinforce that City leaders want to ensure the Post Office remains in downtown.		Mayor/City Administrator
3.13	Evaluate the advisability of creating a Downtown Baldwin City Historic District.	One of the advantages of being placed on the National Register of Historic Places is the potential to qualify for federal and/or state rehabilitation tax credits.		City Council/Chamber of Commerce/Downtown Baldwin City Association/State Historic Preservation Officer

Housing and Neighborhood Conservation

	Implementation Programs	Desired Outcome	Timeline for Completion	Responsible Organization
4.1	Continue to assist neighborhood improvements by providing code enforcement assistance.	Ensure enforcement of property maintenance, abandoned or inoperable vehicles, and other municipal codes intended to maintain a stable neighborhood.	Ongoing	City Administrator and City Council
4.2	Provide city resources to assist in annual neighborhood "clean-up" campaigns.	Provide homeowners/renters a chance to have city crews remove yard debris or unwanted home items.	Ongoing	City Administrator and City Council
4.3	Continue to invest public dollars to upgrade water and sanitary sewer infrastructure, sidewalks, curb and gutter, street lights, and public parks.	Ensure public funds are allocated in each annual operating budget for upgrades and maintenance of infrastructure in older neighborhoods.	Ongoing	City Administrator and City Council
4.4	The City should request grant funding from the Kansas Historical Society to fund a historic resources survey.	Employ a consultant to prepare a cultural resources survey to guide preservation and redevelopment efforts in older neighborhoods.		City Administrator and City Council
4.5	Continue to monitor, inspect, and eliminate deteriorated, dangerous, or hazardous structures.	Ensure enforcement of dangerous or hazardous structure code.	Ongoing	City Administrator and City Council
4.6	Consider implementing a "Neighborhood Revitalization Program (NRP)" to provide homeowners a rebate on property taxes for improvements to their property.	Adoption of an incentive program to encourage reinvestment into home improvements or expansions.		City Administrator and City Council
4.7	Develop a set of "Infill Housing Guidelines" or "Form-based zoning" to accommodate new construction/expansion projects on small lots and inform and guide homeowners/builders on architectural compatibility issues, such as building materials, bulk, placement, roof lines, etc.	Adoptions of a set of design guidelines to ensure that new construction or remodeling projects are compatible with established neighborhood character.		Zoning Administrator, Planning Commission

Subdivision Code Update Issues

	Implementation Tools	Desired Outcome	Timeline for Completion	Responsible Organization
5.1	Review current land use planning, design, and infrastructure requirements such as street widths, lot sizes, setbacks, parking ratios, and utility standards. Consider changing requirements that add unnecessarily to the cost of development.	Adopt subdivision codes, and construction standards that do not create unreasonable costs for new development.		Zoning Administrator, Planning Commission and City Council
5.2	Strengthen the subdivision regulations to protect a riparian zone from destruction by establishing a minimum protection zone.	Adopt design standards for plats to prevent destruction of riparian zones. These standards are intended to prevent mature trees from being lost to urban development.		Zoning Administrator, Planning Commission and City Council
5.3	Strengthen the subdivision regulations to enhance open-space protection provisions.	Update park land dedication or fee-in-lieu requirements.		Zoning Administrator, Planning Commission and City Council
5.4	Encourage the establishments of conservation easements for open-space set asides in existing and future residential developments to ensure long-term preservation.	Adopt design standards to permit the creation of conservation easements.		Zoning Administrator, Planning Commission and City Council
5.5	Evaluate public street standards for existing rural residential subdivisions.	Consider if existing large-lot subdivisions annexed into the city should have flexibility on urban street, sidewalk, and stormwater drainage standards.		Zoning Administrator, Planning Commission and City Council
5.6	Update and clarify platting standards for commercial development.	Clarify when commercial property should be platted.		Zoning Administrator, Planning Commission and City Council

Zoning Code Update Issues				
	Implementation Tools	Desired Outcome	Timeline for Completion	Responsible Organization
6.1	Adopt new provisions that incorporate site plan review for commercial, industrial, and multi-family residential development.	The intent is to allow city officials and the general public to better understand how a proposed development will address issues such as landscaping and buffering, building placement, and traffic and pedestrian access.		Zoning Administrator, Planning Commission and City Council
6.2	Evaluate the parking standards to update and clarify specific sections: ■ Hard surface parking in residential districts. ■ Hard surface parking in non-residential districts	The intent is to provide a minimum standard for parking quantities and minimum pavement standard.		Zoning Administrator, Planning Commission and City Council
6.3	Adopt landscaping, buffering, and screening standards.	The intent is to specify when landscaping, buffering, and screening is required to protect nearby property owners and to enhance the aesthetic appearance of the community.		Zoning Administrator, Planning Commission and City Council
6.4	Adopt standards and requirements to protect existing mature trees during the site plan and preliminary plat design phase.	The intent is to encourage landowners, engineers, and architects to make reasonable attempts to protect mature trees.		Zoning Administrator, Planning Commission and City Council
6.5	Adopt residential zoning regulations to foster traditional neighborhood design.			Zoning Administrator, Planning Commission and City Council
6.6	Amend sign regulations to enhance the visual character of the community.			Zoning Administrator, Planning Commission and City Council

Highway 56 Corridor				
	Implementation Programs	Desired Outcome	Timeline for Completion	Responsible Organization
	Encourage the use of shared driveways and access points between commercial sites to improve traffic flow and conflicts.	Adopt "Access Management Design Criteria" addressing driveway spacing, alignment with other streets and driveways, width of driveway, and minimum site distances.		Planning Commission and City Council
	Improve the visual quality of the corridor by introducing street trees, sign controls on pole and façade signs, and consistent setback standards for parking lots and buildings	Adoption of commercial design guidelines that identify the level of community expectations for new development, as well as redevelopment of property along Highway 56 Corridor.		Planning Commission and City Council
	Work with present business owners to upgrade by creating adequate off-street parking and open space.	Identify incentives to encourage existing property owners to upgrade or redevelop their property in accordance with the commercial design guidelines.		City Administrator and City Council
	Pursue with Kansas Department of Transportation officials an alternative route or bypass for truck traffic, or lower the speed on Highway 56	Open a dialogue with KDOT to express local concerns about traffic safety issues.		Mayor and City Administrator
	Plan for the orderly development of Sixth Street from Highway 56 north to the Baldwin High School.	Identify traffic management and land use guidelines.		City Administrator and City Council