Chapter 3—Future Land Use Projections

In order to develop future land use projections for the K-68 corridor, a market analysis was completed for Ottawa, Paola, and Louisburg. The analysis included a review and projections of each city’s primary market sectors (residential, retail, industrial and office) from 2000 to 2030.

After the timing for and amount of each type of potential development was projected, land use maps were prepared to show geographically where the development would most likely take place. The analysis and maps were used to determine the types of roadway improvement alternatives that would be necessary for K-68 to accommodate projected 2030 traffic demands.

The Steering Committee, public officials, community leaders, and other stakeholders including the general public provided significant input and feedback regarding the assumptions, timing, and location of development in relationship to the corridor’s future transportation needs.

The remaining portions of this chapter outline:

- Market analysis methodology and assumptions
- Development priorities, opportunities, and constraints
- Projected 2030 future land uses maps

MARKET METHODOLOGY

As part of the market analysis, both city and corridor market areas were defined to help determine the amount of growth possible in the vicinity of K-68 generally between I-35 on the west and State Line Road on the east. The market area for the three cities considered their individual one-mile, three-mile, and five-mile trade areas when measured from the core of each city and were referred to as the “city market areas”. As a result, there were three city market areas: Ottawa, Paola, and Louisburg.

The portions of the city market area that were within the K-68 Corridor Management Plan study area were referred to as the “corridor market area” and look into consideration the growth boundaries of the Cities of Ottawa and Paola.

With these market areas in mind, three population projections – Low, Intermediate, and High – were developed to determine the amount of growth that could be anticipated to occur in each city over the next 21-years using 2000 population estimates as a basis.

2030 Low Growth Projection: Illustrated modest growth and development within the study area and was based on traditional forecasting methods such as the review of in- and out-migration and births and deaths. This method assumed that population growth would continue to increase at a relatively slow and steady rate.

2030 Intermediate Growth Projection: Represented the mathematical equivalent of 60% of the difference between the low and high growth scenarios considering a variety of economic and market factors including gasoline prices, transit, energy and construction costs, financing, employment, and availability of economic development incentives. See the Intermediate Growth Projection: Considerations Related to Economic and Market Factors Memo in the Appendix for more information.

2030 High Growth Projection: Involved an analysis of cities that are comparable to those within the K-68 Corridor Management Plan study area because of their location on the edge of the development ring that surrounds the Kansas City Metropolitan Area. Comparable communities included Gardner and Spring Hill, Kansas and Raymore and Grain Valley, Missouri and were rapidly growing due to their proximity to the Kansas City metro area and major transportation routes.

Ottawa, Paola, and Louisburg are positioned on the next ring of growth outside the Metro beyond these communities. As a result, the high growth scenario represented the growth and development that could happen in the study area if Ottawa, Paola, and Louisburg were to grow in population at rates of the comparable communities. See the High Growth Projection: Comparable Communities Memo in the Appendix for more information.

Population Projections: The population projections were then compared against existing estimates for Louisburg and Paola from the Kansas Division of Budget and Kansas Water Department figures for Ottawa. Population information was then used to determine the amount of general residential, retail, industry, and office demand that could be expected in each community under Low, Intermediate and High growth population scenarios.

Residential Demand: The market for new housing was based on the assumptions that household size would stay relatively constant; there would be a dwelling for every household; dwelling type would be predominantly low density, single family; and, there would be a small portion of surplus housing.

Retail Demand: The retail market demand was derived by looking at the per capita demand for retail services and the leakage of sales in a one-, three-, and five-mile radius from the core of each city. Per capita demand was driven by population growth. Leakage refers to sales that occur outside of the community.

The amount of leakage was based upon current information regarding the amount of income estimated to be spent outside of each community. Further, leakage amounts were based on information provided by Claritas and from the Urban Land Institute publication, Dollar and Cents of Shopping Centers/ The Score 2006.
The market demand for new retail space was assumed to be the amount of retail space required to meet growing population demands and to meet the needs of residents shopping outside of their respective city.

**Industrial Demand:** Market demand for industrial uses was assumed to be for business park, flex space, and warehousing space. To determine the amount of new industrial space, the analysis looked at the Bureau of Labor Statistic’s Location Quotients, the current amount and type of industrial uses, properties currently on the market for industrial uses, recent experiences in attracting industry, existing zoning, and proposed and recent industrial development in nearby cities, such as Logistic Park intermodal facility proposed near Gardner, Kansas.

**Office Demand:** The office market was not expected to change significantly within the corridor. Projections of office use were based upon the assumption the size and type of office usage would remain constant and it is very unlikely that there would be construction of the large Class A office structures similar to those found in the large office parks in Johnson County (e.g., Corporate Woods)

**MARKET ASSUMPTIONS**
A set of general assumptions were relied upon for projecting the location and quantity of development that would be expected to occur within the corridor market area.

- Existing land uses will remain and development plots will be built over time
- Generally future uses happen within the plan area and growth occurs from the center out to respect growth boundaries and/or compatible, adjacent development
- Population growth drives residential demand
- New retail development should support the needs of the growing population – Keep retail shoppers close to home
- Industry is relocating to locations south of the metro area with easy highway/rail access and industrial zoning and marketing plans
- Office space is likely to be existing Class B and Class C
- Schools and emergency service needs are based on population projections and response requirements.

See the Market Demand Model: Assumptions for Population Growth and Net New Development Space in the Appendix for a listing of detail assumptions.

**DEVELOPMENT PRIORITIES, OPPORTUNITIES, & CONSTRAINTS**
Steering Committee members and other stakeholders identified priorities, opportunities and constraints within and directly adjacent to the K-68 study area. The priorities and opportunities for new development were primarily focused around each of the cities and along the major roadways (e.g., K-68, US-69, US-169 and I-35) and at intersections of these roadways.

The primary constraints for development along the corridor occurred in locations where environmentally sensitive conditions exist, particularly steep topography, and at points where there are difficult road crossings. Though the provision of water and sewer was mentioned as a constraint to dense development out from the cities, infrastructure was not considered to be a detriment to future development, but as an impact on the timing of development.

**Ottawa:** Because the majority of the City of Ottawa extends beyond the study area for the K-68 Corridor Management Plan, only the portion of Ottawa that was located within the K-68 study area boundary was included in Ottawa’s discussion of K-68 priorities, opportunities and constraints for the purposes of the plan. Ottawa’s representatives saw opportunities for mostly commercial and industrial uses within the vicinity of the intersection of K-68 and I-35. The area is already home to the Wal-Mart and American Eagle Distribution Centers. An area that presents some environmental constraints is located along K-68 to the east of the distribution centers at the confluence of three waterways.

**Future Land Use Projections**
As a result of the market analysis and input from the Steering Committee members, public officials, and other stakeholders about development constraints, opportunities, and priorities, a series of land use maps were prepared for the K-68 Corridor Management Plan.

Future land use maps were created to correspond with each of the three population projections (Low, Intermediate, and High) and for each of the three cities by decade. The general location and type of development (residential, retail, industrial, and office) associated with each scenario remains fairly consistent; the primary difference is the amount of anticipated new development expected to occur. As expected, the Low scenarios show minimal growth and the High scenarios show significant growth in each city.

Because the transportation improvements relate to the 2030 traffic projections, a discussion of 2030 land use and development by community follows.
Future Land Use Projections

Ottawa Land Use 2030: Future development is projected to be a continuation of current growth patterns. Future development is expected to focus on the intersection of K-68 with I-35 with distribution centers of a similar scale to the Wal-Mart and American Eagle facilities extending eastward along K-68. Retail uses are anticipated along the west side of I-35 at K-68 with the potential for residential to the southwest towards the center of the city. See Exhibit 3.1 for the 2030 land use map of Ottawa.

Exhibit 3.1: Ottawa 2030 Land Use Map (Final April 30, 2009)
Paola Land Use 2030: Future development in the K-68 corridor nearest to Paola is expected to extend north from Paola and south from Hillsdale. Residential uses will likely occur along both sides of Old Kansas City Road northward with commercial and development occurring at the intersection of K-68 with U.S. 169 and west along K-68. A mix of residential and commercial development is anticipated around the community of Hillsdale. See Exhibit 3.2 for the 2030 land use map of Paola.

Exhibit 3.2: Paola 2030 Land Use Map (Final April 30, 2009)
Louisburg Land Use 2030: Louisburg is projected to experience development of the South Suburban Business Park at the intersection of US-69 with 247th Street to the north of Louisburg, mixed-use at the intersection of K-68 with US-69, and residential growth along the corridor and east of US-69. See Exhibit 3.3 for the 2030 land use map of Louisburg.

The amount of development is directly related to the amount of growth the community experiences, particularly in regards to the residential land uses. Under the high growth scenario Louisburg is expected to see significant commercial development at the intersection of K-68 with US-69 and residential development extending beyond the one-mile study boundaries to the north and south and between US-69 and Mission Belleview.

Exhibit 3.3: Louisburg 2030 Land Use Map (Final April 30, 2009)