# **TOWNSHIP SUMMARY**

# SECTION NINE

LISBON & SEWARD TOWNSHIPS

### Introduction -

#### Purpose

In March 1994, Kendall County adopted a Land Resource Management Plan (LRMP) which helps guide 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. A general timeline of township planning in Kendall County is shown below.

- 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 in October 1998.
- The second township plan was prepared for Big Grove Township and was adopted in March 2002.
- Little Rock, Bristol, and Oswego Townships comprised the collective Northern Three Townships, which was the next group of townships for which a land resource management plan was developed. The Northern Three Townships LRMP was adopted in June 2003.
- An update to the township plan for Na-Au-Say Township, particularly along the East Route 126 Corridor, was prepared to reflect current growth and development trends. This update illustrates how the County LRMP and the individual township plans have a dynamic quality that allows them to be updated as growth and development trends change and other influential factors dictate (e.g. consideration of new roadways such as the Prairie Parkway and the WIKADUKE Trail). The Na-Au-Say Township LRMP update was adopted in March 2004.
- A combined land resource management plan was developed for Fox and Kendall Townships with a particular focus on the Community of Millbrook. Kendall County plans to provide planning assistance to unincorporated Millbrook, particularly with review of future development and general land resource management. The Fox and Kendall Townships LRMP was adopted in March 2005.

The County selected Lisbon and Seward Townships as the next set of townships for which to develop a land resource management plan based on local interests. This will be the first LRMP for Lisbon Township and an update to the LRMP for Seward Township.

### **Planning Process**

One of the primary reasons for adopting the County LRMP was to promote intergovernmental cooperation.

### **Summary of Planning Process**

Process	Description
Background Analysis	Interviews with key stakeholders, trends analysis including traffic and population, mapping of existing municipal plans and key environmental features, and preliminary land use concepts.
Meetings	Concept review with Ad Hoc Committee.
Township Workshops	Two workshops, one in Lisbon Township on August 3 <sup>rd</sup> and one in Seward Township on August 4 <sup>th</sup> , were conducted to review background analysis and present preliminary land use concepts and alternatives.
Revisions & Document	Based on community input, the plan will be revised and
Preparation	supporting text and tables developed.
Meeting	The draft document was reviewed with the Ad Hoc Committee on August 31 <sup>st</sup> , 2005. The draft was also reviewed with RPC, the PBZ Committee of the County Board, and both townships.
Revisions	The plan was revised based on County input.
Meetings	The revised plan was reviewed with the Ad Hoc Committee prior to the Public Hearing on October 5 <sup>th</sup> and November 4 <sup>th</sup> , 2005.
Public Hearing	A Public Hearing was conducted by the RPC on November 14 <sup>th</sup> , 2005. Recommendation acted on December 7 <sup>th</sup> , 2005.
PBZ Committee Meeting	The plan recommended by the RPC was then reviewed with the PBZ Committee on December 12 <sup>th</sup> , 2005.
County Board Approval	The plan was then reviewed and adopted by the full County Board on December 20 <sup>th</sup> , 2005.
Integration into overall LRMP	Revisions based on the detailed plans for Lisbon and Seward Townships will be integrated into the overall County LRMP.

### Situation Audit -

#### Overview

Preparation of a comprehensive plan for Lisbon and Seward Townships requires a thorough and clear understanding of the local planning issues in the two townships. In particular, the population and housing trends, land use structure, environmental features, and transportation network of the two townships all have an impact on planning for future growth and development. This Situation Audit addresses these planning issues based on the analysis of information gathered from a land use survey, township workshops, and other sources.

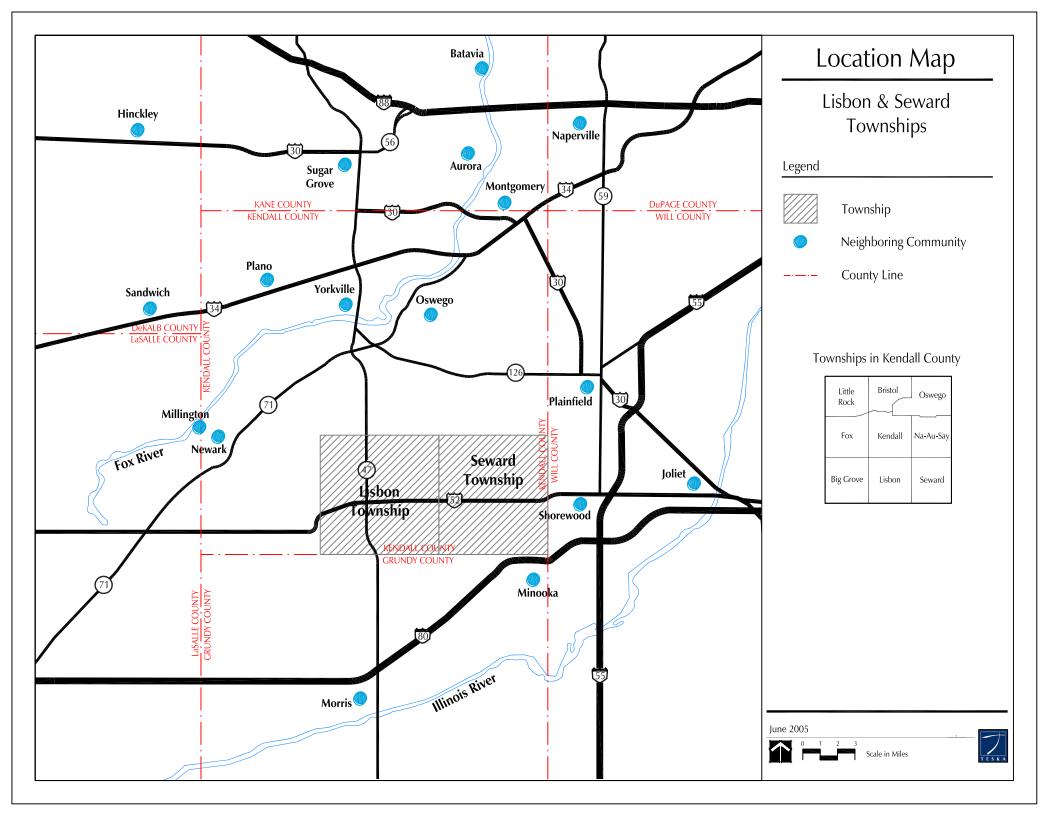
The Situation Audit is organized as follows:

- Public Comments from Township Workshops
- Location Map
- Population Trends
- Existing Land Use (Existing Land Use Map)
- Environmental Issues (Planning Issues Map)
- Transportation Issues (Planning Issues Map)
- Public Facilities & Utilities
- Draft Goals and Objectives

#### Public Comments from Township Workshops

On August 3<sup>rd</sup> and 4<sup>th</sup>, 2005, township workshops were held to present the goals and objectives of the planning process as well as draft future land use recommendations. Residents generally were pleased with the draft plan. Comments and suggestions included:

- Focus on conservation design and innovative stormwater management
- Desire for additional development opportunities on the south side of Lisbon
- Interest in possible incorporation of Plattville
- Interest in and concern for a possible mining district near Lisbon
- Desire to link open space areas to form complete loops for connection of natural systems and corridors



#### **Population Trends**

Collectively, Lisbon and Seward Townships have a predominantly rural character with small portions of three municipalities and scattered residential, commercial, industrial, and agriculturerelated uses located throughout the townships. The two townships also have fairly similar population sizes and growth patterns. The 2000 Census indicates that Lisbon and Seward Townships had almost identical populations of 851 residents and 846 residents, respectively. Despite their strikingly similar 2000 populations, Lisbon Township experienced а population growth of 8.3% from 1990-2000 while Seward Township experienced a population decrease of 0.1%. More recently, though, the two townships had a reversal in population growth from 2000-2003 with the population of Seward Township growing to 952 residents (12.5% and Lisbon increase) Township 909 residents growing to (6.8% increase) [Note: 2003 population estimates based on births, deaths, and migration]. This trend is expected to continue with a potentially larger disparity in population growth due to new residential developments under

Population Trends of All Townships in Kendall County

-	-		Populatio	n Change			
-		Population			1990-2003		
Township	1990	2000	2003 *	Change	Percent		
Na-Au-Say Township	1,006	1,672	4,032	3,026	300.8%		
Oswego Township	18,095	28,417	34,976	16,881	93.3%		
Bristol Township	5,619	7,677	9,585	3,966	70.6%		
Kendall Township	3,399	4,636	5,479	2,080	61.2%		
Lisbon Township	786	851	909	123	15.6%		
Fox Township	1,140	1,257	1,313	173	15.2%		
Big Grove Township	1,438	1,526	1,634	196	13.6%		
Seward Township	847	846	952	105	12.4%		
Little Rock Township	7,083	7,662	7,685	602	8.5%		
Kendall County	39,413	54,544	66,565	27,152	68.9%		

Population Trends of Local & Neighboring Communities in Kendall County

-	U	U	Populatio	n Change	
		Population		1990	-2003
Community	1990 2000 2003 *		Change	Percent	
Communities within Lisbon	Township				
Lisbon	225	248	247	23	10.2%
Communities within Seware	dTownship				
Joliet	78,585	106,221	123,570	27,636	35.2%
Minooka	2,605	3,971	4,706	1,366	52.4%
Local & Neighboring Comm	Local & Neighboring Communities in Kendall County				
Aurora	100,279	142,990	162,184	42,711	42.6%
Boulder Hill (subdivision)	8,894	8,169	-	-725	-8.2%
Millbrook	287	287	288	0	0.0%
Millington	500	458	458	-42	-8.4%
Montgomery	4,614	5,471	8,699	857	18.6%
Newark	840	887	938	47	5.6%
Oswego	4,224	13,326	18,521	9,102	215.5%
Plainfield	5,254	13,038	20,162	7,784	148.2%
Plano	5,137	5,633	5,576	496	9.7%
Sandwich	5,633	6,509	6,820	876	15.6%
Yorkville	4,055	6,189	8,116	2,134	52.6%

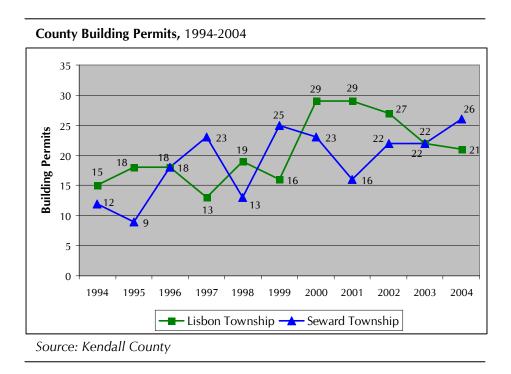
\* Note: 2003 Population Estimates start with the 2000 Population and estimate populations for each subsequent year using data for births, deaths, and migration.

Source: U.S Census Bureau.

construction or planned within Joliet and Minooka in Seward Township. The table above illustrates the population trends for Lisbon and Seward Townships and the surrounding area.

#### **Building Permits**

Evaluating trends in the number of building permits issued by the County is another way to assess population growth. The graphic on the next page illustrates the number of building permits issued between 1994-2004 for Lisbon and Seward Townships. The permit counts account for the building permits issued for properties located within County jurisdiction but not within incorporated areas. The number of building permits issued within Lisbon Township increased steadily from 1994 to 2001 with a steady decrease in the last few years. On the other hand, the number of building permits issued within Seward Township has been fairly sporadic with a low of 9 permits in 1995 and a high of 26 in 2004. It is important to note that a few new developments (e.g. Lakewood Prairie, Sable Ridge, etc.) are under construction within Joliet and Minooka in eastern Seward Township. These developments will have an impact on how Seward and Lisbon Townships develop.



#### Affordable Housing

The Affordable Housing Planning and Appeal Act (Public Act 93-595), which went into effect on January 1, 2004, is intended to encourage Illinois municipalities and counties to provide a sufficient amount of affordable housing in their communities. Under the Act, all municipalities and counties that do not provide sufficient affordable housing are required to adopt an affordable housing plan. Based on formulas, factors, and definitions stated in the Act, <u>municipalities and counties with less than 10% affordable housing are required to incorporate more affordable housing into their communities.</u> The City of Joliet, Village of Lisbon, and Village of Minooka each have a segment of its incorporated land within the boundaries of Lisbon and Seward Townships. <u>All three incorporated communities adhere to the 10% minimum requirement and are thus exempt under the Act</u>. In particular, the percentage of total housing units devoted to affordable housing for Joliet, Lisbon, and Minooka is 63.9%, 62.2%, and 23.0%, respectively.

In addition to the housing units located within incorporated areas, it is important to evaluate the housing units located within unincorporated areas, which make up the "balance" of the county. The balance of Kendall County devotes about 32.5% of its total housing units to affordable housing. Although this percentage cannot be reduced further at the township level, the 32.5% figure is a good indicator that Kendall County on the whole provides a sufficient amount of affordable housing to its citizens living in unincorporated areas. The balance of neighboring Will County has a comparable affordable housing percentage of 29.9%. The balance of Grundy County neighboring to the south has a higher affordable housing percentage of 45.8%. Kane and DuPage Counties both have affordable housing percentages lower than 20%. Not surprisingly, the counties located on the outermost fringe of the Chicago metropolitan area (Grundy and LaSalle Counties) have considerably higher affordable housing percentages. Relative to all counties within or on the fringe of the Chicago metropolitan area, Kendall County's affordable housing percentage is about average.

#### **Existing Land Use**

An existing land use survey was conducted on April 25, 2005, to assess current development patterns and record other existing conditions in Lisbon and Seward Townships. In particular, existing land uses, notable environmental features, and other local characteristics were identified within the two townships. Each township is also comprised of incorporated and unincorporated communities. Lisbon Township includes the eastern portion of the Village of Lisbon as well as the unincorporated hamlets of Helmar, Lisbon Center, and Plattville. Seward Township includes a western portion of the City of Joliet and a northwestern portion of the Village of Minooka. The existing land use survey was supplemented by interpretations of aerial photographs. The existing land use data collected from the two identification methods are illustrated on the Existing Land Use Map. The figure below summarizes the acreage and composition of existing land uses in the Lisbon and Seward Townships.

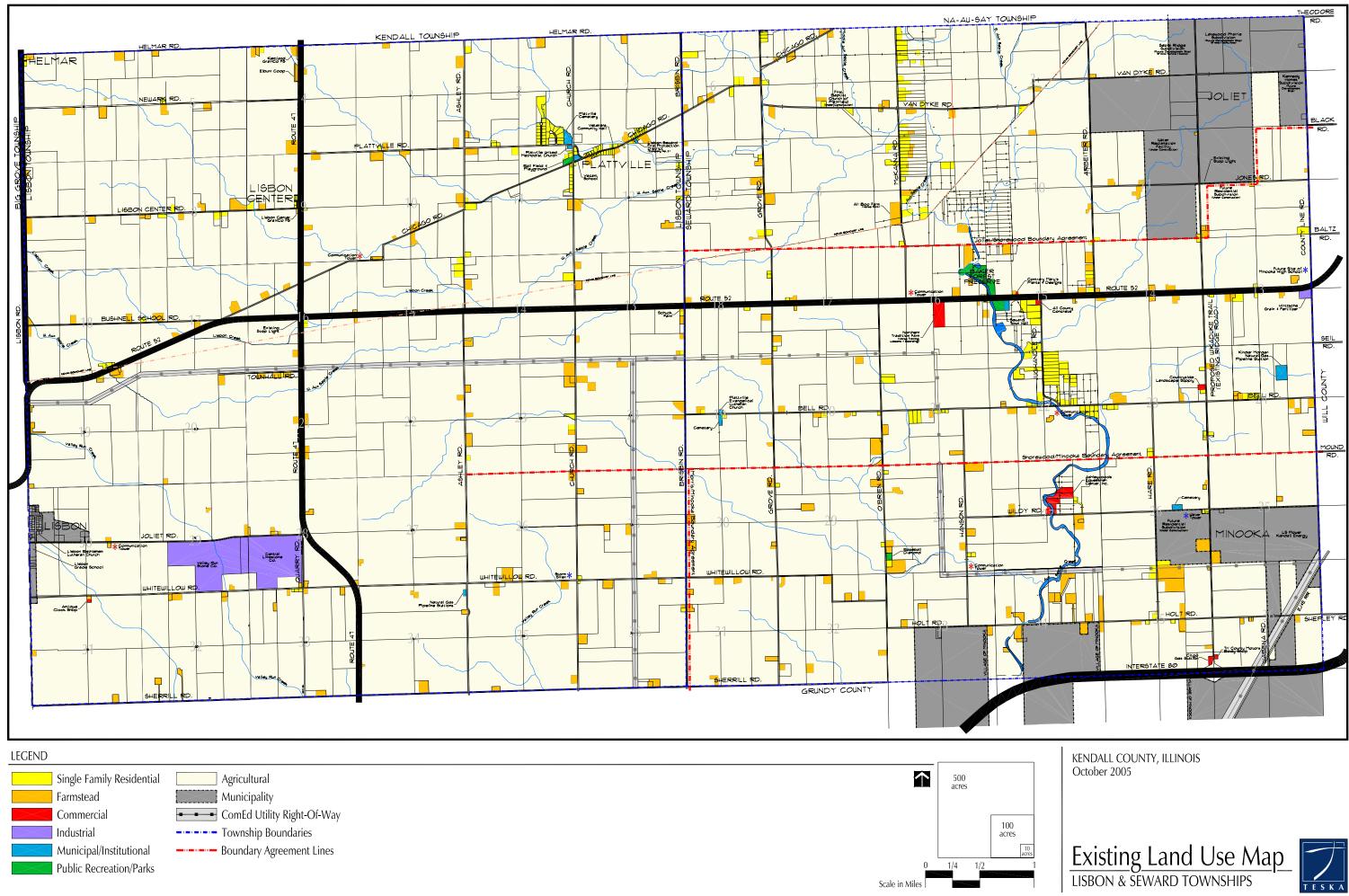
	Lisbon Twp		Seward Twp		Total	
	Area	Percent of	Area	Percent of	Area	Percent of
Land Use	(acres)	Total	(acres)	Total	(acres)	Total
Single Family Residential	136.7	0.6%	311.2	1.4%	447.9	1.0%
Farmstead	438.0	1.9%	526.4	2.3%	964.4	2.1%
Commercial	1.5	0.01%	42.1	0.2%	43.6	0.1%
Industrial	248.6	1.1%	5.9	0.03%	254.5	0.6%
Municipal/Institutional	10.0	0.04%	17.6	0.1%	27.6	0.1%
Public Recreation/Parks	2.9	0.01%	57.9	0.3%	60.8	0.1%
Utilities	312.3	1.3%	154.8	0.7%	467.1	1.0%
Municipalities	101.7	0.4%	1,908.5	8.5%	2,010.2	4.4%
Agricultural	22,127.5	94.6%	19,532.0	86.6%	41,659.5	90.7%
TOTAL	23,379.2	100.0%	22,556.4	100.0%	45,935.6	100.0%

#### **Existing Land Use Areas**

Lisbon & Seward Townships

Agricultural uses comprise approximately 91% of the land within the two townships. Residential uses comprise only 3% of the land within the two townships. Non-residential uses each comprise 1% or less of total land within the two townships. Commercial uses are generally small businesses, agricultural-related businesses, and horse training/boarding facilities. Only two industrial uses operate within the two townships but they are fairly substantial in size and activity. Central Limestone Company and Valley Run Stone Company each operate a stone quarry in Lisbon Township just east of Lisbon and west of Route 47. Hintzsche Grain & Fertilizer bases one of its agricultural operations in Seward Township just north of Minooka.

Churches and cemeteries comprise the municipal/institutional uses in the two townships. Public recreation/park uses within the two townships include small recreational ball fields and the Baker Forest Preserve, which is located along the Aux Sable Creek in Seward Township. The Village of Minooka is developing a large park and regional detention facility on the east side of the Aux Sable Creek between Holt Road and I-80. This facility is planned to serve as a model for future regional stormwater management.



#### **Environmental & Transportation Characteristics**

The Planning Issues Map depicts the environmental features and transportation network of Lisbon and Seward Townships. Planning for the two townships requires close examination of these environmental and transportation characteristics to ensure that potential growth and development are compatible with local features and have minimal impact on environmentally sensitive elements.

#### **Environmental Features**

The environmental features represented on the Planning Issues Map include floodplain, non-productive farmland, wooded areas, wetlands, creeks, and watershed boundaries. Most of these features were identified from the Kendall County Environmental Factors Map, which was produced in December 1992. Some features such as scenic views were identified via observations from the existing land use survey. Key issues relating to these environmental features are noted below.

- Floodplain. A major floodplain follows along the Aux Sable Creek which runs in a north-south direction through the center of Seward Township. Another major floodplain follows along the W. Aux Sable Creek which runs in a southwesterly direction from the north-central section of Seward Township towards the west-central section of Lisbon Township. A third major floodplain follows along the Valley Run Creek which runs in a southeasterly direction in the southwest corner of Lisbon Township. In addition to the major floodplains, smaller "finger" floodplains extend from these larger floodplains. The City of Joliet has completed an extensive study of a portion of this creek and has filed to amend the floodplain limits.
- <u>Non-Productive Farmland</u>. About 90% of the two townships is covered by agricultural uses; however, a small percentage of the agricultural land is considered less productive farmland due to soil and topographic conditions that make the land less favorable for farm production. Despite the non-productive identification, most areas are still used for agriculture. In Kendall County, this classification categorizes land that is not considered prime farmland.
- <u>Wooded areas</u>. The wooded areas depicted on the Planning Issues Map only represent wooded areas that cover 1 acre or more. There are many other small patches of trees scattered throughout the township, but each patch covers less than an acre of land. All wooded areas, regardless of size, should be identified as development activity warrants.
- <u>Wetlands</u>. Various wetlands are located throughout the two townships. Site-specific wetland surveys should be conducted as development activity warrants to accurately identify the shape and location of wetlands. New developments should be sensitive to wetlands.
- Creeks and Watersheds. A variety of creeks run through Lisbon and Seward Townships. The Aux Sable Creek is the most prominent creek in the area due to its path through the Baker Forest Preserve and the natural amenity it provides to creek-side homes and agricultural uses. Sections of the Aux Sable Creek are assigned a Class A rating by the Illinois Department of Natural Resources, classifying the creek as a unique aquatic resource comparable to a stream without human disturbance. In general, the locations of creeks and watershed boundaries are critical for stormwater management and wildlife habitats. Such natural features are also relevant to planning sanitary sewer systems.

• <u>Scenic Views</u>. The rolling topography of the two townships provides various scenic views. Some views offer wide vistas of the County's natural landscape and rural character. Other scenic views offer a visual corridor along a roadway, some enhanced by tree canopies.

#### Transportation Network

The transportation network for Lisbon and Seward Townships is comprised of a system of major and minor roads, including two major proposed regional roadways. In addition to an expressway, arterial roads, and major collector roads, Lisbon and Seward Townships will be served by the proposed Prairie Parkway and WIKADUKE Trail. The features of the network were primarily identified from the Kendall County Transportation Plan, which was produced in August 1999 and has been updated regularly. Each level of the transportation network that traverses Lisbon and Seward Townships is described in greater detail below.

- <u>Expressways</u>. Federal highways are typically categorized as expressways and provide regional roadway access within an area as well as interstate access across the country. **Interstate 80**, which runs through the southeast corner of Seward Township, is the only existing expressway within the two townships. One interchange is provided at Ridge Road. Grundy County is also hoping to add another interchange on I-80 at a location mid-way between Ridge Road and the existing Route 47 interchange in Morris.
- <u>Arterial Roads</u>. State and federal routes typically act as the arterial roads providing regional roadway access to, from, and within an area. The two townships are served by three existing and one proposed arterial roads. Route 52 is an east-west arterial providing access within the two townships as well as to Big Grove Township to the west and Will County to the east. Route 47 is a north-south arterial providing access within Lisbon Township as well as to Kendall Township to the north and Grundy County to the south. County Line Road is another north-south arterial which separates Kendall County from Will County to the east. The proposed WIKADUKE Trail, which is described in greater detail below, is intended to be a limited access arterial traveling along Ridge Road and serving as a regional north-south connection between I-88 and I-80.
- Major Collector Roads. Major collector roads, which are often county roads, are intended to collect traffic from local roads and feed this traffic onto arterial roads. Newark Road, Plattville Road, Joliet Road, Sherrill Road, Lisbon Road, Ashley Road, Grove Road, Holt Road, Brisbin Road, Arbeiter Road, and Wildy Road are identified as the major collectors serving Lisbon and Seward Townships. The segment of Whitewillow Road between Route 47 and Grove Road is also identified as a major collector. When incorporated into a municipality, jurisdiction of these major collector roads is typically transferred to the municipality.
- Minor Collector Roads. A minor collector road is similar to a major collector road. 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 or municipal roads. Minor collectors serving the two townships include Bell Road, Van Dyke Road, and Jones Road.

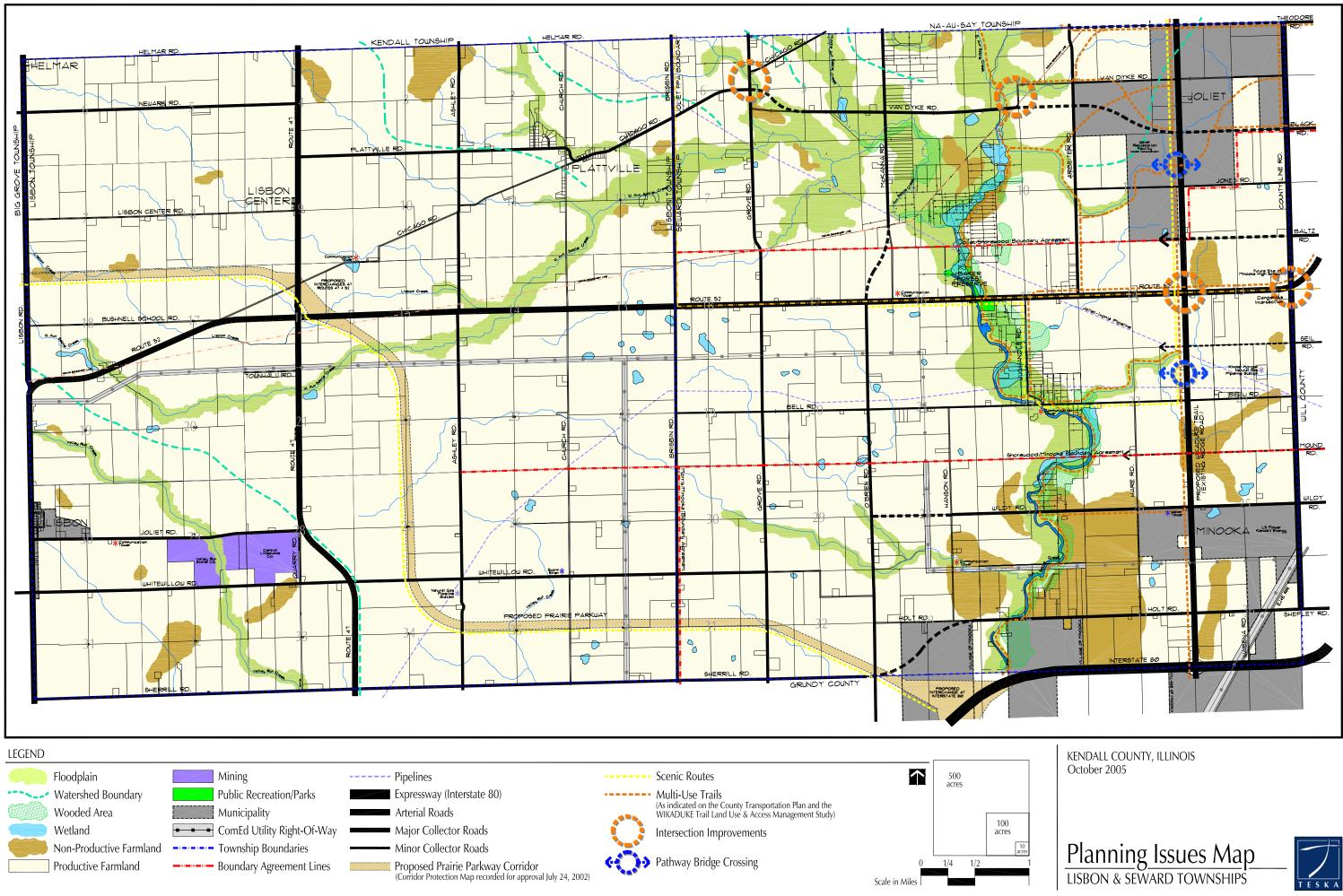
 Local Roads. Local roads are typically residential streets or rural routes that provide direct access to homes and farms. Local residential roads are generally located within incorporated areas.

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

The general road system serving Lisbon and Seward Townships is also supplemented by alternative forms of transportation, namely railroad and multi-use trails. The **EJ&E Railroad**, which primarily provides freight service through the County and State, runs through the far southeast corner of Seward Township. **Multi-use trails** are primarily proposed along scenic routes, natural features (e.g. creeks), and some roadways. These trails will potentially create recreation corridors that can accommodate pedestrian, equestrian, bicycle, and other types of trail users.

#### WIKADUKE Trail

The WIKADUKE Trail is a transportation corridor intended to connect traffic between I-88 and I-80 and alleviate traffic congestion on other regional roads. The proposed road system alignment for the WIKADUKE Trail includes existing rights-of-way along Ridge Road, Plainfield Road, and Stewart Road extending north to Eola Road. As it relates to Lisbon and Seward Townships, the WIKADUKE Trail follows along the right-of-way for Ridge Road located near the Kendall-Will County boundary. Planning for the WIKADUKE Trail is a joint effort by Will, Kane, DuPage, and Kendall Counties. A Land Use & Access Management Study was conducted from 2002-2004 with primary focus on the concept of context sensitive design, which considers the total context within which a transportation improvement project will exist. The goal is a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility. This plan for Lisbon and Seward Township is cognizant of the context sensitive design ideas produced by the Land Use & Access Management Study as growth and development in Also, the impact of the WIKADUKE Trail on the two the two townships are addressed. townships' environmental features, agricultural land, and present and future residential and nonresidential developments will be analyzed to establish methods to minimize negative effects and maximize development opportunities.





#### **Traffic Volume**

IDOT regularly monitors traffic counts on major roads throughout the State and periodically publishes average daily traffic counts. The map below shows the annual average daily traffic counts for 2003 on the major roads serving Lisbon and Seward Townships [Note: All traffic counts were last recorded in 2002 except for major arterials Route 47 and Route 52, which were last recorded in 2003]. In general, the traffic volume on a road is measured by the annual average number of vehicles traveling on that particular road per day.



Annual Average Daily Traffic Counts, 2002-2003 Lisbon & Seward Townships

Source: Illinois Department of Transportation, 2002-2003.

In comparison to the annual average traffic counts recorded for 1994 and 1998, traffic volumes on most roads throughout Lisbon and Seward Townships have experienced increases. Aside from the arterials Route 47 and Route 52, most roads experienced moderate increases in traffic volume. The road segments that experienced the most significant increases in traffic volume were the segments crossing at the Route 47/Route 52 intersection. In particular, the traffic volume along the southbound segment of Route 47 experienced an increase of 41.6% from 1998-2003 (5-year span) and an increase of 51.8% from 1994-2003 (9-year span). Also, the traffic volume along the eastbound segment of Route 52 experienced an increase of 31.8% from 1998-2003 and a considerable increase of 93.3% from 1994-2003.

These trends generally indicate that the recent population growth and development of Kendall County have a significant impact on the local road network, particularly the major arterials with spillover effects

on minor arterials and smaller local roads. Overall, the effects of future developments on traffic volumes on all roads should be kept under consideration in order to minimize traffic problems. In particular, any new developments should consider future transportation needs and reserve appropriate rights-of-way for future roadway improvements and new roadways (e.g. the extensions of existing roads).

#### Road Improvements

IDOT's Proposed Highway Improvement Program for the Fiscal Year 2006-2011 outlines the planned road improvements for Lisbon and Seward Townships (as well as the rest of the state) to be undertaken within the next several years. Planned road improvements for Lisbon and Seward Townships are summarized in the table below.

Road Improvement	Township	Location/Road Segment	Project Date
Land Acquisition	Seward	I-80 interchange at Ridge Rd	2006
Interchange Reconstruction	Seward	I-80 interchange at Ridge Rd	2006
Resurfacing & Cold Milling	Lisbon	Rte 52 (Townhouse Rd to Rte 47)	2006
Bridge Replacement	Lisbon	Rte 52 over Aux Sable Creek	2007-2011
Preliminary Engineering (Plan Preparation)	Lisbon	Rte 52 over Aux Sable Creek	2007-2011
Resurfacing & Cold Milling	Lisbon & Seward	Rte 52 (Rte 47 to Will County Line)	2006

#### Public Facilities & Utilities

In addition to the circulation and access provided by the transportation network, the public infrastructure system serving Lisbon and Seward Townships also includes a system of public facilities and utilities. Public facilities include the school and fire districts. Utilities infrastructure includes electricity service, gas service, and water and sewer systems. In addition, a number of communication towers are located throughout the two townships.

#### **School Districts**

The tables below list the high school and grade school districts serving Lisbon and Seward Townships. Maps of school districts are also provided on pages 17 and 18.

District #	District Name	Service Area
18	Newark High School District	Western and southern sections of Lisbon Twp, including the Village of Lisbon
101	Morris High School District	A portion of Sections 32 and 33 of Lisbon Twp
111	Minooka High School District	Eastern and southern sections of Lisbon Twp and all of Seward Twp, including the City of Joliet and the Village of Minooka
115	Yorkville High School District	Northern and eastern sections of Lisbon Twp

#### High School Districts

District #	District Name	Service Area
60	Saratoga Grade School District	A portion of Section 33 of Lisbon
		Тwp
66	Newark Grade School District	Northwestern corner of Lisbon Twp
90	Lisbon Grade School District	A majority of Lisbon Twp, including the Village of Lisbon but excluding the northern edge of the township and a portion of Section 33
115	Yorkville Grade School District	Northeastern section of Lisbon Twp
201	Minooka Grade School District	Southeastern section of Lisbon Twp and all of Seward Twp, including the City of Joliet and the Village of Minooka

#### Grade School Districts

#### Fire Districts

The table below lists the fire districts serving Lisbon and Seward Townships. A map of fire districts is also provided on page 19.

Fire Districts	
District Name	Service Area
Kendall FPD	Northern edge of Lisbon Twp (north of Newark Road)
Lisbon-Seward FPD	The majority of Lisbon Twp, including the Village of Lisbon,
	and the western and northwestern sections of Seward Twp
Plainfield FPD	A small portion of the northeastern corner of Seward Twp,
	including the City of Joliet
Joliet FPD	A small portion of the northeastern corner of Seward Twp,
	including the City of Joliet
Troy FPD	A small portion of the eastern edge of Seward Twp, including
	the City of Joliet
Minooka FPD	Southeastern section of Seward Twp, including the Village of
	Minooka

#### Park Districts

Lisbon and Seward Townships are also served by a few park districts. The Joliet Park District plans to generally expand its boundaries as the City expands within Seward Township. With Joliet's recent expansion into the northeastern section of Seward Township, it is expected that the Joliet Park District will develop new park facilities, particularly with anticipated residential growth from the Lakewood Prairie, Sable Ridge, and other planned subdivisions.

Parks and recreation matters for the Village of Minooka are generally handled by a parks committee directed by the Village trustees. The Village of Lisbon also handles its own parks and recreation matters. Although the Village of Shorewood (in western Will County) currently does not have any incorporated areas within Kendall County, it has a boundary agreement that extends into Kendall County. In the potential case that Shorewood annexes land within Kendall County, the Village has its own parks department to address recreational needs.

#### **Electricity & Gas Service**

Electricity service for Lisbon and Seward Townships is provided by ComEd. Future development should be cognizant of the location of these transmission lines. The two townships also receive gas service primarily from Nicor Gas. In addition, Kinder Morgan, which is one of the largest energy transportation and storage companies in America, operates a natural gas pipeline facility in east-central Seward Township about a mile north of Minooka. Natural gas pipeline substations are also located in Lisbon Township at the southwest corner of Ashley Road and Whitewillow Road.

#### Water & Sewer Systems

Since a majority of Lisbon and Seward Townships is covered by agricultural land and most residential units are located outside of incorporated areas, well and septic systems are commonly used. Even residents living in the Village of Lisbon are served by wells and a "wildcat" sewer system that directs wastewater into the Village's stormwater collection/ conveyance system. Although the annexed portion of Joliet that is located in the northeast corner of Seward Township is presently undeveloped, Lakewood the Prairie residential development is currently under construction and

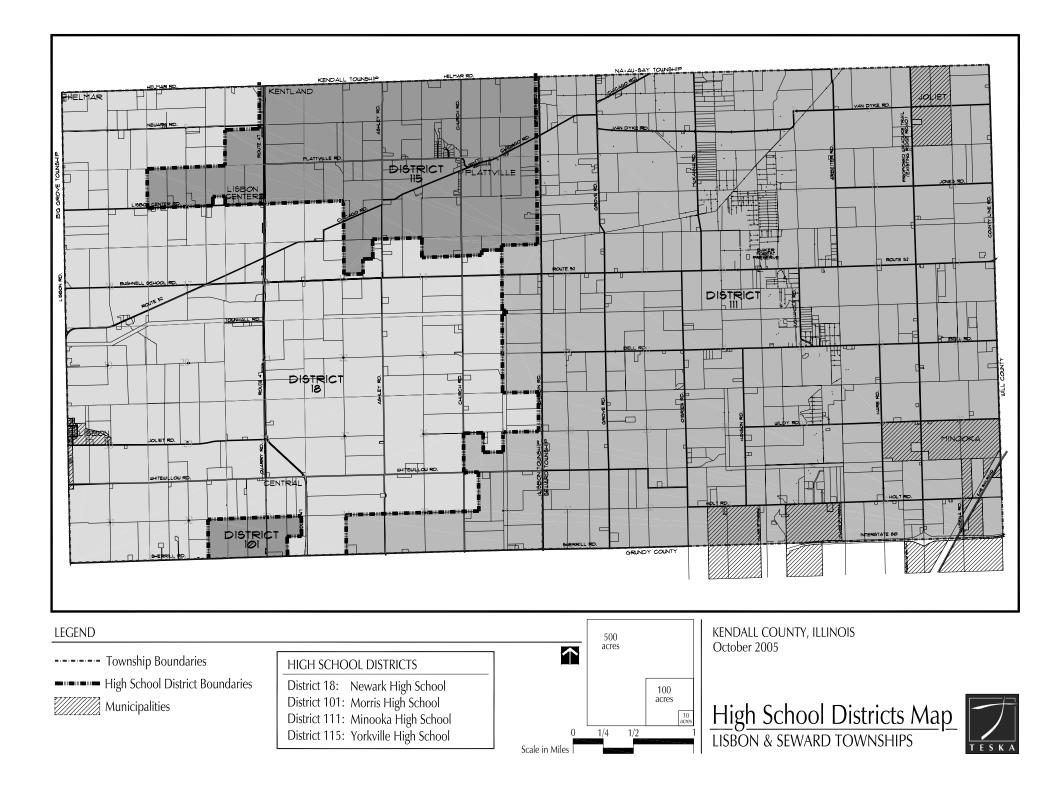
### Municipal Water & Sewer Systems

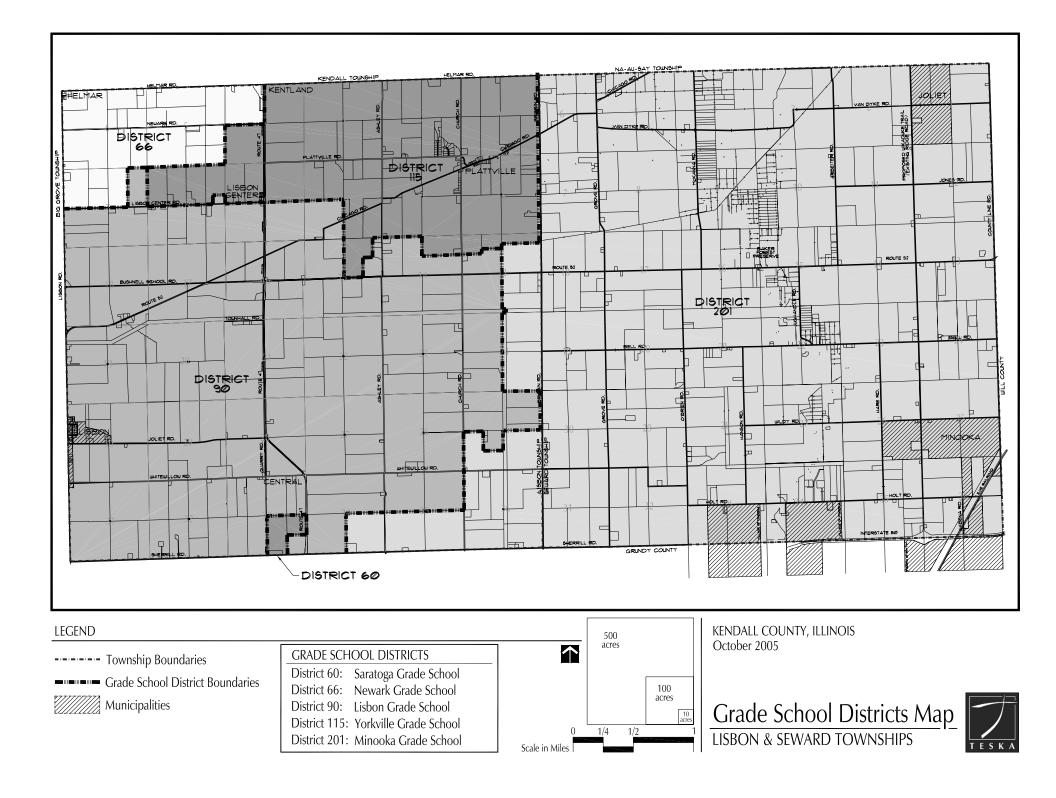
	City of Joliet	Village of Minooka					
Water System	Gallons/Day	Gallons/Day					
Storage Capacity	17,220,000	685,000					
Treatment Capacity	18,340,000	1,404,000					
Average Daily Demand	11,350,000	439,000					
Peak Daily Demand	16,100,000	923,000					
Excess Capacity	1,120,000	481,000					
Sewer System	Gallons/Day	Gallons/Day					
Treatment Capacity	28,200,000 *	1,100,000					
Present Load	21,260,000	375,000					
Excess Capacity	1,120,000	725,000					

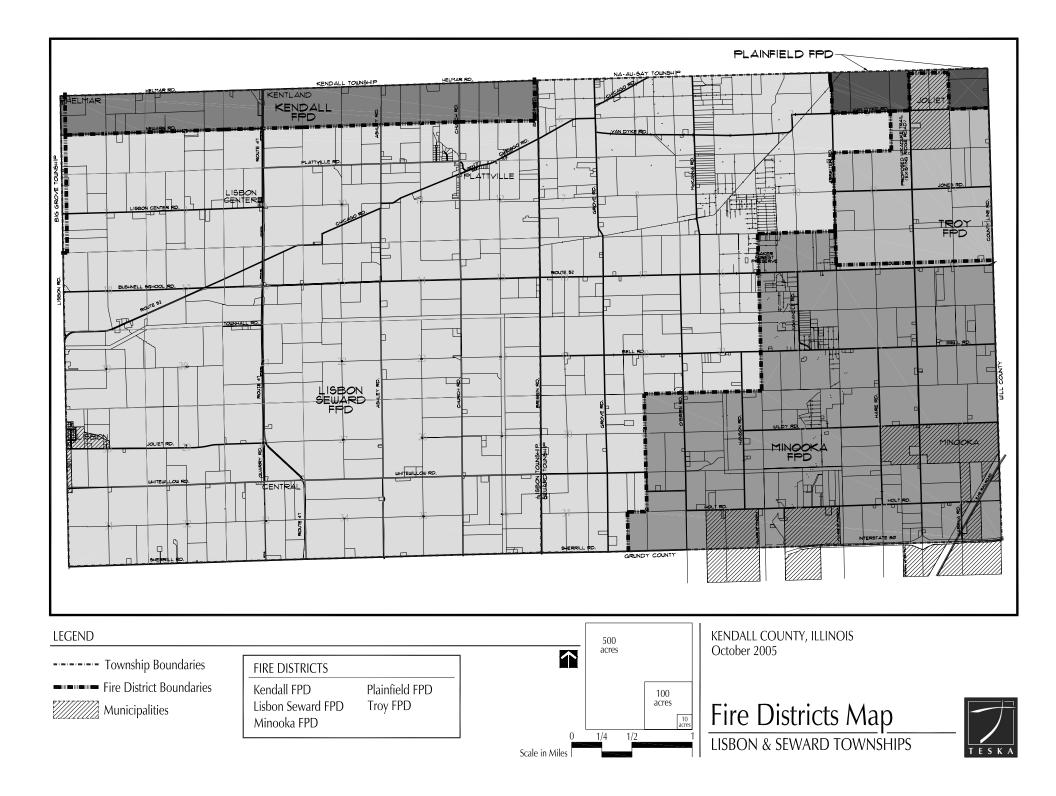
Sources: Data provided by Illinois Department of Commerce and Economic Opportunity and the City of Joliet.

\* Does not include capacity from new plant in Seward Township

will generate a new neighborhood of single family homes, which will be served by the municipal water and sewer services provided by the City of Joliet. Joliet is currently building a new water reclamation facility near the northwest intersection of Ridge Road and Jones Road that is scheduled to be in operation by the end of 2005. Similarly, the annexed portions of Minooka that are located in the southern section of Seward Township are either undeveloped or occupied by small farmsteads or nonresidential uses (e.g. the LS Power Kendall Energy Plant). However, a new residential development under construction along the west side of Ridge Road will be served by the municipal water and sewer services provided by the Village of Minooka. Treatment capacity, present load, and excess capacity for the municipal water and sewer services for Joliet and Minooka are listed in the figure on the right.







### Goals & Objectives-

The following goals and objectives have been developed to guide planning efforts for Lisbon and Seward Townships. While many of the goals and objectives reflect the general management policies outlined in Section 4 of the Kendall County Land Resource Management Plan (LRMP), some goals and objectives relate to the unique character of Southeast Kendall County, particularly the Aux Sable Creek Watershed and the potential for a mining district east of Lisbon.

- 1. Mutually supportive, non-adversarial team of municipal, township, school, park, county, and other governments working toward the benefit of everyone in Kendall County.
  - a. Continue to work with municipalities to reach agreement on future land use patterns and develop effective growth management strategies.
  - b. Continue to work with municipalities to develop boundary agreements based on logical service areas and compatibility with county, municipal, and township goals and objectives to avoid competitive annexations and premature development.
  - c. Evaluate the extent to which municipalities cumulatively envision development of Lisbon and Seward Townships.
  - d. Consign the County with the primary responsibility for resolving regional transportation issues within Lisbon and Seward Townships and issues involving other counties, townships, and municipalities located outside Kendall County.
  - e. Work with the Aux Sable Creek Watershed Committee, the Conservation Foundation, the Kendall County Conservation Foundation, and the Kendall County Forest Preserve District to promote environmental awareness and best stewardship practices.

#### 2. Use of land resources in a manner sensitive to inherent environmental limitations.

- a. Reduce flooding and generally prevent development within floodplain and wetland areas, including adoption of the 0.10 cfs allowable release rate proposed by the City of Joliet throughout the Aux Sable Creek Watershed.
- b. Encourage environmentally sensitive development within the Aux Sable Creek Watershed.
- c. Enact measures to preserve existing trees and natural features as new developments occur in Lisbon and Seward Townships.
- d. Increase connectivity of greenways within Lisbon and Seward Townships and the surrounding townships and communities, including maintenance of a 150 ft corridor on each side of the stream bank as outlined in the Kendall County Greenway Plan.
- e. Pursue the acquisition of key woodlands and open space corridors.

- f. Support creation of wetland banks to accommodate stormwater management and to enhance the viability of wetland environments.
- g. Encourage creation of a greenway along the WIKADUKE Trail.
- 3. A strong base of agriculture, commerce, and industry that provides a broad range of job opportunities, a healthy tax base, and improved quality of services to County residents.
  - a. Maintain the agricultural character of Lisbon Township by supporting farms and agricultural businesses.
  - b. Explore economic development opportunities along I-80, Route 52, and WIKADUKE Trail to enhance the local tax base and to encourage local employment and shopping opportunities.
  - c. Evaluate the need for a mining district east of Lisbon to take advantage of the area's natural resources and create a special use district around the quarries.
  - d. Evaluate the need for additional industrial uses throughout the two townships to provide employment opportunities and complement agricultural and commercial uses.

## 4. An equally balanced pattern of compact, contiguous urban development, countryside residential, & agricultural environments to enhance the quality of personal & community life.

- a. Encourage development to occur within areas that are readily accessible to public infrastructure and support services.
- b. Create a transition of development densities between suburban and agricultural/rural scales.
- c. Maintain the small town atmosphere in Lisbon and Plattville by controlling the rate of growth and the size of developments.

# 5. A rural environment that provides for continuation of viable agricultural activities and a rural character and lifestyle.

- a. Require new developments adjacent to agricultural areas to provide open space buffers and transition between uses.
- b. Preserve scenic routes and vistas by maintaining contiguous stretches of open space, requiring thoughtful design and placement of landscape features, and requiring appropriately scaled building setbacks from the road centerline.

## 6. Management of the quality, quantity, and location of housing development to provide for the efficient use of the County's land resources.

a. Provide opportunities for appropriate types of residential development in and around areas adequately served by public roads, utilities, and services.

- b. Encourage conservation design via clustered development and/or planned unit development (PUD) that protects and incorporates natural features and open space, particularly within and around the Aux Sable Creek Watershed.
- c. Establish a comprehensive and updated inventory of environmentally sensitive features, including wetlands, floodplain areas, watersheds, and rivers and water bodies of local and statewide significance and develop regulations for their protection.

# 7. Provision of appropriate local and regional recreational facilities and schools to serve a growing population.

- a. Share growth projections and new development proposals with local school, fire, and park districts to facilitate their long-range planning activities.
- b. Develop a broad range of recreational opportunities, including trails, forest preserves, woodlands, and community centers through acquisition and public/private partnerships.
- c. Encourage consolidation of open space amenities provided in new developments into areas large enough to accommodate the needs of a variety of users.

# 8. Improvement of major transportation routes to facilitate travel to, within, and through the region.

- a. Continue planning for the WIKADUKE Trail in accordance with the recommendations cited in the WIKADUKE Trail Land Use & Access Management Study.
- b. Provide road extensions, road realignments, and intersection improvements to facilitate efficient circulation and sufficient road access throughout the County.
- c. Encourage pathway bridge crossings across WIKADUKE Trail.
- d. Encourage interconnected street layouts between residential developments.
- e. Encourage the maintenance of scenic routes by preserving vistas and maintaining adequate right-of-way setbacks along scenic roadways, particularly along the WIKADUKE Trail and proposed Prairie Parkway as well as within the vicinity of the Aux Sable Creek.
- f. Provide multi-use trails to accommodate the circulation, access, and recreational needs of pedestrian, equestrian, bicycle, and other forms of trail users.

### Future Land Use & Transportation Plan-

The Future Land Use & Transportation Plan Map depicts a long-range vision for the future growth and development of Lisbon and Seward Townships. Similar to a comprehensive plan, a 15 to 20 year time period is generally anticipated for the recommendations shown on the Future Land Use & Transportation Plan Map to completely materialize as depicted. The future land uses and transportation improvements depicted on the map are subject to change in response to the dynamic growth and development of the two townships.

#### **Transportation Issues**

In addition to the planned road improvements outlined in IDOT's Proposed Highway Improvement Program for the Fiscal Year 2006-2011, the Future Land Use & Transportation Plan Map depicts a few other additions and improvements to the local transportation network. These transportation additions and improvements include:

- Intersection Improvements. Intersection improvements help resolve traffic problems at intersections by realigning roads, adding traffic lights and/or signs, and adding dedicated turn lanes if necessary. Potential intersection improvements are shown at the following four intersections:
  - Realignment of Van Dyke Road (near Arbeiter Road)
  - Grove Road, Chicago Road, and a realigned Van Dyke Road
  - WIKADUKE Trail and Route 52
  - County Line Road and Route 52
- Road Reclassifications. As the population of the two townships grows and development increases, certain roads begin to carry an increasing amount of traffic. As a result, roads may require reclassification to be properly identified in accordance with the amount of traffic they carry. As indicated on the map, Whitewillow Road (the segment of running west from Route 47) and Wildy Road have been reclassified as minor collectors and will remain under Township jurisdiction unless annexed into a municipality.
- **Road Extensions**. Potential road extensions include:
  - Route 52 (the curve leading from Lisbon Township into Big Grove Township)
  - McKanna Road (curving southwest to connect with O'Brien Road at Route 52)
  - Theodore Road (leading westward from the Kendall-Will County Line to Arbeiter Road)
  - Van Dyke Road (realigned and leading eastward from Arbeiter Road to the Kendall-Will County Line connecting with Black Road)
  - o Baltz Road (leading westward from the Kendall-Will County Line into Seward Township)
  - o Seil Road (leading westward from the Kendall-Will County Line into Seward Township)
  - Mound Road (leading westward from the Kendall-Will County Line into Seward Township)
  - Wildy Road (leading westward from Hanson Road to O'Brien Road)
  - Holt Road (curving southwest to connect with Sherrill Road at O'Brien Road)

- Multi-Use Trails. As described in the Situation Audit, multi-use trails are primarily proposed along scenic routes, natural features (e.g. creeks), and some roadways. A network of multi-use trails creates an interconnected system of recreation paths connecting the variety of public and private parks and recreation areas in Lisbon and Seward Townships. These trails will accommodate pedestrian, equestrian, bicycle, and other forms of trail users. In some locations, it may be appropriate to develop separate trails to accommodate various trail users. It is anticipated that the Forest Preserve District will continue to work together with local park districts to create plans for a connected network of trails, open space, parks, and recreation. The County's recently adopted Greenways Plan provides some direction in this regard. Links to this regional trail system should be provided within new developments.
- Pathway Bridge Crossings. As indicated in the Land Use & Access Management Study for the WIKADUKE Trail, two pathway bridge crossings are planned to provide safe pedestrian and bicycle access across the WIKADUKE Trail. The first bridge crossing is located north of Jones Road within an area recently incorporated into Joliet. The second bridge crossing is located north of Bell Road. These two potential bridge crossings will also tie into the planned multi-use trail system.
- Scenic Routes. Scenic routes provide passing motorists with attractive views of the rural character of Lisbon and Seward Townships. Identified scenic routes are located near the area including the Aux Sable Creek and Baker Forest Preserve as well as along the proposed Prairie Parkway and WIKADUKE Trail corridors. In order to maintain these scenic routes in the face of development, roadways designated as scenic routes should maintain a minimum setback of 150 feet from the roadway centerline for any new structures.

#### WIKADUKE Trail

The WIKADUKE Trail presents an opportunity to provide a transportation corridor that adequately serves the increasing traffic demand in the vicinity. In addition to the transportation benefits presented by the WIKADUKE Trail, economic development opportunities are also presented, particularly given Joliet's growth westward into Kendall County and Minooka's recent and anticipated annexations in southern Seward Township. As stated in the Situation Audit, this plan will be cognizant of the context sensitive design ideas produced by the Land Use & Access Management Study as growth and development in the two townships are addressed.

#### Future Land Use Issues

In addition to showing proposed transportation improvements, the Future Land Use & Transportation Plan Map depicts a pattern of land uses that would accommodate growth and development in Lisbon and Seward Townships over the next 15 to 20 years. Future land use recommendations were based on a synthesis of analyses of existing land uses, current and anticipated growth and development patterns, and input from the Ad Hoc Committee, County, township, and municipal officials, residents, and other local stakeholders.

Future land use categories include three different residential categories, commercial, mixed use business, mining, public/institutional, public recreation/parks, open space, and agricultural uses. The recommended residential densities 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 and wetlands. Refer to the definition in the Residential Planned Development (RPD) section of the County Zoning Ordinance for more details.

The future land use categories include the following:

- <u>Municipality</u>. The Municipality category represents areas that are incorporated into one of the following municipalities: Lisbon, Joliet, and Minooka. Land uses within an incorporated area are governed by the municipal zoning ordinance.
- Agricultural. Intended primarily to encourage farming and agricultural businesses and to protect the existing character of rural areas, the Agricultural land use category is designed to provide for continued agricultural use. Residential use shall not be permitted unless it is directly associated with the operation of a local farm and generally not more than 1 home per 40 acres. Existing physical constraints are consistent with the applicable provisions of the Kendall County Zoning Ordinance, which states that "physical features which serve as barriers to farm operations such as streams, rock outcroppings and property configuration in relationship to wetlands, flood-prone areas or buildings" may render a specific site incompatible with agricultural use. Expansive woodland coverage, poor soil conditions, and excessive slopes are other physical constraints that would render a site incompatible with agricultural use. In these cases, limited additional residential development may be permitted per conditions outlined in the Zoning Ordinance. Agricultural uses cover a majority of Lisbon Township and the southwest section of Seward Township.

- Planned Rural Estate Residential. (Not to exceed .45 dwelling units per gross buildable acre.) The Planned Rural Estate Residential land use category promotes low-density detached single family residential development. This land use category is generally consistent with the County's RPD-1 zoning district, permitting a base density of 0.33 du/ac and a maximum density of 0.45 du/ac. Planned development and clustering are strongly encouraged within this land use 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. The district provides a semi-rural or countryside setting, retaining a greater amount of open space. Compatible governmental, educational, religious, and recreation uses also may be permitted in these areas. Proposed as the lowest density residential uses in Lisbon and Seward Townships, Planned Rural Estate Residential uses are primarily located along Route 52 between Ashley Road and Grove Road and in an area bounded by Route 52, Grove Road, O'Brien Road, and the Aux Sable Creek.
- Planned Rural Residential. (Not to exceed .65 dwelling units per gross buildable acre.) 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 0.60 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 allowing up to 0.65 du/ac may be granted for particularly creative development plans providing additional public amenities. If this bonus up to 0.65 du/ac is achieved, an additional density bonus allowing up to 0.85 du/ac may be granted in the case of a proposed RPD development that (a) utilizes both community septic and community water services, (b) is all or partially located within 100 ft of the Aux Sable Creek (including tributaries of the main creek), and (c) is located in Lisbon Township, Seward Township, or Na-Au-Say Township.

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. A majority of the Planned Rural Residential uses are planned within Seward Township with a few pockets around Plattville in northeast Lisbon Township. In addition, Planned Rural Residential uses primarily serve as a density buffer between low density uses designated as Planned Rural Estate Residential and higher density uses within the high growth areas around Joliet and Minooka.

- Suburban Residential. (Not to exceed 1.0 dwelling units per gross buildable acre if developed under County zoning authority.) The Suburban Residential land use category promotes a residential character of low to medium density residences. This land use is consistent with the County's RPD-3 zoning district, permitting a base density of 0.86 du/ac and a maximum density of 1.0 du/ac. Higher municipal densities are appropriate on lots where adequate public sewer and water systems exist or can be made available (via community septic and well systems). Creative planned developments may also be appropriate under County zoning authority at a much lower density. 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. Suburban Residential uses are typically located around incorporated areas since these areas have the highest likelihood of being annexed into the municipality. As a result, Suburban Residential uses are primarily proposed around the current municipal boundaries of Joliet and Minooka. Also, Suburban Residential uses are proposed around the Community of Plattville, which is located in northeast Lisbon Township. Plattville may eventually become incorporated (see below) but it will maintain a Suburban Residential designation under County authority until the incorporation occurs.
- Commercial. The Commercial land use category provides for office and retail establishments that offer goods and services in easily accessible locations. Commercial uses are mainly located along major transportation routes such as Route 52 and the WIKADUKE Trail. A commercial node is planned at the Route 52/Lisbon Road intersection. Within Joliet's incorporated area, commercial uses are planned at the northwest, southwest, and southeast corners of the WIKADUKE Trail/Black Road intersection as well as the northeast and northwest corners of the WIKADUKE Trail/Theodore Road intersection. Other commercial nodes are planned along the WIKADUKE Trail, particularly at the intersections at Route 52, Bell Road, and Holt Road.
- Mixed Use Business. The Mixed Use Business land use category provides for employment opportunities for County residents while providing a balanced tax base. This land use category is consistent with the County's Office and Research Park District as well as the County's three manufacturing districts. Buildings and land in this category should be properly landscaped and developed in an orderly manner that conveys a well-maintained environment. Due to their high trip generation rates, these uses are generally planned in easily accessible locations, such as the Mixed Use Business uses located along County Line Road and near the I-80 interchange at WIKADUKE Trail. Additional Mixed Use Business uses are located along the eastern edge of the Village of Lisbon. The landscaping and appearance standards established for Mixed Use Business uses would help create an attractive land use buffer between the residential community in Lisbon and the mining quarries near Route 47.
- Mining. The Mining land use category applies to the mining quarries operated by Central Limestone Company and Valley Run Stone Company. These quarries are located just west of Route 47 between Joliet Road and Whitewillow Road. Although the quarries are largely kept out of view by tall man-made hills, the existence of the quarries is fairly apparent by the volume of truck traffic in the area, particularly as the trucks enter and exit off of Route 47 via Quarry Road. Mining uses typically fall under the M-3 Manufacturing District (Earth Material Extraction, Processing and Site Reclamation), which is covered by the Mining land use category (see above); however, establishing a separate Mining land use category seemed logical as the Central Limestone and Valley Run mining quarries are unique to the area.

The County is exploring the concept of establishing a **Mining District** (denoted on the map), which would create a special use district within which other mining quarries could be established to take advantage of Kendall County's rich stock of natural resources. The County continues to work with its mining consultant to identify the most viable location(s) for a Mining District, keeping in mind the availability of natural resources, impacts on the environment, access to key transportation routes, and proximity to incompatible land uses. Any specific mining application will be closely reviewed to ensure that it meets environmental performance standards appropriate to Kendall County and the specific location, including the buffering of such uses from adjacent residential, institutional, or public uses. Road impacts will also be closely evaluated to minimize impact on local transportation systems.

The proposed Mining District illustrated on the Future Land Use & Transportation Plan Map was based on review of soil borings in the area and testimony regarding the presence of quality stone with limited cover. The Illinois Department of Natural Resources is preparing to conduct the Illinois Geological Survey to study and map subsurface geology throughout the State. The survey is anticipated to provide a wealth of data that will provide insight on the type, quality, and location of natural resources. Survey results would also provide insight into the potential designation of a Mining District or a set of multiple dispersed quarries. The County plans to monitor the progress of the survey and accordingly plan for a Mining District as data becomes available over the next few years. The proposed Mining District has been pulled back from Route 47 to preserve opportunities for future commercial development.

- Public/Institutional. The Public/Institutional land use category applies to those lands where existing or proposed federal, state, or local governmental activities are conducted. Public and private educational and other non-profit organization facilities are also categorized as public/institutional uses, but none of these types are currently present in Lisbon and Seward Townships. The Public/Institutional uses shown on the Future Land Use & Transportation Plan represent only existing churches, cemeteries, public utility facilities, and schools including the future Minooka High School site near Route 52 and County Line Road. Additional Public/Institutional uses will certainly be established in the two townships to accommodate future population growth, but they are not shown on the map due to the complexity of projecting the size and locations of these future uses.
- **Public Recreation/Parks**. The Public Recreation/Parks land use category includes all state parks, forest preserves, and other public recreational uses such as parks, nature preserves, multi-use trails, picnic areas, and other recreation facilities. Public Recreation/Park uses provide for recreational opportunities for a growing population and also provide opportunities for improved flood control and wetland banking. Lisbon and Seward Townships currently offer a select amount of Public Recreation/Park uses, including small recreational ball fields and Baker Forest Preserve along the Aux Sable Creek. Similar to Public/Institutional uses, the Future Land Use & Transportation Plan only shows existing Public Recreation/Park uses. Additional Public Recreation/Park uses will certainly be established in the two townships to accommodate future population growth, but they are not shown on the map due to the complexity of projecting the size and locations of these future uses.

Open Space. The Open Space land use category identifies lands that are sensitive to development containing unique environmental characteristics that should be preserved or protected from encroachment by developments. These characteristics primarily include woodlands, floodplains, wetlands, creeks, and the river. In some cases, conceptual open space connections have been illustrated on the plan where no natural features exist. In these locations, the goal is to highlight the desire to develop an interconnected open space system. Open space 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. Open space boundaries depicted on the Future Land Use & Transportation Plan are only conceptual. Appropriate open space boundaries for a particular parcel shall be determined based on specific site analysis at the time of pending development.

#### **Conservation Design**

According to the Land Resource and Management Area Policies of the Kendall County LRMP, the County "shall promote the use of clustered development or planned unit development (PUD) procedures that allow the construction of dwellings in an arrangement that encourages the permanent protection of open space within the immediate area of those dwellings." The use of clustered development or PUD procedures to protect open space is commonly referred to as "conservation design." The benefits of conservation design include:

- Flexibility in site design and lot size
- Protection and management of natural resources
- Reduction of impervious surfaces
- Reduction of infrastructure costs
- Sustainable stormwater management
- Facilitation of greenway connections and wildlife corridors
- Creation of open space
- Creation of neighborhoods with a "sense of place"

Relative to the Future Land Use & Transportation Plan map, the areas designated as Planned Rural Estate Residential and Planned Rural Residential areas provide opportunities for conservation design. Conservation design is also encouraged in areas designated as Suburban Residential and within municipalities.

#### **Future Land Use Areas**

The following table lists the land areas of the future land uses in Lisbon and Seward Townships.

	Lisbon Twp		Seward Twp		Combined	
	Area	Percent of	Area	Percent of	Area	Percent of
Land Use	(acres)	Total	(acres)	Total	(acres)	Total
Planned Rural Estate Residential	561.8	2.4%	1,602.8	7.1%	2,164.6	4.7%
Planned Rural Residential	547.4	2.3%	6,244.9	27.7%	6,792.3	14.8%
Suburban Residential	2,597.5	11.1%	4,229.4	18.8%	6,826.9	14.9%
Commercial	132.2	0.6%	467.1	2.1%	599.3	1.3%
Mixed Use Business	726.2	3.1%	931.5	4.1%	1,657.7	3.6%
Mining	307.6	1.3%	0.0	0.0%	307.6	0.7%
Public/Institutional	8.3	0.0%	121.4	0.5%	129.7	0.3%
Public Recreation/Park	2.9	0.0%	57.9	0.3%	60.8	0.1%
Open Space	2,360.0	10.1%	5,482.0	24.3%	7,842.0	17.1%
ComEd Right-Of-Way	312.3	1.3%	154.8	0.7%	467.1	1.0%
Municipality	101.7	0.4%	1,957.0	8.7%	2,058.7	4.5%
Agricultural	15,721.3	67.2%	1,307.6	5.8%	17,028.9	37.1%
TOTAL	23,379.2	100.0%	22,556.4	100.0%	45,935.6	100.0%

#### **Population Projections**

Population growth trends and existing development patterns are key indicators in determining how much the total population of Lisbon and Seward Townships will grow in the future, particularly in

#### **Population Projections**

	Population
2000 Population	1,697
2010 Population *	2,294
2020 Population *	3,102
Population	52,489
(full build-out) **	

Notes

- Based on a 35.2% growth rate, which is the same growth rate experienced by the City of Joliet from 1990-2000
- \*\* Based on County population densities except for the Suburban Residential area along the WIKADUKE Trail, which will likely be annexed into Joliet or Minooka and use the more appropriate 2.00 du/ac density for incorporated areas

reference to the Future Land Use & Transportation Plan presented in this LRMP. Population estimates provide a basis for determining the appropriate allocation of land, funds, and other resources to establish new schools, parks, and recreation areas as well as expand forest preserve areas and municipal service areas for water, sewer, and fire protection.

Based on full build-out of the residential densities depicted on the Future Land Use & Transportation Plan, the total population of Lisbon and Seward Townships is anticipated to grow to 52,489 residents, a dramatic 2993% increase from the 2000 population of 1,697 residents. It is important to note that full build-out of the areas designated for Suburban Residential are calculated using a 2.00 du/ac density near Joliet and Minooka (along WIKADUKE Trail) and 1.00 du/ac in all other areas. The higher 2.00 du/ac density is used for areas near municipalities like Joliet and Minooka since these areas will most likely be annexed prior to development.

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Although the Future Land Use & Transportation Plan is a long-range plan with full-build out estimated at 15-20 years, the 52,489 population projection is a very generous estimate, even for a 15-20 year buildout time frame. It is also important to note that this population projection would be even greater if substantial land is annexed into local municipalities and developed at higher densities than the modest 1.00 du/ac maximum density permitted within Kendall County jurisdiction.

Population projections can also be viewed from a growth rate perspective. From 1990-2000, Lisbon and Seward Townships experienced a 3.9% growth rate. In that same time period, the City of Joliet, which is primarily located within Will County but progressively growing westward into Kendall County, experienced a 35.2% growth rate. Based on current and expected growth and development trends, Lisbon and Seward Townships will likely experience a growth rate greater than 35.2%.

#### Future Schools

As the population of the two townships grows, local school and park districts will need to provide sufficient facilities to accommodate a growing population of school-aged children and an overall need for additional parks and recreational opportunities. Based on the full-build out population projection, the table shown below lists the total land acreages needed to accommodate the anticipated student population growth at the elementary, junior high, and high school levels. At full build-out, the Future Land Use & Transportation Plan will generate 6,295 elementary school students, 3,539 junior high school students, and 4,276 high school students. These projections are fairly generous estimates since they are based on full build-out of the Future Land Use & Transportation Plan. Moderate population growth and development will yield lower student populations; however, the need for additional land for schools will likely remain the same regardless of the degree of growth and development. Existing schools will accommodate the anticipated student population growth as much as possible; however, new schools will need to be built as existing facilities reach full capacity. Communities and local school districts will determine the type, size, and location of new schools.

#### **Student & School Acreage Projections**

Based on Full Build-Out of Future Land Use & Transportation Plan

				Total		
		Residential	Total	Elementary	<b>Total Junior</b>	Total High
Residential Land Use	Total Land	Density	Dwelling	School	High School	School
Classification	Acreage	(du/ac)	Units	Students	Students	Students
Planned Rural Estate Residential	2,165	0.45	974	516	290	351
Planned Rural Residential	6,792	0.60	4,075	2,160	1,214	1,467
Suburban Residential	6,827	1.00	6,827	3,618	2,034	2,458
TOTAL	15,784	-	11,876	6,295	3,539	4,276

<u>Notes</u>

Estimates for school age population based upon Illinois School Consulting Service/Associated Municipal Consultants, Inc. 1996 data

#### **Future Parks**

Based on a ratio of 20 acres of park space per 1,000 residents, the anticipated population growth for Lisbon and Seward Townships at full build-out (52,489 residents) will require 625 acres of land to be devoted to parks and open space. Lisbon and Seward Townships are currently served by a variety of public and private parks and open spaces within and in the vicinity of the two townships. Communities such as Lisbon, Joliet, and Minooka also provide parks and recreational facilities. To accommodate the need for 625 acres of additional park space, local park and forest

#### Park Acreage Projections

Based on Full Build-Out of Future Land Use & Transp.Plan

Residential Land Use	Total	Park
Classification	Population	Acreage
Planned Rural Estate Residential	2,567	51
Planned Rural Residential	10,716	214
Suburban Residential	17,969	359
TOTAL	31,252	625

<u>Notes</u>

Park acreage based on a ratio of 20 acres per 1000 residents (National Recreation & Parks Association).

preserve districts will need to work together to plan for additional parks and recreational spaces. Park and forest preserve districts may choose to either expand existing facilities or establish new ones. Similar to the student population and school acreage projections, the 625 acres of additional park space is considered a fairly generous estimate since it is based on full build-out of the Future Land Use & Transportation Plan. Moderate population growth will yield a lower park acreage projection, which will still likely require the need for additional park space if existing facilities are overburdened. Any new parks and recreational facilities must be linked to the connected network of trails, open space, parks, and recreation that is currently being planned by local park and forest preserve districts. The County's recently adopted Greenways Plan will be a useful reference in this regard.

#### Amendment to Na-Au-Say Township Future Land Use Map

As the Future Land Use & Transportation Plan was being developed for Lisbon and Seward Townships, it was compared with the Future Land Use & Transportation Plans for adjacent Kendall and Na-Au-Say Townships to ensure compatibility and seamless transitions near township lines. The transition of future land use near the Kendall/Lisbon Township Line was fairly smooth and the land uses were primarily compatible with each other. On the other hand, the transition of future land uses near the Na-Au-Say/Seward Township Line was not quite as seamless. The types of land uses are relatively compatible; however, a section of agricultural use bounded by Brisbin Road, Walker Road, the Aux Sable Creek, and the Na-Au-Say/Seward Township Line created a glaring break in the residential land uses planned for the two adjacent townships. To facilitate a seamless transition and maintain land use compatibilities between Na-Au-Say and Seward Townships, the future land use recommendations for southwest Na-Au-Say Township were amended as illustrated on the updated Future Land Use Plan Map for the township in Section 10.