Section 4

Existing Conditions:
Land Use and Development
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Existing Conditions: Land Use and Development

Introduction

This Chapter examines the existing conditions including existing development, infrastructure, and land use pattern for the corridor and the larger Study Area. Land use categories used throughout the corridor are identified and defined. An inventory of existing land uses describes both the amount of land in each land use category and the distribution of uses throughout the Study Area.

Development Patterns and Existing Land Use

The use of land in a community is not a random process. Numerous distinct variables influence the way a given piece of land is used. Some of the variables are influenced by factors beyond the control of the community, including economic factors such as the demand for new development, the cost of property, and the cost of construction. Environmental factors such as soil conditions, topography, and the location of floodplains or other natural limitations are largely pre-determined. Other variables, however, are within the control of the community including traffic patterns, the capacity and location of public utilities, the delivery of municipal services, and the physical appearance of development. Unfortunately, these variables are not constant, but they have an impact on the use of land and on each change in land use.

Viewed as a whole, the use of individual pieces of property forms a pattern of land use that describes the character of the corridor in several ways. It will help to explain where residents live and work, how they obtain goods and services, and where they seek recreation. It will also aid in analyzing the strengths and challenges of the communities in the area and South Leavenworth County as a whole. Finally, and perhaps most importantly, examining the pattern of existing uses is the starting point in the process of formulating policies for the future development within and around the corridor.

Table 4-1 and Figure 4-1 identify the generalized land use in the Corridor Planning area as well as the entire Study Area. Data was obtained from the Leavenworth County GIS database which incorporates appraisal information and is known to be current as of July 2006. This detailed information was aggregated into the following categories:

1. Single Family Residential
2. Multifamily Residential
3. Hotel
4. Light Industrial/Warehousing
5. Heavy Industrial and Manufacturing
6. Transportation and Utilities
7. Retail Commercial
8. Service Commercial
9. Office
10. Institutional
11. Cultural/Recreational
12. Agriculture-No improvements
13. Agriculture w/Farm Improvements Only
14. Agriculture w/Residential and Farm Improvements
15. Vacant

These categories can generally be defined in the following manner:

**Single Family Residential:** Land occupied by a single dwelling unit, including accessory buildings, the primary use being for sheltering individuals, families, or groups of persons. Examples: single-family residences, duplexes (single-family attached dwellings).

**Multifamily Residential:** Land occupied by more than two dwelling units, including accessory buildings, the primary use being for sheltering individuals, families, or groups of persons. Examples: apartments, manufactured housing, and nursing homes.

**Hotel:** Land that is occupied by a hotel.

**Light Industrial/Warehousing:** Land occupied by buildings or open space, the primary use being for storage, transportation, or assembly of a product. Examples: material storage, warehousing, wholesale operations and trucking.

**Heavy Industrial and Manufacturing:** Land occupied by buildings or open space, the primary use being manufacturing of a product. Examples: manufacturers, construction yards, heavy equipment storage.

**Transportation and Utilities:** Land dedicated for public utilities and land used for railroad purposes.

**Retail Commercial:** Land or buildings where merchandise is offered for retail sale. Examples: grocery, clothing, hardware and drug stores, restaurants.

**Service Commercial:** Land or buildings where services are offered. Examples: car and farm equipment sales and service, service stations, banks.

**Office:** Land occupied by private offices including doctors offices, veterinary offices etc. Does not include public offices such as a City Hall.

**Institutional:** Land or buildings occupied by agencies of the government or by religious, educational or civic groups, excluding land used for recreational purposes. Examples: schools, churches, cemeteries, city buildings, fire stations, hospitals.

**Cultural/Recreational:** Land occupied by cultural and recreational uses. Examples: Sports Arenas, Playing Fields, Baseball Diamonds, Museum, Bowling Alley, Library, Auditorium,

**Agriculture-No improvements:** Land which is exclusively being used for farming purposes.

**Agriculture w/Farm Improvements Only:** Land which is exclusively being used for farming purposes, but may have some agriculture related improvements and structures, such as a barn.

**Agriculture w/Residential and Farm Improvements:** Land which is primarily being used for farming purposes, but may have residential improvements on site including dwellings, greenhouses, barns, etc.

**Vacant:** Land which has not been developed or has been cleared of prior development.

Data shows that the corridor is more developed than the surrounding Study Area; the corridor is 65% agriculture and agriculture-related land uses, compared to 85% for the Study area. Single Family Residential land use forms the predominant non-agricultural land use in the corridor. Utilities, Institutional and multifamily residential land uses constitute a small fraction of the available land area.

<table>
<thead>
<tr>
<th>Detailed Land Use</th>
<th>Planning Area</th>
<th>% of Total</th>
<th>Study Area</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>3,629</td>
<td>22%</td>
<td>19,005</td>
<td>10%</td>
</tr>
<tr>
<td>Multifamily Residential</td>
<td>221</td>
<td>1%</td>
<td>519</td>
<td>0%</td>
</tr>
<tr>
<td>Hotel</td>
<td>2</td>
<td>0%</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Light Industrial/Warehousing</td>
<td>77</td>
<td>0%</td>
<td>275</td>
<td>0%</td>
</tr>
<tr>
<td>Heavy Industrial &amp; Manufacturing</td>
<td>28</td>
<td>0%</td>
<td>390</td>
<td>0%</td>
</tr>
<tr>
<td>Transportation/Utilities</td>
<td>444</td>
<td>3%</td>
<td>1,611</td>
<td>1%</td>
</tr>
<tr>
<td>Retail-Commercial</td>
<td>35</td>
<td>0%</td>
<td>59</td>
<td>0%</td>
</tr>
<tr>
<td>Service Commercial</td>
<td>66</td>
<td>0%</td>
<td>240</td>
<td>0%</td>
</tr>
<tr>
<td>Office</td>
<td>7</td>
<td>0%</td>
<td>22</td>
<td>0%</td>
</tr>
<tr>
<td>Institutional</td>
<td>430</td>
<td>3%</td>
<td>1,863</td>
<td>1%</td>
</tr>
<tr>
<td>Cultural/Recreational</td>
<td>345</td>
<td>2%</td>
<td>1,604</td>
<td>1%</td>
</tr>
<tr>
<td>Ag Land - No Improvements</td>
<td>3,927</td>
<td>23%</td>
<td>63,375</td>
<td>34%</td>
</tr>
<tr>
<td>Farm w/Residential and Farm Improvements</td>
<td>6,593</td>
<td>39%</td>
<td>76,794</td>
<td>41%</td>
</tr>
<tr>
<td>Farm w/Farm Improvements Only</td>
<td>749</td>
<td>4%</td>
<td>18,974</td>
<td>10%</td>
</tr>
<tr>
<td>Vacant</td>
<td>234</td>
<td>1%</td>
<td>860</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total area (acres)** 16,789 185,591

**Total area (sq. miles)** 26 290

Source: Leavenworth County GIS, BWR
Major Utility Inventory

**Figure 4-1** identifies the major existing utilities in the Leavenworth County portion of the Planning area. Several electric transmission lines crisscross the planning area. A high pressure liquid gas line crosses the southeastern part of the corridor (south of Basehor) and about 15 oil and gas wells are located within the corridor.

**Figure 4-2** identifies the assigned service areas for water providers in the planning area. Currently there is an area south and east of the City of Tonganoxie that does not have an assigned water provider.
Figure 4-1: Major Utilities

Source: Leavenworth County GIS, BWR
Figure 4-2: Water District Boundaries

Source: Leavenworth County GIS, BWR
MetroGreen

MetroGreen is a regional greenway system for the Kansas City metropolitan area. It is principally comprised of linear corridors of land found along streams, roadways, and within abandoned rail corridors. The purpose of MetroGreen is to establish an interconnected system of public and private open spaces, greenways, and trails that will link the seven-county metropolitan region. The plan covers Leavenworth, Johnson, and Wyandotte counties in Kansas, and Cass, Clay, Jackson, and Platte counties in Missouri.

**Figure 4-3** identifies the MetroGreen corridors in Leavenworth County. In the US 24/40 Corridor, the MetroGreen corridors include the following:

- Trail along US 24/40 Highway from a former rail corridor on the east to Stranger Creek.
- A former rail corridor through eastern Basehor.
- A stream corridor trail along Stranger Creek.
- A stream corridor trail along Tonganoxie Creek from Stranger Creek to connect with VFW Park, Magnatech Park, and Chieftain Park in Tonganoxie.

**Figure 7-2: US 24/40 Corridor Supporting Transportation System Network** in Chapter 7 identifies the recommended greenway trail system to implement MetroGreen in the US 24/40 Corridor. Several issues need to be addressed in order to implement the greenway system in the corridor and the larger Leavenworth County planning area:

- Acquisition of land or easements,
- Regulatory updates,
- Design standards,
- Funding, and
- Maintenance.

Options and recommendations to implement the MetroGreen system are provided in Chapter 8, *Future Land Use and Development Regulations* and Chapter 10, *Implementation and Coordination Strategy*. 


Figure 4-3: MetroGreen Corridors in Leavenworth County, Kansas