

# TOWNSHIP SUMMARY

## SECTION EIGHT

### BIG GROVE TOWNSHIP

## **Land Resource Management Plan**

### **Big Grove Township - Kendall County**

## **Introduction**

### **Purpose**

In March 1994, Kendall County adopted a Land Resource Management Plan (LRMP), which helps guide the County's future development and outlines specific strategies to address key growth issues. Since the LRMP only provides general guidelines regarding land use, the County agreed to develop individual land resource management plans for each township. The first township plan was prepared for the southeastern portion of the County, which includes Seward and Na-Au-Say Townships. This plan was adopted on October 20, 1998. The County selected Big Grove Township as the next township for which to develop an individual land resource management plan based on local interest.

### **Planning Process**

Intergovernmental cooperation was one of the primary reasons for the County's adoption of the LRMP. To facilitate this intergovernmental cooperation, an advisory committee was established to guide the development of the Land Resource Management Plan for Big Grove Township. The committee was comprised of key staff members and/or representatives from Kendall County, Big Grove Township, and the Villages of Newark and Lisbon.

Key elements of the planning process included:

- A kickoff meeting was held on October 25, 2001, to mark the beginning of the planning effort aimed at developing a land use plan for Big Grove Township. Community leaders and members were provided with the opportunity to express their concerns and observations relating to the future development of the township.
- An advisory committee meeting was held on January 9, 2002, to review the future land use plan for two different population projections (20% growth and 60% growth in the next 20 years). The committee also discussed other issues such as the proposed Prairie Parkway and the adequacy of municipal sewer capacity in Newark.
- A public hearing was held at the annual County Planning Workshop on February 23, 2002.
- Additional revisions were also incorporated to reflect changes to the plan affecting the Village of Lisbon resulting from the 2005 update of the Lisbon and Seward Township LRMP.

A majority of the information provided within this section was originally collected as part of the 2001-2002 update. However, portions of the Big Grove Township LRMP were revised in 2008 to reflect land use recommendations from the Newark Comprehensive Plan and relevant revisions to the township LRMP's for Fox and Kendall Townships and Lisbon and Seward Townships.

## **Situation Audit**

### **Overview**

In order to prepare a comprehensive plan for Big Grove Township, local planning issues in the township need to be clearly understood. Particularly, the land use structure, environmental features, transportation network, and population trends of the township all have an impact on planning for future growth and development in the township. This situation audit addresses these planning issues based on the analysis of information gathered from a land use survey, the kickoff planning meeting in late October, and various other sources.

The situation audit is organized as follows:

- Initial opinions & observations of planning issues (kickoff meeting)
- Summary of planning issues
  - Existing land use (Existing Land Use Map)
  - Environmental issues (Planning Issues Map)
  - Transportation issues (Planning Issues Map)
  - Population trends
  - Utilities/infrastructure
- Draft goals and objectives

In addition to the two Planning Issues Maps, a Location Map is included.

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### **Initial Opinions & Observations of Planning Issues**

A kickoff meeting held on October 25, 2001, marked the beginning of the planning effort aimed at the establishment of a comprehensive plan for Big Grove Township. The following list summarizes the initial opinions and observations expressed by community leaders and members during the meeting. The issues are not listed in any particular order, but they are categorized for ease of presentation.

#### **Land Use/Development**

- Newark Community High School is filled to capacity and is dealing with space issues
- Significant unplatted land exists within the incorporated area of Newark
- Quarry proposed (located 2.5 miles east of Big Grove Township)
- Economic development is important
- Owner of existing tree farm wants to subdivide land when sewer infrastructure is available
- 25-30 new homes built in Newark in last 10 years
- 10 new homes built in Lisbon in last 10 years
  
- Industrial uses are lacking but important (Village Board expresses little interest in actively pursuing industrial development)

*Land Resource Management Plan - Big Grove Township*

- Most residents drive northeast to neighboring communities (e.g. Aurora, Montgomery, etc.) for work
- Grocery store needed
- Small manufacturing uses possible
- Call for controlled growth to minimize impact on farms
- Joliet residents move out to Lisbon to get away from traffic congestion
- Clients of local banker expressed interest to use local areas for development
- Good jobs needed in the area
- Good to encourage residents to remain in area
- Central location to attract people from 20/25-minute drive
- Small town atmosphere should be maintained in both villages

**Transportation**

- High traffic volume on State Route 71 occurs during the morning and evening rush hours
- Speed on State Route 71 is typically 65-70 mph or more
- Traffic on Federal Highway 52 is also increasing

**Agriculture**

- Agricultural character should be maintained
- Township envisioned as being mostly agricultural
- Agricultural uses should be kept contiguous

**Infrastructure**

- Newark may need a new water tower to increase the capacity of the water system
- Septic problems on small lots in Lisbon
- Communications infrastructure has improved
- Ameren, ComEd, and REA satisfactorily provide electricity service to area residents
- 36" gas line located south of Lisbon
- Are municipal impact fees at appropriate levels?
- Underground water (Newark fault 400-feet deep)
- Fire Department equipment in Newark and Lisbon are kept separate

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**Planning Issues**

**Existing Land Use**

In order to assess past and present development patterns in the township, an existing land use survey was conducted on September 27, 2001. During the survey, existing land uses, notable environmental features, and other local characteristics were identified within the township as well as in the villages of Newark and Lisbon. In addition to the survey, land uses were also identified by interpreting aerial photographs. The existing land use data collected from the two identification methods are indicated on the Existing Land Use Map. Figure 1 summarizes the acreage and composition of existing land uses in Big Grove Township.

Approximately 95% of the land within Big Grove Township is used for agricultural purposes. The second highest land use composition is residential uses, which comprises only 3.34% of the land. The remaining 1.63% of land uses are split among commercial, institutional, parks/open space, and communication and utility uses. In addition to these land uses, a set of electrical transmission power lines runs in a north-south direction on the east side of the township. An extension of power lines runs from the center of the main lines in an easterly direction.

**Figure 1  
Existing Land Uses  
Big Grove Township**

Land Use	Area (acres)	Percent of Total Area
<b>Residential</b>		
* Single family homes	219	1.00%
* Farmsteads	497	2.26%
<b>Total</b>	<b>716</b>	<b>3.25%</b>
<b>Commercial</b>		
<b>Total</b>	<b>23</b>	<b>0.11%</b>
<b>Institutional</b>		
* Churches	2	0.01%
* Cemeteries	8	0.03%
* School district property	17	0.08%
<b>Total</b>	<b>26</b>	<b>0.12%</b>
<b>Communication &amp; Utilities</b>		
* Electricity lines	245	1.11%
* Communication tower	4	0.02%
<b>Total</b>	<b>249</b>	<b>1.13%</b>
<b>Industrial</b>		
* Private airstrips	19	0.09%
* Industrial storage	2	0.01%
<b>Total</b>	<b>21</b>	<b>0.10%</b>
<b>Public Park/Open Space</b>		
* County-owned property	39	0.18%
* Old quarry	19	0.09%
<b>Total</b>	<b>57</b>	<b>0.26%</b>
<b>Agricultural</b>		
* General farmland	17,317	78.72%
* Non-productive farmland	3,590	16.32%
<b>Total</b>	<b>20,907</b>	<b>95.03%</b>
<b>Total (Big Grove Township) *</b>	<b>22,000</b>	<b>100.00%</b>
<b>Notes</b>		
* Land use areas for Big Grove Township include the figures for Helmar but exclude the figures for Newark and Lisbon		

## Environmental & Transportation Characteristics

The Planning Issues Map depicts the environmental features and transportation network of Big Grove Township. Local features such as an old quarry, an apple orchard, and a bridge over Roods Creek are also represented on this map.

**Environmental Features:** The environmental features represented on the Planning Issues Map include non-productive farmland, wetlands, floodplain, wooded areas, steep slopes, and the watershed boundary. Most of these features were identified from a Kendall County Environmental Factors Map, which was produced in December 1992. Some features, particularly steep slopes, were verified via observations from the land use survey. Creeks were identified from a GIS map provided by the Illinois Watershed Management Clearinghouse<sup>1</sup>. Key issues relating to these environmental features are noted below:

- **Floodplain:** Most of the floodplain in Kendall County is situated in the northern and eastern portions of the county. The only section of mapped floodplain that runs through Big Grove Township is situated within the municipal boundaries of the Village of Newark.
- **Wetlands:** Wetlands were identified from the National Wetlands Inventory. Site-specific wetland surveys should be conducted as development activity warrants in order to more accurately identify the shape and location of wetlands.
- **Non-productive farmland:** Although 95% of the township is covered by agricultural uses, approximately 17% of agricultural land is considered non-productive farmland. Much of this area was forested and farmed for lumber. Despite the non-productive identification, some of these areas are still used for agriculture. A large section of the non-productive farmland was subdivided into parcels that were sold as wood lots. If any development is slated to occur on non-productive farmland, the non-productive soil in these areas would be an influential factor in determining the feasibility of development.
- **Wooded areas:** The wooded areas depicted on the Planning Issues Map only represent wooded areas that cover 1 acre or more. There were several other patches of trees scattered throughout the township, but each patch covered less than an acre of land. Similar to wetlands, all wooded areas, regardless of size, should be identified as development activity warrants.
- **Creeks and watersheds:** The location of creeks and watershed boundaries (i.e. ridge lines) are critical for stormwater management. Big Grove Township is intersected by a set of three watershed boundaries. In particular, the township covers the Aux Sable Creek, Lower Fox River/Illinois River, and Nettle Creek watersheds.

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<sup>1</sup>Internet source: <http://web.aces.uiuc.edu/watershed/maps.html>

- **Indian boundary line:** Aside from a few roadside signs, the Indian Boundary Line is not physically marked on the landscape. The line runs slightly diagonally through the center of Big Grove Township. Despite its lack of physical visibility, future development around the Indian Boundary Line should be cognizant of the location and historical significance of the line.

**Transportation Network:** The transportation network shown on the Planning Issues Map includes arterial roads, major and minor collector roads, and a depiction of the scenic driving routes currently identified on the Kendall County Transportation Plan. Scenic driving routes provide passing motorists with attractive views of Big Grove Township's rural character. The features of the network were primarily identified from the Kendall County Transportation Plan, which was produced in August 1999. A few of the features of the network, particularly the identification of County Route 7 (Sheridan Road) as a minor collector road, were identified during the land use survey.

Each level of the four-level transportation network that traverses Big Grove Township is described in greater detail below:

- **Arterials:** State and federal routes typically act as the arterial roads which provide regional roadway access to, from, and within an area. In Big Grove Township, State Route 71 and Federal Highway 52 not only provide access within the township but also connect the township to the rest of Kendall County as well as LaSalle County on the west. Highway 52 currently takes two very sharp turns north of Lisbon. A realignment of this roadway to smooth out these curves is proposed as part of the future transportation system.
- **Major collectors:** Major collector roads, which typically are county roads, are intended to collect traffic from local roads and feed this traffic onto the arterial roads. Newark Road (County Route 4), Canal Street/Lisbon Road (County Route 5), and Townhouse Road (County Road 6) are identified as the township's major collectors.
- **Minor collectors:** A minor collector road is similar to a major collector road such that they are both generally used to collect traffic from local roads and feed this traffic onto arterial roads. However, minor collectors differ from their counterparts in the sense that major collectors assume a greater regional significance and connectivity. In addition, minor collectors are typically township roads. Woodman St/Apakesha Grove Road as well as Sheridan Road (County Route 7, located west of the Village of Newark) are identified as the township's minor collectors.
- **Local roads:** Local roads are typically residential streets or rural routes that provide direct access to homes and farms. Local residential roads are generally located in the Villages of Newark and Lisbon. Local rural roads such as Lisbon Center Road, White Willow Road, Fennel Road, Roods Road, and Scott School Road run throughout the township.

In addition to the Existing Land Use and Planning Issues Maps, the Location Map depicts Big Grove Township in the context of the larger regional transportation network as well as various neighboring communities in adjacent counties.

The Illinois Department of Transportation (IDOT) conducts periodic traffic counts on roadways throughout the state.

Figure 2 summarizes traffic counts in 1994 and 1998 for State Route 71, Federal Highway 52, and Townhouse Road. During the 5-year time period, all three roads experienced increases in traffic

**Figure 2**  
**Traffic Volumes on Major Roads**  
Big Grove Township

Segment	Traffic Volume		Change in Traffic Volume	
	1994	1998	Change	Percent
Route 71 (north of Newark)	5,600	6,700	1,100	19.6%
Route 71 (south of Newark)	4,600	5,700	1,100	23.9%
Route 52 (west of Townhouse Road)	1,100	2,050	950	86.4%
Route 52 (east of Townhouse Road)	1,000	1,750	750	75.0%
Route 52 (north of Lisbon)	1,500	1,800	300	20.0%
Townhouse Road (south of Route 52)	250	400	150	60.0%
Townhouse Road (north of Route 52)	450	500	50	11.1%

volume. Traffic counts on Highway 52 experienced the most significant increases in traffic volume. The effects of future developments on traffic counts on all three roads should be kept under consideration in order to minimize traffic issues. While current traffic volumes do not warrant major changes to the roadway capacity at this time, any new development should take into consideration future transportation needs and reserve appropriate right-of-way for future roadway improvements.

Based on Kendall County's 5-year capital improvement plan, the only capital road improvement project currently planned for Big Grove Township is the resurfacing of the portion of Lisbon Road located between Joliet Road and the south county line (Kendall-Grundy Counties). Completion is planned for 2002.



**Population Trends & Projections**

Over 96% of Big Grove Township is unincorporated land. The small portion of the township that is incorporated is part of the Village of Newark in the northwest or the Village of Lisbon in the southeast. The rural character of the township is clearly evident by the low population levels and the vast majority of land occupied by agricultural uses. Figure 3<sup>2</sup> summarizes the changes in population between 1990 and 2000 for Big Grove Township and the other eight townships in Kendall County. Figure 4<sup>3</sup> summarizes the changes in population between 1990 and 2000 for Big Grove Township and eight neighboring communities in Kendall and Will Counties.

Figure 3  
**Population Trends of Neighboring Townships in Kendall County**

Township	Population		Change in Population, 1990-2000		Growth Rate
	1990	2000	Net	Percent	1990-2000
Big Grove	1,438	1,526	88	6.1%	0.60%
Bristol	5,619	7,677	2,058	36.6%	3.17%
Fox	1,140	1,257	117	10.3%	0.98%
Kendall	3,399	4,636	1,237	36.4%	3.15%
Lisbon	786	851	65	8.3%	0.80%
Little Rock	7,083	7,662	579	8.2%	0.79%
Na-Au-Say	1,006	1,672	666	66.2%	5.21%
Oswego	18,095	28,417	10,322	57.0%	4.62%
Seward	847	846	-1	-0.1%	-0.01%
<b>Kendall County</b>	<b>39,413</b>	<b>54,544</b>	<b>15,131</b>	<b>38.4%</b>	<b>3.30%</b>

Figure 4  
**Population Trends of Neighboring Communities**

Community	Population		Change in Population, 1990-2000		Growth Rate
	1990	2000	Net	Percent	1990-2000
Big Grove Twp.	1,438	1,526	88	6.1%	0.60%
Minooka	2,605	3,971	1,366	52.4%	4.31%
Montgomery	4,614	5,471	857	18.6%	1.72%
Oswego	4,224	13,326	9,102	215.5%	12.18%
Plainfield	5,254	13,038	7,784	148.2%	9.51%
Plano	5,137	5,633	496	9.7%	0.93%
Sandwich	5,633	6,509	876	15.6%	1.46%
Shorewood	6,300	7,686	1,386	22.0%	2.01%
Yorkville	4,055	6,189	2,134	52.6%	4.32%

**Population trends within Kendall County:**

Aside from Seward Township which decreased in population between 1990 and 2000, Big Grove Township had the second smallest net change in population (88 new residents) but had the smallest percentage change in population (6.1%) and smallest growth rate (0.60%). These trends are not

too surprising in light of the overwhelming rural character of Big Grove Township. Over the 1990-2000 time period, Big Grove Township remained as the fourth smallest township in Kendall County.

**Population trends in neighboring communities:** In comparison to neighboring communities around Kendall and Will Counties, Big Grove Township experienced the smallest net and percentage changes in population (88 new residents and 6.1%, respectively) as well as the smallest growth rate (0.60%) over the 1990-2000 time period. Given the rural character of the township, its 2000 population (1,526 residents) was less than half the population of the second smallest community (Minooka at 3,971 residents).

<sup>2</sup>Source: U.S. Census Bureau: Profiles of Demographic Characteristics, Illinois 2000 and Population Estimates for Minor Civil Divisions.

<sup>3</sup>Source: U.S. Census Bureau: Profiles of Demographic Characteristics, Illinois 2000 and Population Estimates for Places.

It is important to note that Figures 3 and 4 are based on an overall county and regional perspective in which the rural townships (Big Grove, Lisbon, and Seward Townships) in southern Kendall County are compared with the moderately populous northern townships (Little Rock, Bristol, and Oswego Townships) and communities in northern Kendall County and Will County. Communities such as Yorkville, Oswego, and Plano in northern Kendall County are clearly more developed and populous than the southern section of the county, so relatively high population growth is expected in the former. However, the southern townships are not expected to experience large increases in population.

**Building permits for single-family homes:** Despite its rural character, the population growth of Big Grove Township can be assessed by determining the number of building permits issued over a certain period of time. In particular, annual counts for building permits for single-family homes reveal the number of new homes that are constructed. Figure 5<sup>4</sup> summarizes the number of building permits for single-family homes issued since 1996 for Big Grove Township<sup>5</sup> and ten neighboring communities. Although portions of the Villages of Newark and Lisbon are part of Big Grove Township, their building permit counts are kept separate from the building permit counts issued by Kendall County.<sup>6</sup>

Figure 5  
**Building Permits for Single Family Homes Since 1996**

Community	2000	Single Family Home Building Permits						
	Population	1996	1997	1998	1999	2000	2001	Total
Big Grove Twp.	1,526	3	2	1	6	8	1	21
Lisbon	248	1	1	0	0	2	0	4
Minooka	3,971	27	33	30	47	44	32	213
Montgomery	5,471	66	19	36	17	20	376	534
Newark	887	6	2	5	4	5	5	27
Oswego	13,326	257	308	391	401	513	314	2,184
Plainfield	13,038	287	229	528	772	602	470	2,888
Plano	5,633	19	8	7	5	10	6	55
Sandwich	6,509	39	25	42	46	38	30	220
Shorewood	7,686	78	107	99	93	101	43	521
Yorkville	6,189	93	54	50	82	127	116	522

Since November 1996, twenty-one single-family home building permits have been issued in Big Grove Township. Of those 21 permits issued, 8 were issued in 2000, which was the highest annual total between 1996 and 2000. However, only 1 permit has been issued all of this year. In comparison to moderately populated neighboring communities such as Montgomery and Plainfield, Big Grove Township has seen relatively

<sup>4</sup>Building permit figures for 2001 include the number of permits issued through October 2001. The number of permits for Big Grove Township is based on figures collected up to October 26, 2001. Sources: U.S. Census Bureau: Building Permits; Kendall County Department of Planning, Building, and Zoning: Single Family Home Permits in Big Grove Township.

<sup>5</sup>In Figure 5, the 2000 population for Big Grove Township includes Newark and Lisbon residents who reside within the township boundaries. However, building permit counts for Newark and Lisbon are kept separate from the permit counts for the parts of the township located outside the municipal boundaries of the two villages.

<sup>6</sup>Based on building permit counts provided by the Kendall County Department of Planning, Building, and Zoning, all 21 single-family home permits issued since November 1, 1996, were issued to properties outside the Newark and Lisbon municipal boundaries.

little issuance of building permits for single-family homes. This discrepancy can be partly attributed to the rural character of the township. However, when Big Grove Township is compared with other rural places such as Newark and Lisbon, the township has been issued a moderate amount of building permits over the past five years. In fact, unincorporated Big Grove Township has experienced over 5 times as many permits as incorporated Lisbon and only 6 less permits as the Village of Newark.

### **Utilities/Infrastructure**

In addition to the transportation network, the township's utilities infrastructure is composed of the electricity service and the water and sewer systems. A communication tower is also located within the township. The tower is situated northeast of the intersection of Stephen Road and Highway 52 in the western portion of the township.

**Electricity service:** Electrical power lines provided by Ameren, ComEd, and REA run in a north-south direction along the eastern edge of the township. A minor extension of power lines, which is located at the center of the township, runs eastward into neighboring Lisbon Township. Future development should be cognizant of the location of the power lines.

**Water system:** The Newark Village Water Department is the primary supplier of water. Based on figures compiled in May 2000<sup>7</sup>, the storage and treatment capacities of water for the department are 60,000 gallons/day and 30,000 gallons/day, respectively. Average daily water demand is 90,000 gallons/day. Currently, the water department does not have any excess capacity. An infiltration study may help improve the capacity of the water system by finding and fixing water leakages within the system. Expansion of the water system would require the construction of a new water tower.

**Sewer system:** The Newark Sanitary Plant is the primary handler of local sanitation. The plant currently handles a sewage load of 105,000 gallons/day, which comprises a bulk of the plant's treatment capacity of 110,000 gallons/day. The unutilized capacity of 5,000 gallons/day qualifies as excess capacity. Expansion of the sewer system would require a study of the types and sizes of new developments. In lieu of the overall sewer system, septic systems serve smaller lots in Lisbon.

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<sup>7</sup>Figures based on a community profile of Newark compiled in May 2000 by the Illinois Department of Commerce and Community Affairs.

# Location Map

## Big Grove Township

### Legend



Township



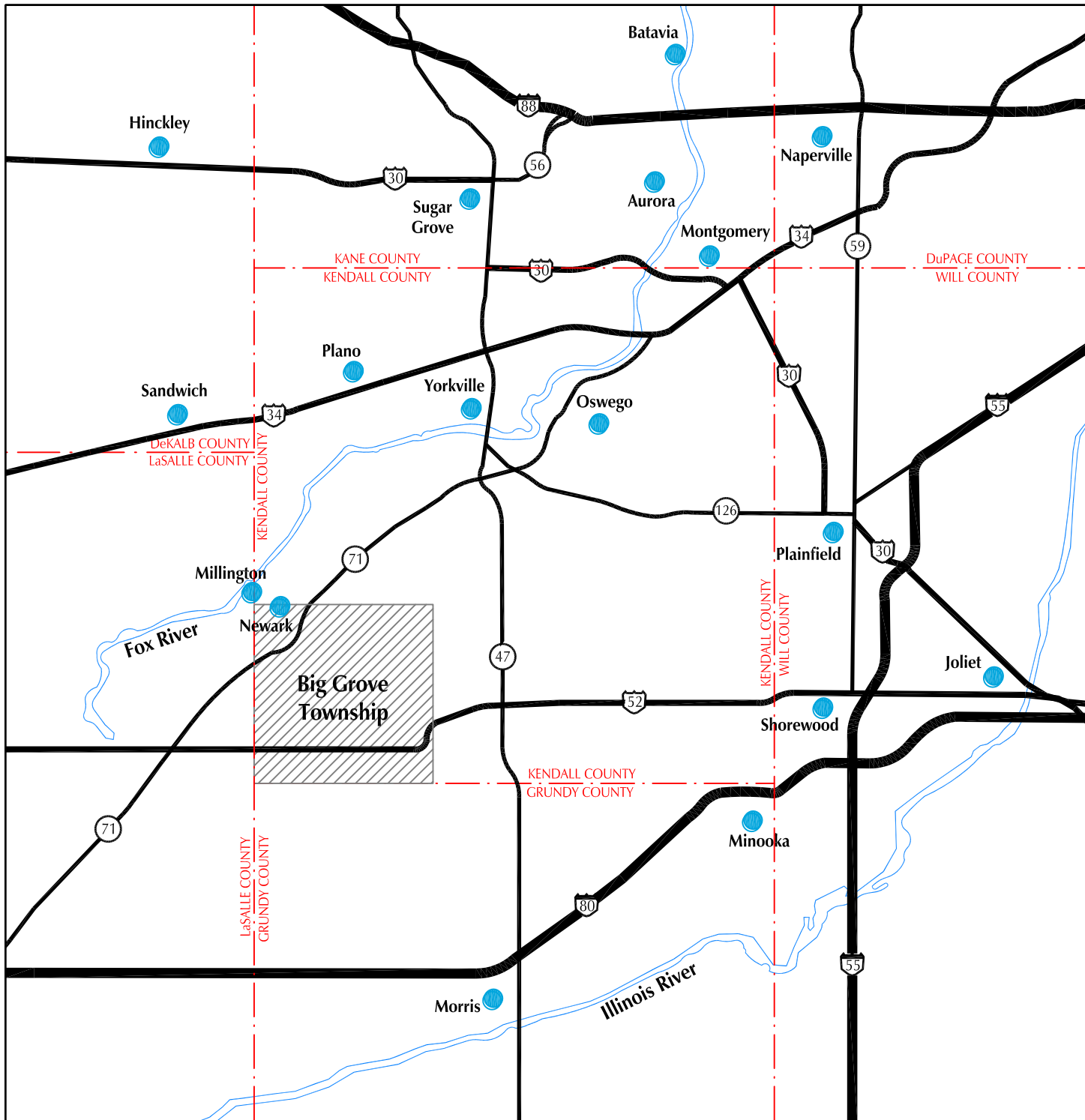
Neighboring Community



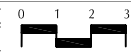
County Line

### Townships in Kendall County

Little Rock	Bristol	Oswego
Fox	Kendall	Na-Au-Say
Big Grove	Lisbon	Seward

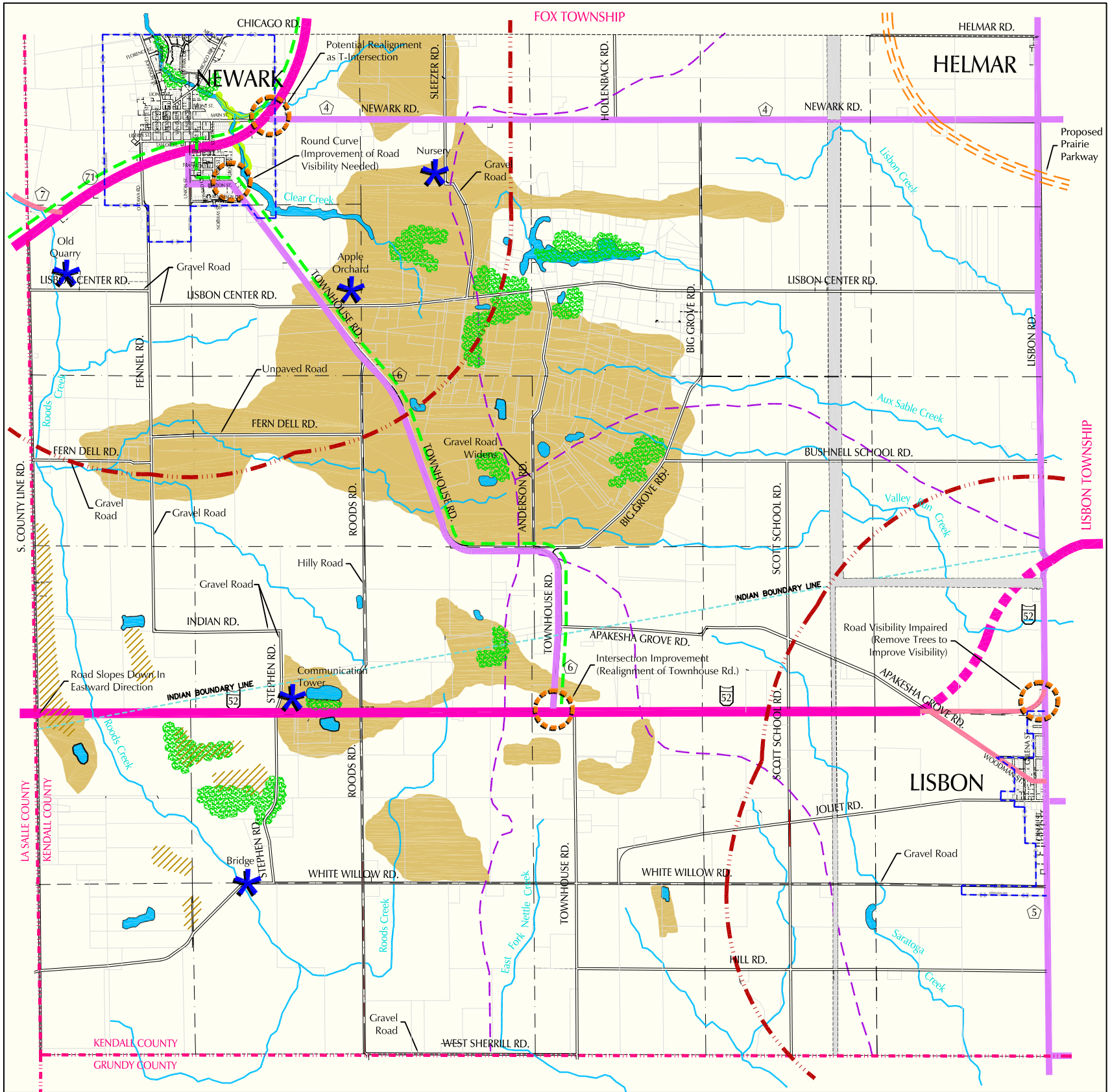


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Scale in Miles

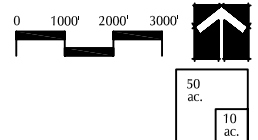




**LEGEND**

- |  |                          |  |                         |  |                             |
|--|--------------------------|--|-------------------------|--|-----------------------------|
|  | Existing Arterial        |  | Non-Productive Farmland |  | Municipal Boundary          |
|  | Proposed Arterial        |  | Wetland                 |  | Municipal Planning Boundary |
|  | Major Collector          |  | Floodplain              |  | County Line                 |
|  | Minor Collector          |  | Wooded Area             |  | Local Feature               |
|  | Scenic Route             |  | Steep Slope             |  | Future Road Improvement     |
|  | Indian Boundary Line     |  | Creek                   |  | Utility Right-Of-Way        |
|  | Proposed Prairie Parkway |  | Watershed Boundary      |  |                             |

March 2002



# Planning Issues

## Big Grove Township - Kendall County, Illinois

## **Goals and Objectives**

The following goals and objectives have been developed to guide the planning efforts towards the preparation of a comprehensive plan for Big Grove Township. Many of the goals reflect the general management goals outlined in Section 4 of the Kendall County Land Resource Management Plan (LRMP). The objectives listed under each goal address specific issues concerning the township.

**Goal 1:** Establish a mutually supportive, non-adversarial team of county, township, municipal, school, park, and other governmental bodies working towards the benefit of all residents in Big Grove Township.

### **Objectives:**

- A. Collaborate with county, municipal, and township officials to determine future land use patterns.
- B. Work with the Newark Village Water Department and the Newark Sanitary Plant to determine the need for potential expansion of water and sewer capacities to accommodate future developments.
- C. Ensure that future developments avoid the potential for conflicts between agricultural and non-agricultural uses.
- D. Conduct joint transportation project planning and development review to implement policies established in the Kendall County LRMP.
- E. Work with municipalities to develop boundary agreements based on logical service areas and compatibility with county, township, and municipal goals and objectives to avoid competitive annexations and pre-mature development.
- F. Adopt a comprehensive plan for Big Grove Township based on the Kendall County LRMP.

**Goal 2:** Use land resources in a manner sensitive to inherent environmental limitations.

### **Objectives:**

- A. Minimize negative impacts on productive farmland by directing development to farmland areas that are considered non-productive as well as areas immediately adjacent to existing communities.
- B. Maintain a continuous collection of agricultural uses by preventing the separation of agricultural uses by intermittent non-agricultural uses
- C. Reduce flooding and prevent development within flood plain and wetland areas.

- D. Provide vegetative buffers to enhance flood plain and wetland areas as well as to filter pollutants and sediments out of these environmental features.
- E. Conduct a Natural Resource Inventory (NRI) for all proposed single family homes and other larger developments located outside Newark and Lisbon.
- F. Continue to utilize the Land Evaluation Site Assessment (LESA) system as a tool to help evaluate all new development proposals.

**Goal 3:** Maintain a strong base of agriculture, commerce, and industry to provide a broad range of quality job opportunities, a solid tax base, and improved quality of services to township residents.

**Objectives:**

- A. Maintain the agricultural character of the township by supporting existing and attracting new farms and agricultural businesses.
- B. Enhance the quality of services provided by local businesses by catering to the needs and concerns of local business owners and local entrepreneurs.
- C. Work with the County Economic Development Commission to establish a campaign that helps attract potential businesses to locate within Newark. The size and focus of attracted businesses should be appropriate for the rural lifestyle of the township.
- D. Research the need for additional industrial uses in Newark to complement existing and potential agricultural and commercial uses.
- E. Consider the expansion of the schools in Newark and Lisbon in order to accommodate the need for additional space for their growing student bodies.

**Goal 4:** Establish an equally balanced pattern of compact, contiguous urban development, countryside residential, and agricultural environments to enhance the quality of personal and community life.

**Objectives:**

- A. Maintain the viability of agriculture in the township by promoting compact residential development and providing open space buffers between agricultural and residential uses. Such buffers will typically be established along natural drainage ways or existing roadways.
- B. Locate new developments near existing developed areas in order to minimize the loss of local environmental assets such as wetlands, productive soils, and the rural character of contiguous agricultural areas.

*Land Resource Management Plan - Big Grove Township*

- C. Encourage development to occur within or near Newark and Lisbon where adequate infrastructure and support services can most easily be provided.
- D. Maintain the small town atmosphere in Newark and Lisbon by controlling the rate of growth and the size of developments.
- E. Create a serene residential environment to which residents from larger neighboring communities would like to live in order to escape the hustle-and-bustle of highly-urbanized areas.
- F. Preserve scenic routes and vistas by maintaining contiguous stretches of farmland and open space, requiring thoughtful design and placement of landscape features, and requiring appropriately scaled building setbacks from the ultimate road right-of-way.

**Goal 5:** Ensure careful management of the quantity, quality, placement, and rate of housing development to provide for the efficient use and conservation of the township's natural and public resources.

**Objectives:**

- A. Encourage residential growth where development can be adequately served by public roads, utilities, and other services.
- B. Encourage cluster development which integrates the natural character of the land with creative planning and design to blend new development into the existing environment.

**Goal 6:** Improve major transportation routes to facilitate travel within the township as well as travel to and throughout the surrounding region.

**Objectives:**

- A. Monitor the size and peaks of traffic along major routes (e.g. Route 71 and Highway 52) as development around the township increases in order to control traffic issues in a prudent and efficient manner.
- B. Realign Highway 52 north of Lisbon to eliminate dangerous curves.
- C. Continue to plan for the proposed Crimmins Road extension.



## Future Land Use & Transportation Plan

### Transportation Issues

As mentioned in the Situation Audit, the only short-term road improvement project planned for Big Grove Township is the resurfacing of the segment of Lisbon Road located between Joliet Road and the south county line (Kendall-Grundy Counties). According to Kendall County's 5-year capital improvement plan, completion of this resurfacing project is slated for later this year.

Although they are not planned in the county's 5-year capital improvement plan, the following road improvements have been proposed:

- Improvement of road visibility along Townhouse Road at the curved intersection with Benton Street (southeast Newark). [*A sharp curve currently reduces road visibility.*]
- Realignment of the intersection of Newark Road with Route 71 as a T-intersection (eastern section of Newark). [*A T-intersection would create a safer driving environment at this key intersection, especially if development occurs around it.*]
- Realignment of two separated segments of Townhouse Road presently intersected by Route 52 (center of the township). [*Route 52 currently offsets the northern and southern segments of Townhouse Road.*]
- Improvement of road visibility along the curved transition between Route 52 and Lisbon Road (north of Lisbon). [*A patch of trees currently obscures road visibility.*]

In addition to these road improvements, the following major road construction projects are currently under consideration:

- Smoothing of Route 52 at the eastern section of the township (north of Lisbon) to eliminate existing tight curves.

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## **Land Use Issues**

### **Future Land Use Plan**

The Future Land Use Plan represents the allotment of land uses that would accommodate projected population growth as well as potential development that may occur in Big Grove Township over the next 20 years. The plan was the product of the following three-step process:

1. **Existing land use plan**: An existing land use plan was produced based on a land use survey conducted on September 27, 2001. Interpretation of aerial photographs contributed to the production of the existing land use plan. In October 2001, the plan was submitted to the advisory committee for review. The existing land use plan was then revised based on comments and observations from the advisory committee.
2. **Conceptual future land use plans**: Two conceptual future land use plans were developed to reflect the amount of land needed to accommodate projected populations at two different rates of population growth (20% and 60%) by the year 2022. The two population projections were based on the following factors:
  - The 20% population growth projection reflects the likely growth scenario for Big Grove Township, given its past growth trend.
  - The 60% population growth projection reflects a pattern of growth that Big Grove Township would experience if it develops at a similar rate as larger neighboring communities such as Plainfield.
  - For both growth projections, the residential land uses depicted on the maps were placed in general areas to demonstrate the amount of land needed to accommodate anticipated population growth. Thus, the residential land uses do not reflect the exact locations of future developments, only land densities. Furthermore, some residential uses will most likely be in-fill developments in existing neighborhoods, which is difficult to clearly depict on a general land use map.
  - In addition, the locations of commercial and industrial land uses for both growth projections are more specific due to the layout of the local road network, the locations of existing commercial and industrial sites, and Newark's Comprehensive Plan.

The two conceptual future land use plans were presented to the advisory committee in January 2002. Overall, the advisory committee seemed more receptive to the 60% population growth scenario than the 20% scenario. Comments and revisions from the advisory committee were then used to shape the recommended future land use plan.

3. **Future land use plan**: The future land use plan reflects anticipated population growth projection and incorporates the comments and revisions from the January advisory committee review. Although a majority of the advisory committee stated that they would

prefer most development to remain within the municipal boundaries of Newark and Lisbon, the future land use plan displays the potential for some development outside Lisbon at the Village's request. The advisory committee has voiced the following concerns and observations:

- The adequacy of sewer capacity within Newark and Lisbon is the primary issue facing future developments within and near the two villages.
- Locating most developments depends greatly on the accessibility of water and sewer service.
- Impact fees on schools and parks.
- Residential developments located outside the two communities should be minimized to prevent the construction of isolated subdivisions that have no link to either of the two municipalities.

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### **Land Use Categories**

All recommended residential densities described below are based upon the gross buildable acreage of a given parcel of land. The gross buildable portion of the land is determined by subtracting those areas of the property that are not suitable for development. These areas include floodplains, wetlands, and land in permanent easements or right-of-ways.

The land use categories described below are illustrated on the Future Land Use Plan.

**Agricultural.** Intended primarily to encourage farming and agricultural businesses and to protect the existing open space character of rural areas, the Agricultural land use category is designed to provide for continued agricultural use. Residential use shall generally not be permitted unless it is directly associated with the operation of a local firm.

**Planned Rural Residential.** *(Not to exceed .65 dwelling units per gross buildable acre; a density bonus to increase the maximum density up to .85 du/ac may also be granted.)* The Planned Rural Residential land use category promotes large-lot, low-density detached single-family residential development. This land use category is generally consistent with the County's RPD-2 zoning district, permitting a base density of 0.45 du/ac and a maximum density of 0.65 du/ac. Planned development and clustering are strongly encouraged within this category to preserve the natural features of the land such as topography and vegetation. Lot size may be varied with a planned development, but the overall density should be within the guidelines established in this plan. An additional density bonus up to 0.85 du/ac may be granted if a proposed development: (1) is partially or entirely located within 100 ft of a Class A Stream (as defined by IDNR) or its tributaries, or (2) utilizes both community septic and community water services. The district provides a semi-rural or countryside setting, retaining a greater amount of open space. Compatible governmental, educational, religious, and recreational uses also may be permitted in these areas. Public water should be provided where practical. Planned Rural Residential uses are

primarily proposed at the outer fringe of municipalities. The only areas planned for Planned Rural Residential use in Big Grove Township are areas bordering outside Newark's municipal boundary.

**Suburban Residential/Contiguous Growth Area.** (Not to exceed 1.00 dwelling unit per gross buildable acre.) This land use category promotes a residential character of low density residences consistent with the character of the adjacent community. Higher municipal densities are appropriate near Newark on lots where adequate public sewer and water systems exist or can be made available. While anticipated to contain primarily single family detached housing, some attached housing units may be considered, particularly within a planned development. Compatible governmental, educational, religious, and recreational uses also may be permitted in these areas. If developed under County zoning authority, development should occur under the RPD-3 zoning regulation. The overall County LRMP also classifies the suburban residential use category as Contiguous Growth Area, which are areas surrounding existing urbanized communities that provide opportunities for growth with access to municipal services.

**Commercial.** The Commercial land use category provides for office and retail establishments that offer goods and services in easily accessible locations. The purpose is to provide for commercial uses which are oriented to the automobile. These uses are mainly concentrated along Route 71. Some commercial uses are located near the residential neighborhoods and a few are even located outside municipal boundaries.

**Public/Institutional.** The Public/Institutional land use category applies to those lands where existing or proposed federal, state, or local governmental activities are conducted. Also included are public and private educational and other non-profit organization facilities. A church or a nursing home are two examples of institutional uses. The only major new public use depicted on the Future Land Use Plan is the property at the northeast corner of Newark which is owned by the Newark School District.

**Public Open Space.** The Public Open Space land use category includes all Forest Preserve and Park District public open space and recreation facilities such as parks, nature preserves, bike trails, picnic areas and other recreation facilities. The land use category also recognizes land that act as a landscaped buffer between incompatible uses. For example, the Future Land Use Plan shows a landscaped open space between the suburban residential use and industrial use along the western edge of Newark.

**Private Open Space.** The Private Open Space land use category identifies lands that are sensitive to development containing unique environmental characteristics that should be preserved. These characteristics include: wetlands, floodplains, significant tree coverage, and prairies. These areas also provide the County with such natural functions as flood storage and conveyance, pollution control, and wildlife habitats. Conservation easements, land trusts and other preservation techniques are encouraged to protect these valuable open space assets.

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**Land Use/Population Projections**

Figure 6 summarizes the Future Land Use Plan and the resulting population projections<sup>8</sup> under the presumption that all land designated for residential use is developed. To calculate the population projections at the selected 60% population growth scenario, an average of 2.85 persons per household was assumed based on 2000 U.S. Census statistics for Big Grove Township. Big Grove Township is comprised of approximately 22,123 acres of land<sup>9</sup>. The County envisions limited opportunities for any new residential development within its zoning authority. One particular opportunity is potential development of a section of land located northwest of the Village of Lisbon and bounded by Apakesha Grove Road and Route 52. New residential developments located within the respective planning areas of Newark and Lisbon will likely be annexed into those municipalities.

The bottom portion of Figure 6 summarizes the projected holding capacities of the township. Holding capacity measures the population that land is able to support if all land that *can be* developed for residential uses *is* developed as such. The County’s holding capacity of 2,687 acres can accommodate 7,654 residents. In addition, Newark and Lisbon have 794 acres of land available, which can support approximately 6,784 residents. The entire township has the potential hold capacity of 14,438 residents, provided that the Future Land Use Plan develops as depicted on the map.

Figure 6 Future Land Use Areas/Population Estimates Big Grove Township			
Land Use Category	Acres	Percent of Total	Estimated Population
Agriculture	18,649.4	81.4%	197
Planned Rural Residential	200.8	0.9%	372
Suburban Residential/Contiguous Growth Area	2,485.8	10.8%	7,085
Commercial	179.9	0.8%	-
Public/Institutional	65.0	0.3%	-
Public Open Space	183.1	0.8%	-
Private Open Space	114.6	0.5%	-
Municipalities (Newark & Lisbon)	793.4	3.5%	-
Utility Right-Of-Way	244.1	1.1%	-
<b>TOTAL, County Zoning Control</b>	<b>22,916.1</b>	<b>100.0%</b>	<b>-</b>
<b>TOTAL Projected Holding Capacity</b>			
County Zoning Control	2,686.6	-	7,654
Municipal Control (Newark & Lisbon)	793.4	-	6,784
<b>TOTAL Capacity (Big Grove Township)</b>	<b>3,480.0</b>	<b>-</b>	<b>14,438</b>

<sup>8</sup>Based on 60% population growth in the next 20 years.

<sup>9</sup>Not including land within Newark and Lisbon.

*Land Resource Management Plan - Big Grove Township*

Residential densities varied as illustrated on the Future Land Use Plan and outlined in the previous section (land use categories). The Future Land Use Plan was developed to provide sufficient land area to accommodate the amount of population growth projected for the year 2022. Since the population projection is based on the type of growth experienced by larger neighboring communities, the amount of residential use depicted on the plan is most likely greater than the amount that would realistically be built.

## **Implementation Strategy**

In order to successfully implement transportation and land use strategies outlined in this plan, Kendall County must work alongside with Newark, Lisbon, and the rest of the township. Although each entity is responsible for carrying out its own implementation steps, the implementation must still be guided by intergovernmental cooperation to ensure that different steps either complement each other or avoid conflicts with each other. Implementation action steps are divided into steps completed by the county and steps carried out by the township and its municipalities. In addition, guidelines for the production of effective transition spaces between residential and agricultural uses are outlined.

### **County Action Steps**

- Replace the Big Grove Township Summary in the Kendall County LRMP with this Land Resource Management Plan.
- Reserve appropriate right-of-way during plat review for proposed road improvements depicted on the Future Land Use Plan.
- Install roadside pull-off stops and interpretive signs along the scenic routes of Route 71 and Townhouse Road.
- Implement a notification and recognition program to identify and acknowledge landowners who have protected the County's environmental and scenic assets. Recognition should only be made with the landowner's permission, but can create a sense of pride and renewed commitment to resource protection.
- Work with property owners and IDOT along the proposed Prairie Parkway and other proposed road improvements throughout the township to coordinate land use and roadway design standards.
- Encourage new residential developments to locate within municipal boundaries to prevent the construction of isolated subdivisions that have no link to any local municipality.

### **Municipal/Township Action Steps**

- Maintain an intergovernmental agreement with Kendall County to promote continued joint planning and cooperation.
- Encourage new residential developments to locate within municipal boundaries to prevent the construction of isolated subdivisions that have no link to any local municipality.

- Pursue a major private development and grant to expand sewer capacity in Newark to maintain a sufficient supply of sanitation service for future developments.

**Residential/Agricultural Transition Guideline**

The following guidelines are appropriate for both County and municipal adoption to promote a more effective transition between residential and agricultural uses.

- Utilize existing streams, roadways, hedgerows, and other physical barriers to provide a separation between agricultural uses and new residential developments.
- Continue or expand the practice of notifying new homeowners that they are moving into an agricultural area where they can expect some inconveniences (e.g. late/early operation of farm machinery, slow-moving vehicles on the road, etc.).
- Promote the use of cluster subdivisions which provide open space buffers between homes and agricultural land.
- Consider requiring all residential dwellings to be set back at least 150 feet from the property line of land that is actively used for agriculture prior to issuance of a building permit.