

TOWNSHIP SUMMARY

SECTION SIX

NORTHERN THREE TOWNSHIPS
(Little Rock, Bristol & Oswego Townships)

Introduction

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

Northern Three Townships

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 in October 1998. A second township plan was prepared for Big Grove Township and was adopted in March 2002. The County selected Little Rock, Bristol, and Oswego Townships --- collectively known as the Northern Three Townships --- as the next set of townships for which to develop a land use resource management plan based on local interests.

Planning Process

Promoting 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 the Northern Three Townships. The committee was comprised of key staff members and/or representatives from Kendall County, the three townships, and the affected municipalities.

Key elements of the planning process included:

- ❑ A kickoff meeting was held on June 4, 2002, to mark the beginning of the planning effort to prepare a land resource management plan for the Northern Three Townships. Community leaders were given the opportunity to express their concerns and observations relating to the existing conditions in the area as well as the future development of the townships.
- ❑ The draft Goals and Objectives were reviewed during the advisory committee meeting held on July 10, 2002.
- ❑ Drafts of the Future Land Use/Transportation Plan were reviewed during the advisory committee meetings held on August 29 and October 30, 2002. Each draft of the plan was based on the comments and suggestions provided by committee members.
- ❑ Individual township meetings were held in late February and early March 2003 to garner input from community members of each township. These meetings invited community members to review and provide comments on the Future Land Use and Transportation Plan.
- ❑ Public hearing TBA.

Overview

Creating a comprehensive plan for the Northern Three Townships begins with developing a clear understanding of the local planning issues in the townships. In particular, the land use structure, environmental features, transportation network, and population trends of the 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, meetings with the advisory committee, and various other sources.

The situation audit is organized as follows:




- ❑ Initial opinions & observations of planning issues (kickoff meeting)
- ❑ Population trends
- ❑ Summary of planning issues
- ❑ Existing land use
- ❑ Environmental and transportation issues
- ❑ Public facilities and utilities

In addition to the Existing Land Use and Planning Issues Maps, a Location Map is included on the next page.

Location Map

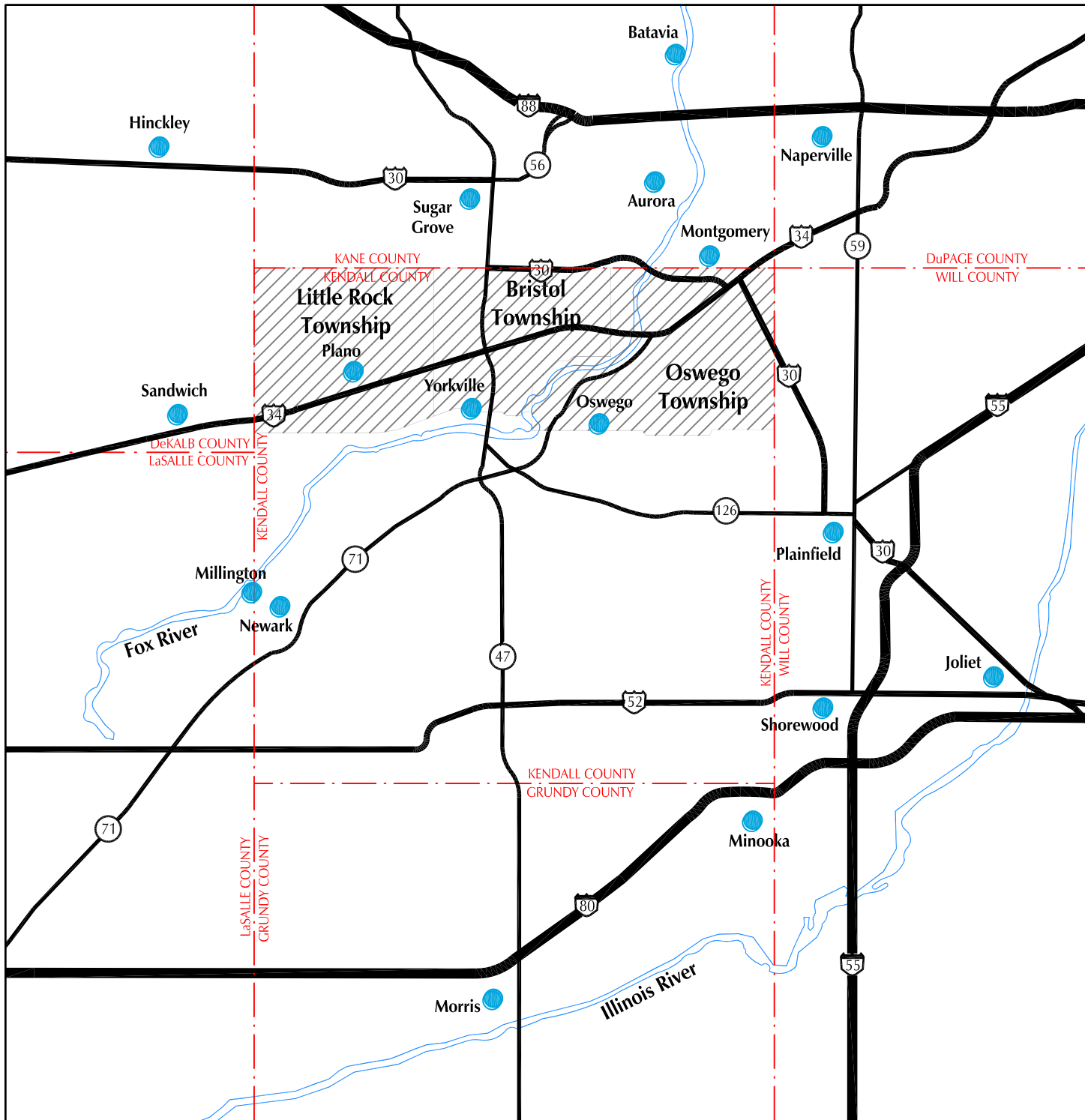
Little Rock, Bristol & Oswego Townships

Legend

-  Township
-  Neighboring Community
-  County Line

Townships in Kendall County

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



March 2003



Initial Opinions & Observations of Planning Issues

Community representatives from the County, the three townships, and adjacent jurisdictions were invited to attend a kick-off meeting in June 2002. An Existing Land Use map for each township was displayed to show how land is currently used in each township. In addition, a Planning Issues map for each township was also displayed to show the existing transportation network as well as existing environmental characteristics. Community representatives were asked to make observations and express any concerns or opinions relating to the maps. They were also asked the following questions:

- What are the primary assets of the three townships?
- What are the main issues/problems that the three townships face?
- What are the main attractions in the three townships? (Why do people choose to move to this area?)
- What are the best examples of new developments in the three townships?

These questions help determine the strengths and weaknesses of the townships as well as the issues the townships face as they grow and develop. The following list summarizes the initial opinions and observations expressed by community representatives.

GENERAL COMMENTS

Initial comments/concerns

- ❑ Interviews with local representatives should include talks with representatives from the County Transportation Department, the township road commissions, township public works, and the Forest Preserve.
- ❑ Poor run-off in Bristol Township leads to flooding problems.
- ❑ Wetlands are separated by federal and local classifications, so it is important to differentiate between the two.
- ❑ It is important to see how the municipal plans will collectively impact the development of the 3 townships. An optimal coordination of the municipal plans (especially those of adjacent municipalities) should be sought to produce the best possible environment for growth and development in the three townships.

PRIMARY ASSETS

What are the primary assets of the three townships?

- ❑ Fox River
- ❑ Creeks and floodplains (e.g. Blackberry Creek Corridor)
- ❑ Connectivity of the greenways between the three northern townships as well as other adjacent townships
- ❑ Focus on watershed protection

- ❑ Lisbon/Eldamain Road maintained as an industrial development corridor
- ❑ Proposed extension of Miller Road (in Little Rock Township) into DeKalb County to relieve some of the traffic on Route 34
- ❑ Rural character of the three townships (important to preserve this character as the townships grow and develop)

PRIMARY ISSUES

What are the main issues/problems that the three townships face?

- ❑ Mitigate traffic congestion on Routes 34 and 47 by providing road improvements to handle increased traffic introduced by new developments
- ❑ Mitigate traffic congestion at access points of major roads
- ❑ Resolve transportation issues in the townships using a comprehensive County approach (forward transportation planning is needed)
- ❑ Maintain/create roadway connections between the three townships
- ❑ Preserve a limited access corridor for the future alignment of Eldamain Road and Lisbon Road
- ❑ Orchard Road should serve as a model for Lisbon/Eldamain Road and other commercial corridors
- ❑ Increase access by providing more major arterial roads
- ❑ Explore potential opportunities for extending Metra service and providing Metra commuter rail stations along the Burlington Northern Railroad
- ❑ Promote a healthy balance between growth/development and preservation of rural character
- ❑ Discern farmland and open space property rights (use environmental features, natural breaks, roads, and existing land uses to form edges between adjacent properties); farmland represents open space to many residents; property rights issues are becoming more prevalent, especially as newcomers arrive and wish to halt developments after their arrival
- ❑ Preserve existing trees and natural features when developing the local landscape as development progresses in the townships
- ❑ Preserve Routes 34 and 47 for commercial development (to create tax base and keep shopping local); maintain a healthy mix of big-box developments with locally-owned businesses to keep local dollars in the area
- ❑ Maintain a balance between resolving transportation and accessibility issues and providing economic development opportunities along Orchard Road

- ❑ Maintain an equal balance of housing options within and outside the municipalities (fair share allocation of affordable housing); the more recent residential developments seem to be more up-scale; some affordable housing options have been made available within certain municipalities

MAIN ATTRACTIONS

What are the main attractions in the three townships?

(Why do people choose to move to this area?)

- ❑ Value for the amount spent on housing
- ❑ Good, safe communities to raise families (people willing to live in a good, safe community despite further work commutes, lack of mass transit, etc.)
- ❑ Relatively good school districts compared to larger surrounding jurisdictions (e.g. Aurora, Joliet)
- ❑ Each municipality has its own identifiable character (which should be utilized as focal points as development progresses throughout the townships)
- ❑ Access to the Fox River
- ❑ Large amounts of undeveloped land (i.e. farmland and open spaces)

BEST EXAMPLES OF NEW DEVELOPMENTS

What are the best local examples of new developments?

- ❑ Ron Hill Subdivision (located in Kendall Township on the southwest corner of Legion and Emmanuel Roads): good overall layout, street network, nice character; utilizes 1-acre lots
- ❑ Solitude Lakes: good example of using non-productive farmland for residential development; excellent use of existing paths and trees in the final development; excellent use of private drives to preserve trees
- ❑ White Oaks Farm (Yorkville): well-done subdivision with relatively low density, trails, and utilization of an old barn
- ❑ Schaefer Woods South (southeast of Plano) is another well-done subdivision
- ❑ Conservation design, which includes the use of individual septic systems, should be encouraged in the rural settlement/rural estate zones at the periphery of the municipalities (i.e. the outer edges of the contiguous growth areas)
- ❑ Developments on small lots (1 acre or smaller) as well as other properties located within close proximity to a municipality should be provided with municipal water and sewer services
- ❑ Montgomery Crossings and other similar residential developments share the name of their respective home municipalities
- ❑ Large estate lots on non-productive agricultural land do not necessarily need access to municipal water and sewer services

Population Trends

INCORPORATED AREAS

Of the Northern Three Townships, Oswego Township has the largest population (28,417 residents, as reported in the 2000 U.S. Census) as well as the highest amount of incorporated land coverage (28.9%) as a percentage of total land area. Bristol Township is the second most populous township with a population of 7,677 residents (2000 U.S. Census) and an incorporated land coverage of 23.8%. Little Rock Township is third with a population of 7,662 residents (2000 U.S. Census) and an incorporated land coverage of 14.5%. Little Rock Township has virtually half the amount of incorporated land as Oswego Township, which demonstrates the wide range of urbanization among the Northern Three Townships.

The composition of each township's incorporated land is broken down as follows:

- ❑ **Little Rock Township's incorporated areas** include part of the eastern edge of the City of Sandwich and the entire City of Plano.
- ❑ **Bristol Township's incorporated areas** include the northern part of the United City of Yorkville, the southwest part of the Village of Montgomery, and a small part of the western edge of the Village of Oswego.
- ❑ **Oswego Township's incorporated areas** include the southeast part of the Village of Montgomery, most of the Village of Oswego (excluding a small part of its western edge), a small part of the southwest corner of the City of Aurora, and a small part of the western edge of the Village of Plainfield. The Boulder Hill Subdivision is also part of Oswego Township but is unincorporated.

RURAL CHARACTER OF THE NORTHERN THREE TOWNSHIPS

Although each township is characterized by the municipalities that comprise its incorporated areas, the three townships all currently retain a rural character to some extent. Little Rock Township is the most rural township of the three, which is clearly evident by the low population levels and the land used for agriculture (76.1%). Bristol Township and Oswego Township also have their own distinct rural characters, but less land is used for agriculture (64.9% and 60.2%, respectively).

POPULATION TRENDS WITHIN KENDALL COUNTY

All three townships have experienced population growth and development over the past several years, but Bristol and Oswego Townships have experienced significantly more growth than Little Rock Township, which is evident by a comparison of their percent changes in population and growth rates from 1990-2000. Figure 1 summarizes these population trends for the Northern Three Townships as well as the other six townships in Kendall County.

Figure 1
Population Trends of All 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%
Kendall County	39,413	54,544	15,131	38.4%	3.30%

Source: U.S. Census Bureau

Among all nine townships in Kendall County, Na-Au-Say Township had the highest percent change in population and growth rate from 1990-2000. However, Oswego Township had the second highest values for each category with a 57.0% percent change in population and a 4.62% growth rate. These values were the highest among the Northern Three Townships. Bristol Township was next with a 36.6% percent change in population and a 3.17% growth rate. Little Rock Township experienced the least amount of growth among the three townships with a 8.2% percent increase in population and a 0.79% growth rate.

**POPULATION TRENDS IN THE
NORTHERN THREE TOWNSHIPS &
ITS NEIGHBORING COMMUNITIES**

Comparing the population trends of the Northern Three Townships with the population trends of local and neighboring communities is a way to determine whether the townships are growing at faster, slower, or similar rates as local or surrounding communities. Figure 2 shows the population trends of the three townships as well as local and neighboring communities. Summaries of the comparisons of each township with the communities follow on the next page.

Figure 2
Population Trends of Local &
Neighboring Communities

	Population		1990-2000		Growth Rate
	1990	2000	Net	Percent	1990-2000
Northern Townships *					
Little Rock Twp.	7,083	7,662	579	8.2%	0.79%
Bristol Twp.	5,619	7,677	2,058	36.6%	3.17%
Oswego Twp.	18,095	28,417	10,322	57.0%	4.62%
Local & Neighboring Communities					
Aurora	100,279	142,990	42,711	42.6%	3.61%
Batavia	17,587	23,866	6,279	35.7%	3.10%
Boulder Hill (subdivision)	8,894	8,169	-725	-8.2%	-0.85%
Joliet	78,585	106,221	27,636	35.2%	3.06%
Lisbon	225	248	23	10.2%	0.98%
Millington	500	458	-42	-8.4%	-0.87%
Minooka	2,605	3,971	1,366	52.4%	4.31%
Montgomery	4,614	5,471	857	18.6%	1.72%
Newark	840	887	47	5.6%	0.55%
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%
Sugar Grove	2,123	3,909	1,786	84.1%	6.29%
Yorkville	4,055	6,189	2,134	52.6%	4.32%

Source: U.S. Census Bureau

* The population counts for the three townships include residents living within both incorporated and unincorporated areas.

Little Rock Township

In comparison to the other two northern townships in Kendall County, Little Rock Township experienced the smallest net and percentage changes in population (579 new residents and 8.2%, respectively) as well as the smallest growth rate (0.79%) over the 1990-2000 time period. In addition, these same population trends for Little Rock Township were the smallest when compared to neighboring communities within and outside of Kendall County. Only Lisbon, Millington, and Newark had smaller population growth rates. Even though Sandwich and Plano both had the highest population counts of all municipalities in Kendall County's northern townships in 1990, Little Rock Township experienced the smallest population growth as the other two townships and their municipalities grew much more dramatically.

Bristol Township

The population growth rate for Bristol Township (3.17%) is comparable to the growth rate for the City of Joliet (3.06%). In fact, the population of Bristol Township was over one-third (36.6%) greater in 2000 than in 1990. Bristol Township's significant population growth is attributed to the growth of Yorkville. Yorkville's population grew over 50% between 1990 and 2000. Montgomery's growth was limited to Oswego Township (and Kane County) from 1990-2000, but the village has experienced more recent growth in Bristol Township.

Oswego Township

The population growth rate for Oswego Township (4.62%) is greater than the growth rates for all neighboring communities except the Villages of Plainfield (9.51%) and Sugar Grove (6.29%). However, both Plainfield and Sugar Grove had lower net changes in population than Oswego Township. The Village of Oswego experienced the highest percent change in population (215.5%) and population growth rate (12.18%) in comparison to all neighboring communities (in and out of Kendall County).

Although Oswego had the third highest net change in population (9,102 new residents) among all neighboring communities (right behind the Cities of Aurora and Joliet), that figure is the highest of all communities located only in Kendall County. It should be noted that the Boulder Hill Subdivision lost 725 residents from 1990-2000, which is an 8.2% decrease (and a 0.85% negative "growth" rate). Despite the loss of residents in Boulder Hill, the substantial population growth in the Village of Oswego and Oswego Township as a whole more than offset this loss.

RESIDENTIAL BUILDING PERMITS

The population growth of the Northern Three Townships may also be assessed by determining the number of building permits issued over a certain period of time. In particular, annual counts for building permits for residential units reveal the number of new homes that are constructed. Figure 3 summarizes the number of residential building permits issued between 1996-2001 for the three townships as well as local and neighboring communities. The permit counts for the three townships account for the permits issued for residences located within County jurisdiction but not within municipalities. The residential building permit counts for the local and surrounding communities are kept separate from those issued by Kendall County.

Figure 3
Residential Building Permits
(1996-2001)

Community	Building Permits for Residential Homes						Total
	1996	1997	1998	1999	2000	2001	
Northern Townships							
Little Rock Twp.	10	5	8	3	15	17	58
Bristol Twp.	18	12	13	18	11	15	87
Oswego Twp.	26	20	16	18	31	32	143
Neighboring Communities							
Aurora	858	908	1,183	1,284	1,030	1,156	6,419
Batavia	152	137	167	227	215	185	1,033
Joliet	1,081	1,157	1,482	1,704	1,522	1,893	8,839
Lisbon	1	1	0	0	2	0	4
Minooka	27	33	30	47	44	45	226
Montgomery	66	19	36	17	20	524	682
Newark	6	2	5	4	5	7	29
Oswego	257	308	391	401	513	439	2,309
Plainfield	287	229	528	772	602	627	3,045
Plano	19	8	7	5	10	11	60
Sandwich	39	25	42	46	38	36	226
Sugar Grove	76	46	42	82	140	304	690
Yorkville	93	54	50	82	127	198	604

Source
U.S. Census Bureau & Kendall County
Planning, Building & Zoning Dept.

Comparing the number of residential building permit counts listed in Figure 3 provides insight into the amount of residential growth occurring within unincorporated areas (i.e. County jurisdiction within the Northern Three Townships) compared to incorporated areas (i.e. local and neighboring communities).

CONTINUING GROWTH AND DEVELOPMENT IN THE NORTHERN THREE TOWNSHIPS

The Northern Three Townships continue to grow and experience a significant amount of development. Residential developments are currently under construction within and around all township municipalities.

In addition to new residential developments, local municipalities are also introducing new commercial developments. For example, Oswego has introduced new commercial developments, particularly along Route 34, including a Dominick's grocery store, a Home Depot, and a Chili's restaurant. As the municipalities continue to grow, the new residential developments warrant the addition of more commercial uses that provide sufficient goods and services to the growing population.

Planning Issues

EXISTING LAND USE

In order to assess past and present development patterns in the townships, a survey of existing land uses was conducted on March 14-15, 2002. Existing land uses, notable environmental features, and other local characteristics were identified. In addition to the survey, land uses were also identified by interpreting aerial photographs. Gross acreage calculations for existing land uses were determined from the centerline of the right-of-way. A summary of the existing land use in each township is provided below.

Little Rock Township

Figure 4 summarizes the acreage and composition of existing land uses in Little Rock Township.

Figure 4
Existing Land Use

Land Use	Little Rock Township	
	acres	percent of total
Single Family Residential	658.8	2.9%
Farmstead	426.1	1.9%
Commercial	5.0	0.02%
Institutional	16.9	0.1%
Industrial	41.5	0.2%
Parks/Recreation	365.3	1.6%
Open Space	133.4	0.6%
Utilities (ComEd)	420.1	1.8%
Agricultural Special Use	77.0	0.3%
Agricultural	17,367.0	76.1%
Municipalities	3,304.8	14.5%
Total	22,815.9	100.0%

Of the approximately 22,816 acres of total land within Little Rock Township, over three-quarters (76.1%) is covered by agricultural land. Parts of two different municipalities comprise 14.5% of the total land. In particular, Little Rock Township is home to a small part of the eastern edge of the City of Sandwich and the entire City of Plano. Single family residential homes and farmsteads make up 2.9% and 1.9%, respectively.

Bristol Township

Figure 5 summarizes the acreage and composition of existing land uses in Bristol Township.

Figure 5
Existing Land Use

Land Use	Bristol Township	
	acres	percent of total
Single Family Residential	1,205.9	6.4%
Farmstead	218.5	1.2%
Commercial	3.4	0.02%
Institutional	7.7	0.04%
Industrial	9.4	0.0%
Parks/Recreation	161.7	0.9%
Open Space	72.1	0.4%
Utilities (ComEd)	364.8	1.9%
Agricultural Special Use	110.0	0.6%
Agricultural	12,275.4	64.9%
Municipalities	4,496.7	23.8%
Total	18,925.6	100.0%

Bristol Township covers approximately 18,926 acres of land. About 65% of this land is used for agricultural land. Parts of three different municipalities comprise almost a quarter (23.8%) of the total land. In particular, Bristol Township is home to the northern section of the United City of Yorkville, the southwest part of the Village of Montgomery, and a small part of the western edge of the Village of Oswego. Single family residential homes and farmsteads comprise 6.4% and 1.2%, respectively, of total land.

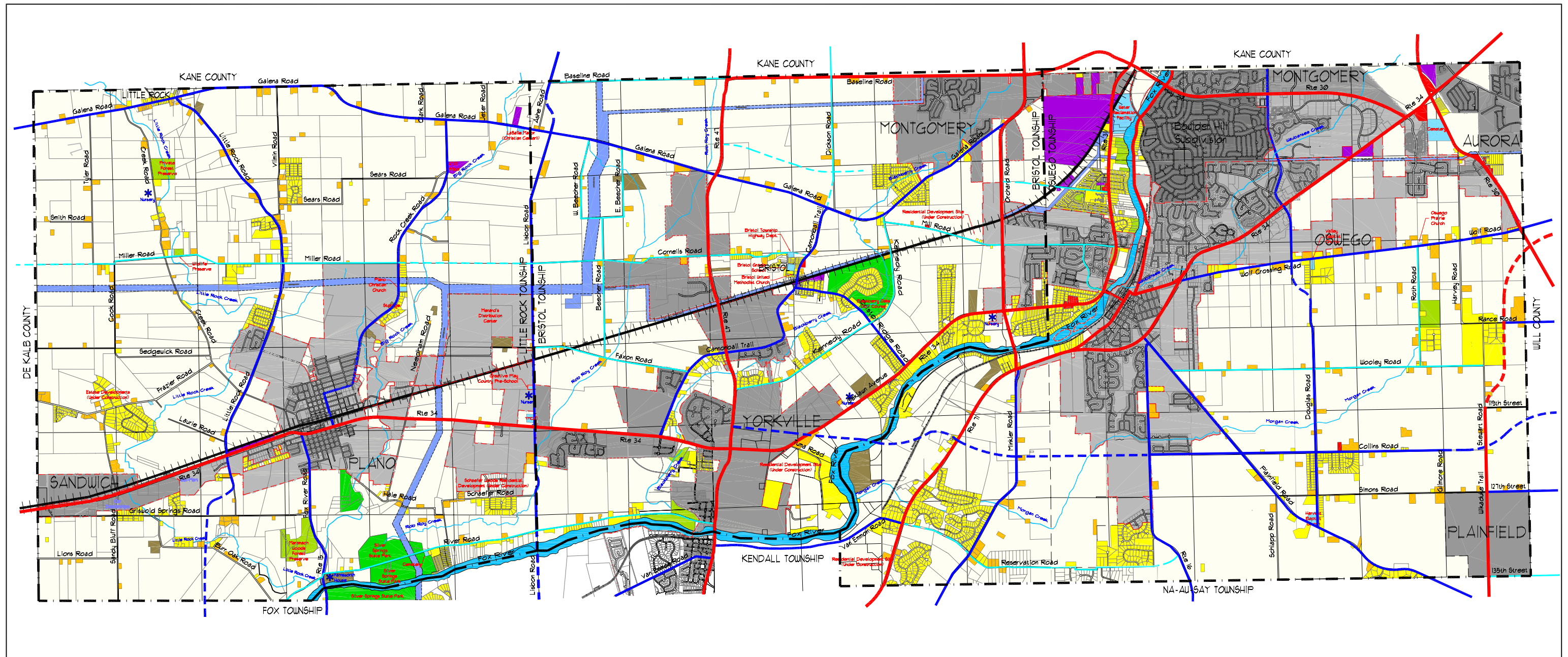
Oswego Township

Figure 6 summarizes the acreage and composition of existing land uses in Oswego Township.
















Figure 6
Existing Land Use


Land Use	Oswego Township	
	acres	percent of total
Single Family Residential	2,478.3	9.6%
Farmstead	378.0	1.5%
Commercial	52.2	0.2%
Institutional	160.5	0.6%
Industrial	430.5	1.7%
Parks/Recreation	19.5	0.1%
Open Space	48.1	0.2%
Utilities (ComEd)	60.0	0.2%
Agricultural Special Use	95.4	0.4%
Agricultural	15,490.9	60.2%
Municipalities	6,501.4	25.3%
Total	25,714.8	100.0%

Oswego Township covers approximately 25,715 acres of land, which includes over 60% agricultural land. Parts of four municipalities comprise over a quarter (28.9%) of the total land. In particular, Oswego Township is home to the southeast section of the Village of Montgomery, most of the Village of Oswego, a recently annexed section of the Village of Plainfield, and a small section of the southwest corner of the City of Aurora. The Boulder Hill Subdivision is unincorporated but is developed at a higher density (2-3 dwelling units per acre) than what the County typically permits. A few parks and institutional uses are also part of Boulder Hill. Single family residential homes and farmsteads comprise 9.6% and 1.5%, respectively, of total land.



EXISTING LAND USE LEGEND

- | | | |
|--|--|---|
|  Single Family Residential |  Institutional |  Arterial Roads |
|  Farmstead |  Agricultural |  Major Collector Roads |
|  Commercial |  Agricultural Special Use |  Minor Collector Roads |
|  Industrial |  Utility Right-Of-Way |  Township Boundaries |
|  Parks/Recreation |  Municipality | |
|  Open Space | | |

January 2003 

Existing Land Use Plan

NORTHERN THREE TOWNSHIPS - KENDALL COUNTY, ILLINOIS

ENVIRONMENTAL FEATURES

The environmental features represented on the Planning Issues Map include wetlands, soil and sub-surface construction hazard areas, wooded areas, steep slopes, creeks and watershed boundaries, and floodplains. Most of these features were identified from the 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. The Illinois Watershed Management Clearinghouse, which is an online resource maintained by the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois at Urbana-Champaign, was another key source of environmental information. Key issues relating to these environmental features are noted below:

Wetlands

Although wetlands are primarily situated along the Fox River and local creeks, some wetlands are located in isolated spots throughout the three 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.

Soil and sub-surface construction hazard areas

These areas deter not only farmland production but also the development of structures such as houses. Environmental conditions such as peat and muck, poor drainage, and high water tables hinder the construction of new developments. Thorough analyses of these construction hazard areas should be conducted in order to determine the feasibility of development. If a development is deemed feasible, the size and environmental impacts of the development need to be evaluated.

Wooded areas

The wooded areas depicted on the Planning Issues Map only represent wooded areas that cover one acre or more. There were several other groves of trees scattered throughout the township, but each grove covered less than an acre of land. Similar to wetlands, all wooded areas, regardless of size, should be identified as development activity warrants.

Steep slopes

Steep slopes are defined as slopes with grades greater than 10%. Steep slopes are primarily located along the floodplain and non-productive farmland. Areas with steep slopes should be thoroughly evaluated to determine their suitability for development.

Creeks and watersheds

The location of creeks and watershed boundaries (i.e. ridge lines) are critical for stormwater management.

- ❑ **Little Rock Township:** Little Rock Creek, Big Rock Creek, and Rob Roy Creek all run through Little Rock Township. In addition, the township contains the Big Rock Creek Watershed and the Lower Fox River/Illinois River Watershed.
- ❑ **Bristol Township:** Blackberry Creek and Rob Roy Creek are the two creeks that run through Bristol Township. In addition, the township is intersected by three major ridge lines and covers the Lower Fox River/Illinois River Watershed, the Blackberry Creek Watershed, and the Lower Fox River/Yorkville Watershed.
- ❑ **Oswego Township:** Waubensee Creek and Morgan Creek both flow through Oswego Township. A small portion of the East Aux Sable Creek also runs through the southeast corner of the township. In addition, the township contains portions of the Lower Fox River/Yorkville Watershed, the Aux Sable Creeks Watershed, and the DuPage River Watershed.

Floodplains

In addition to creeks and watersheds, the floodplains in each township help make up their respective environmental character.

- ❑ **Little Rock Township:** The floodplain in Little Rock Township forms a rough U-shaped area. The left portion of the floodplain primarily follows the path of Little Rock Creek while the right portion primarily follows the path of Big Rock Creek. The floodplain is also characterized by several small extensions. Portions of the floodplain run through the Cities of Sandwich and Plano.
- ❑ **Bristol Township:** The floodplain in Bristol Township runs in a southwesterly direction along the path of the Blackberry Creek to the Fox River. The floodplain follows the creek into the Village of Montgomery and extends into Kane County.
- ❑ **Oswego Township:** Floodplain areas in Oswego Township primarily follows the path of the Fox River and Waubensee Creek.

TRANSPORTATION NETWORK

The transportation network shown on the Planning Issues Map includes existing arterial roads, major and minor collector roads, the Burlington Northern Railroad, scenic routes, and multi-use trails. The features of the network were primarily identified from the Kendall County Transportation Plan, which was originally prepared in March 1994 and updated in December 2002.

Each level of the four-level transportation network that traverses the Northern Three Townships is described in greater detail below.

Arterial Roads

State and federal routes typically act as the arterial roads which provide regional roadway access to, from, and within an area.

- ❑ **Little Rock Township:** Route 34 is the only arterial road that runs through Little Rock Township. **Route 34** provides access within the township and connects the township to the rest of Kendall County, DeKalb County to the west, and extends east to Chicago and west towards Iowa.
- ❑ **Bristol Township:** Four arterial roads run through Bristol Township. Route 34 and Route 30 both provide access within Bristol Township and connect the township to the rest of Kendall County. **Route 34** runs through the southern portion of the township while **Route 30** runs along the township's northern boundary. **Route 47** is a major north-south arterial road that carries a large load of traffic in the township. **Orchard Road** is a fourth arterial road that is situated directly west of the Bristol-Oswego township boundary and runs in a north-south direction.
- ❑ **Oswego Township:** Four arterial roads run through Oswego Township. Route 34 and Route 30 both provide access within Oswego Township and connect the township to the rest of Kendall County. **Route 34** runs in a diagonal direction from the southwest to the northeast parts of the township. **Route 30** runs in an easterly direction between the adjacent village limits of Montgomery and Oswego, intersects with Route 34, and then continues in a southeasterly direction into Will County. Routes 31, 25, and 71 are three other arterial roads that carry large loads of traffic in the township. **Route 31** runs along the western side of the Fox River and merges into Route 34 at the Washington Street Bridge in Oswego. **Route 25** runs through Montgomery along the eastern side of the Fox River and merges into Oswego's Main Street before merging into **Route 71**, which runs diagonally from the northeast to southwest. Route 71 also merges into Route 34 directly north of Oswego Community High School. **WIKADUKE Trail** is a proposed arterial that runs along the eastern edge of the township.

Major Collector Roads

Major collector roads, which typically are county roads, are intended to collect traffic from local roads and feed this traffic onto the arterial roads.

- ❑ **Little Rock Township:** Little Rock Township's major collectors include **Galena Road, Little Rock Road, Fox River Road, Rock Creek Road,** and **Eldamain Road.** All the major collectors are located within Little Rock Township except for Eldamain Road which runs along the township's eastern edge.
- ❑ **Bristol Township:** Bristol Township's major collectors include **Galena Road, Cannonball Trail, Bristol Ridge Road** and **Eldamain Road.**
- ❑ **Oswego Township:** Oswego Township's major collectors include **Plainfield Road, Grove Road, Wolfs Crossing Road, Collins Road, Douglas Road, Stewart Road,** and **Minkler Road.** All the major collectors are located within Oswego Township. A **realignment of Douglas Road** is proposed to connect its intersection with Wolfs Crossing Road. Another **proposed extension con-necting Collins Road to Minkler Road** and Route 71.

Minor Collector Roads

Minor collectors are typically township roads with less regional connectivity than major collectors.

- ❑ **Little Rock Township:** Little Rock Township's minor collectors include **Miller Road, Sandy Bluff Road,** and **River Road.**
- ❑ **Bristol Township:** Bristol Township's minor collectors include **Corneils Road, Dickson Road, Mill Road, Kennedy Road,** and **River Road.**
- ❑ **Oswego Township:** Oswego Township's minor collectors include **Light Road, Mill Road, Roth Road, Woolley Road,** and **Reservation Road.** Another minor collector is the segment of **Baseline Road** from Route 31 to the Route 30 bypass.

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 and around municipalities. Griswold Springs Road, Beecher Road, and Simons Road are examples of local roads.

Railroad

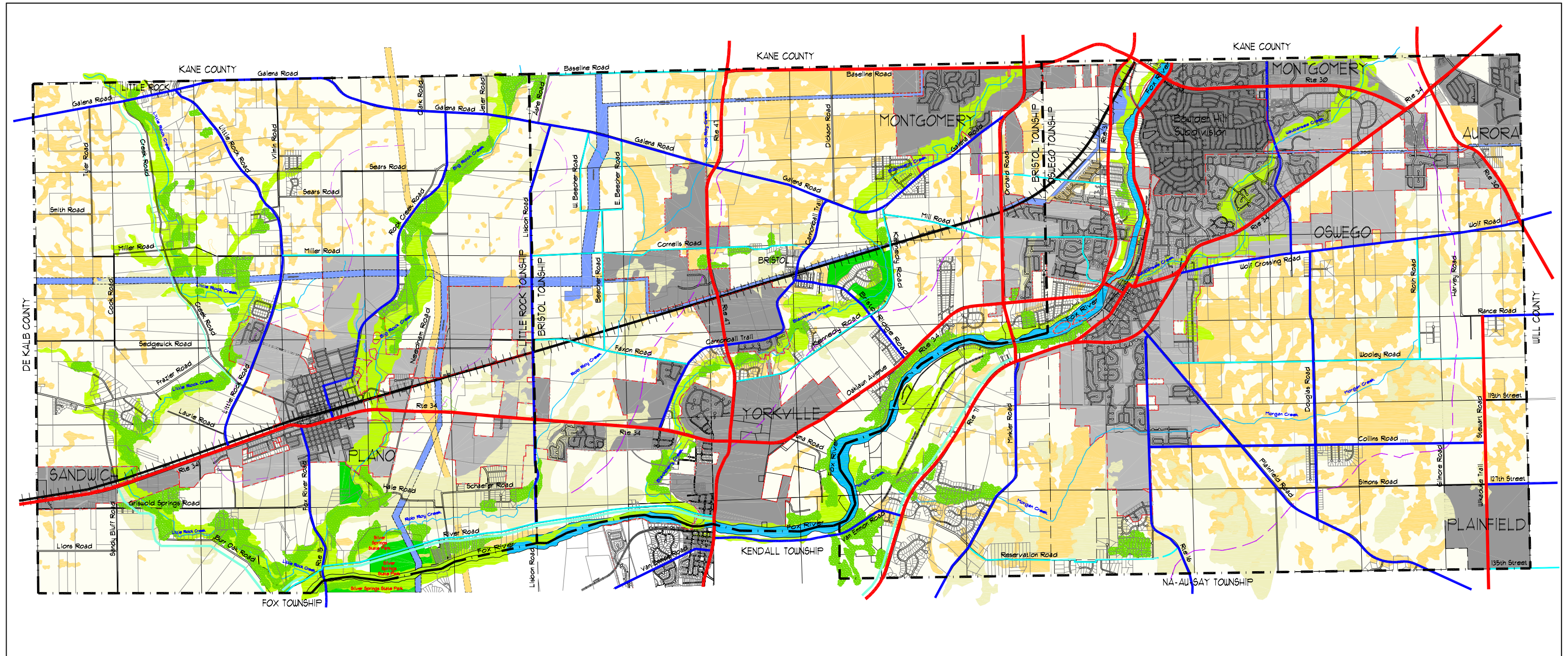
The Burlington Northern Railroad runs through all three Northern Townships. The railroad starts west of the Fox River in Montgomery (near the Route 31/Route 30 bypass), curves in a southwesterly direction into Bristol Township, passes through Yorkville and Plano, and eventually runs parallel to Route 34 as it enters Sandwich from Plano. Railnet is another local railroad which runs east of the Fox River, passes through downtown Oswego, veers slightly away from the river and follows along Route 71 towards Van Emmon Road (east of Yorkville).

Scenic routes

Scenic routes provide passing motorists with attractive views of the rural character of the Northern Three Townships. Identified scenic routes generally follow the Fox River and roadways that traverse the serene and undeveloped areas outside of municipalities (i.e. unincorporated areas).

Multi-use trails

Multi-use trails are primarily located along scenic routes, natural features (e.g. creeks), and some roadways. These trails create corridors that can potentially accommodate pedestrian, equestrian, bicycle, and other forms of trail users.



ENVIRONMENTAL CHARACTERISTICS LEGEND

- Floodplain
- Creek
- Watershed Boundary
- Wooded Area (1 acre or more)
- Non-Productive Farmland
- Soil & Sub-Surface Construction Hazard (Peat & muck, poor drainage, high water table)

- Productive Agricultural Farmland
- Parks/Recreation
- Municipality
- Township Boundary

TRANSPORTATION NETWORK LEGEND

- Arterial Road
- Major Collector Road
- Minor Collector Road
- Scenic Route
- Proposed Prairie Parkway Corridor (Corridor Protection Map recorded for approval July 24, 2002)

January 2003

Planning Issues Map

NORTHERN THREE TOWNSHIPS - KENDALL COUNTY, ILLINOIS



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Evanston, IL 60201
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TRAFFIC VOLUME

IDOT conducts periodic traffic counts on roadways throughout the state. Figures 7, 8, and 9 summarize traffic counts in 1998 and 2002 for the arterial, major collector, and minor collector roads that traverse through the Northern Three Townships. The traffic volume trends for each township are summarized below and the next two pages.

Overall, the effects of future developments on traffic counts on all road segments should be kept under consideration in order to minimize traffic problems. In particular, any new development should take into consideration future transportation needs and reserve appropriate right-of-way for future roadway improvements.

Little Rock Township

Figure 7 summarizes traffic counts in 1998 and 2002 for the road network in Little Rock Township. Route 34, which is the only arterial road running through the township, experienced decreases in traffic volume along all its segments except for the one west of Eldamain Road. Little Rock Road experienced the largest increase in traffic volume (1,950 more cars) at its intersection with Route 34, which is located on the west side of Plano. Most other roads in the township experienced increases in traffic volume. Even small roads such as Griswold Springs Road and Sandy Bluff Road experienced their share of traffic volume increases.

Figure 7
Traffic Volumes on Major Roads
in Little Rock Township

Road Segment	Traffic Volume		Change in Traffic Volume	
	1998	2002	Net	Percent
Route 34				
• West of Sandy Bluff Rd	13,200	12,600	-600	-4.5%
• West of Little Rock Rd	13,200	11,700	-1,500	-11.4%
• East of Rock Creek Rd	17,000	12,300	-4,700	-27.6%
• West of Eldamain Rd	11,900	12,800	900	7.6%
Calena Road				
• West of Creek Rd	6,900	7,200	300	4.3%
• West of Vilmin Rd	2,800	3,100	300	10.7%
• West of Rock Creek Rd	3,450	3,600	150	4.3%
• East of Rock Creek Rd	5,600	6,500	900	16.1%
Little Rock Road				
• North of Miller Rd	2,450	2,800	350	14.3%
• North of Creek Rd	3,050	3,850	800	26.2%
• North of Route 34	1,550	3,500	1,950	125.8%
Fox River Road				
• South of Route 34	2,700	2,700	0	0.0%
Rock Creek Road				
• South of Calena Rd	3,350	3,700	350	10.4%
• South of Miller Rd	2,950	2,700	-250	-8.5%
Eldamain Road				
• North of Route 34	1,500	1,400	-100	-6.7%
Miller Road				
• West of Little Rock Rd	375	400	25	6.7%
• East of Little Rock Rd	800	1,250	450	56.3%
Creek Road				
• South of Calena Rd	375	450	75	20.0%
Vilmin Road				
• South of Calena Rd	550	700	150	27.3%
Griswold Springs Road				
• East of Sandy Bluff Rd	1,950	2,200	250	12.8%
Sandy Bluff Road				
• South of Griswold Springs Rd	2,350	2,850	500	21.3%

Source: 1998 and 2002 Traffic Maps, Illinois Department of Transportation

Note: Traffic volume is measured in the average daily number of cars driving on a particular road.

Bristol Township

Figure 8 summarizes traffic counts in 1998 and 2002 for the road network in Bristol Township. The three arterial roads in the township -- Routes 34, 47, and 30 -- all experienced increases in traffic volume, except for a small segment along Route 34 near Bristol Ridge Road (200 fewer cars). In particular, the segment of Route 30 extending east of Route 47 saw an increase of 2,800 more cars, which was the largest increase in traffic volume on any of the three arterial roads. Most other segments along these arterials experienced an increase of 900 cars or more since 1998.

Overall, the segment of Orchard Road extending south of Galena Road experienced the largest increase in traffic volume (4,700 more cars). Also, the segment of Cannonball Trail extending east of Route 47 saw an increase of 1,100 additional cars. Most other roads experienced relatively smaller increases in traffic volume.

Not all roads experienced increases in traffic volume, though. Traffic volume all along Galena Road decreased since 1998. The segment of Galena Road extending west of Orchard Road experienced the largest decrease in traffic volume (2,300 fewer cars).

Figure 8
Traffic Volumes on Major Roads
in Bristol Township

Road Segment	Traffic Volume		Change in Traffic Volume	
	1998	2002	Net	Percent
Route 34				
• East of Eldamain Rd	12,000	13,000	1,000	8.3%
• West of Route 47	12,400	14,200	1,800	14.5%
• Intersection with Bristol Ridge Rd	15,000	12,800	-2,200	-14.7%
• West of Orchard Rd	12,100	13,000	900	7.4%
Route 30				
• East of Route 47	6,000	8,800	2,800	46.7%
Route 47				
• South of Route 50	15,500	14,700	-800	-5.2%
• North of Cornells Rd	15,500	15,700	200	1.3%
Galena Road				
• West of Route 47	5,300	4,650	-650	-12.3%
• East of Route 47	5,900	3,650	-2,250	-38.1%
• West of Orchard Rd	5,900	3,600	-2,300	-39.0%
Cannonball Trail				
• South of Galena Rd	1,300	1,300	0	0.0%
• East of Route 47	1,700	2,800	1,100	64.7%
• North of Route 54	1,800	2,400	600	33.3%
Bristol Ridge Road				
• Northwest of Kennedy Rd	1,150	1,300	150	13.0%
• Southeast of Kennedy Rd	1,250	1,250	0	0.0%
Eldamain Road				
• North of Route 54	1,500	1,400	-100	-6.7%
Dickson Road				
• North of Galena Rd	225	375	150	66.7%
Mill Road				
• Intersection with Kennedy Rd	600	700	100	16.7%
Kennedy Road				
• South of Galena Rd	2,000	1,700	-300	-15.0%
Orchard Road				
• South of Galena Rd	7,000	11,700	4,700	67.1%
Baseline Road				
• East of Ash Rd	2,050	2,550	500	24.4%

Source: 1998 and 2002 Traffic Maps, Illinois Department of Transportation

Note: Traffic volume is measured in the average daily number of cars driving on a particular road.

Oswego Township

Figure 9 summarizes traffic counts in 1998 and 2002 for the road network in Oswego Township. Route 34, which is one of the township's primary arterial roads, experienced relatively little increase in traffic volume. The largest increase along Route 34 was 200 additional cars along the segment extending south of Route 30 near Aurora. In addition, certain segments along Route 30 experienced the largest decreases in traffic volume in the entire township. On the other hand, other arterial roads such as Routes 30 and 31 experienced substantially larger increases in traffic volume. In particular, 3,000 more cars drove along the segment of Route 30 extending east of Route 25 while 4,100 additional cars drove along the segment of Route 31 extending south of Route 30.

Collector roads such as Wolfs Crossing Road, Douglas Road, Woolley Road, and Grove Road all experienced increases of 1,100 additional cars or more along certain segments. In particular, the segment of Wolfs Crossing Road extending west of Route 30 saw an increase of 3,800 more cars.

Figure 9
Traffic Volumes on Major Roads
in Oswego Township

Road Segment	Traffic Volume		Change in Traffic Volume	
	1998	2002	Net	Percent
Route 34				
East of Route 25	9,900	10,000	100	1.0%
West of Douglas Rd	16,500	16,300	-200	-1.2%
South of Route 30	17,300	17,500	200	1.2%
Route 30				
East of Route 25	22,500	25,500	3,000	13.3%
South of Route 31	12,500	13,500	1,000	7.9%
North of Wolfs Crossing Rd	12,700	11,100	-1,600	-12.7%
Route 31				
South of Route 30	12,500	16,600	4,100	32.8%
Route 25				
South of Route 30	7,100	8,500	1,400	19.7%
North of the Wackinton Street Bridge	7,100	7,200	100	1.4%
Route 71				
Near Saw-Was-Kee Nature Preserve	7,600	9,400	1,800	23.7%
East of Winkler Rd	9,100	9,500	400	4.4%
Merge with Route 31	10,200	10,000	-200	-2.0%
Other Road				
South of Route 71	1,000	6,200	5,200	520.0%
Wolfs Crossing Road				
West of Douglas Rd	6,400	6,000	-400	-6.2%
East of Douglas Rd	5,500	6,600	1,100	20.0%
West of Route 30	1,800	5,600	3,800	211.1%
Collins Road				
West of Plainfield Rd	200	950	750	375.0%
Douglas Road				
South of Route 31	2,750	4,100	1,350	49.1%
South of Wolfs Crossing Rd	1,700	2,850	1,150	67.6%
South of Woolley Rd	1,500	2,150	650	43.3%
North of Plainfield Rd	600	1,000	400	66.7%
Winkler Road				
South of Route 71	550	1,200	650	118.2%
Light Road				
West of Route 31	2,250	2,750	500	22.2%
Woolley Road				
East of Plainfield Rd	650	1,850	1,200	184.6%
West of Stewart Rd	550	1,700	1,150	209.1%
Renewal Road				
West of Winkler Rd	275	500	225	81.8%

Source: 1998 and 2002 Traffic Maps, Illinois Department of Transportation

Note: Traffic volume is measured in the average daily number of cars driving on a particular road.

ROAD IMPROVEMENTS

IDOT's highway capital improvement plan for Kendall County outlines a variety of road improvement projects for the Northern Three Townships to be undertaken in the near future. The road improvements for each township are summarized below.

Little Rock Township

Four road improvements are planned for Little Rock Township.

1. **Bridge replacement over Little Rock Creek**: The bridge that currently spans over Little Rock Creek in Sandwich is slated for replacement. The bridge is located on Route 34 just east of the intersection of Route 34 and Sandy Bluff Road. The project is planned for 2004.
2. **Road reconstruction along Route 34**: The segment of Route 34 that runs between Chilton Way and Big Rock Creek in Plano is scheduled for reconstruction. Additional lanes and traffic lights are part of this reconstruction plan. Land acquisition is required. The project is planned for later this year.
3. **Storm sewer construction along Route 34**: Infrastructure for a storm sewer system is scheduled for the segment of Route 34 that runs between Bill Street and Big Rock Creek in Plano. The project was initiated last year.
4. **Traffic light installation at Sandy Bluff Road**: IDOT is currently conducting a study of the installation of traffic lights at the intersection of Route 34 and Sandy Bluff Road. The project was completed in August 2002. No installation dates have been set.

Bristol Township

Three road improvements are planned for Bristol Township.

1. **Intersection improvement at Route 34/Route 47**: The intersection of Route 34 and Route 47 in Yorkville is slated for improvement. Land acquisition is required. The project is planned for later this year.
2. **Roadway expansion along Route 34**: The segment of Route 34 located between Orchard Road (west of Oswego) and Route 31 is scheduled to be expanded to 2-4 additional lanes. Infrastructure for a storm sewer system and curb and gutter treatments are also part of the plan. This road segment crosses the Bristol-Oswego township boundary line and is thus situated in both townships. Land acquisition is required. The project is planned for 2006.
3. **Roadway expansion and reconstruction along Route 34**: The segment of Route 34 located between Route 47 and Orchard Road (west of Oswego) is scheduled for reconstruction and expansion. Infrastructure for a storm sewer system and curb and gutter treatments are also part of the

plan. The project is planned for later this year.

Oswego Township

Two road improvements are planned for Oswego Township.

1. **Roadway reconstruction and expansion along Route 31:** The segment of Route 31 between the Kendall-Kane County line and Route 34 is slated for reconstruction and the construction of additional lanes. Land acquisition is required. The project is planned for 2005.
2. **Roadway expansion along Route 34:** The segment of Route 34 located between Orchard Road (west of Oswego) and Route 31 is scheduled to be expanded to 2-4 additional lanes. Infrastructure for a storm sewer system and curb and gutter treatments are also part of the plan. This road segment crosses the Bristol-Oswego township boundary line and is thus situated in both townships. Land acquisition is required. The project is planned for 2006.

Public Facilities & Utilities

In addition to the transportation network, the public facilities and utilities of the Northern Three Townships are key assets to the communities in the area. Public facilities include the school and fire districts (as shown on the School and Fire Protection Districts Maps on pages 6-28 and 6-29, respectively). Utilities infrastructure includes electricity service and the water and sewer systems.

SCHOOL DISTRICTS

The Northern Three Townships are divided into the following five school districts:

- ❑ District 88 - Plano School District
- ❑ District 115 - Yorkville School District
- ❑ District 308 - Oswego School District
- ❑ District 429 - Hinckley Big Rock School District
- ❑ District 430 - Sandwich School District

The specific division of school districts is described below.

Little Rock Township

Little Rock Township includes Districts 88, 115, 429, and 430. The land coverages of these four districts are depicted on the School Districts Map.

District 88 comprises the majority of the township's land coverage. Most of the City of Plano is in District 88, except for a small section which is in District 115. District 115 is located along the Fox River in the south-east corner of the township. District 429 covers only a small portion of the township (near the Vilmin Road/Galena Road intersection). No municipalities are included in this district. District 430 is located along the western edge of the township but is segmented into three subsections. Part of the eastern edge of the City of Sandwich is in District 430. A small portion of Sandwich's eastern edge is in District 88.

Bristol Township

Bristol Township includes Districts 88, 115, and 308. The land coverages of these three districts are depicted on the School Districts Map.

District 88 covers the central-west section of the township. Parts of the United City of Yorkville intersect District 88 in two separate locations. The remaining parts of Yorkville are part of District 115, which comprises the majority of the township's land coverage. District 308 is located on the township's eastern edge and include parts of the Villages of Montgomery and Oswego.

Oswego Township

Oswego Township includes Districts 115 and 308. The land coverages of these two districts are depicted on the School Districts Map.

District 115 covers the southwest corner of the township. No municipalities are included in this district. District 308 covers the remaining part of the township. Small parts of the Village of Montgomery and the City of Aurora as well as the majority of the Village of Oswego are part of District 308. The Boulder Hill Subdivision is also part of this district.

FIRE PROTECTION DISTRICTS

The Northern Three Townships are divided into the following six fire protection districts:

- ❑ Little Rock-Fox Fire Protection District
- ❑ Sandwich Fire Protection District
- ❑ Bristol-Kendall Fire Protection District
- ❑ Oswego Fire Protection District
- ❑ Montgomery and Countryside Fire Protection District
- ❑ Aurora Fire Protection District

The specific division of fire protection districts is described below.

Little Rock Township

Little Rock Township includes the Little Rock-Fox Fire Protection District, the Sandwich Fire Protection District, and the Bristol-Kendall Fire Protection District. The land coverages of these three districts are depicted on the Fire Protection Districts Map.

The Little Rock-Fox Fire Protection District comprises a majority of Little Rock Township. The entire City of Plano and part of the eastern edge of the City of Sandwich are located in this district. The rest of Sandwich's eastern edge is part of the Sandwich Fire Protection District. The Bristol-Kendall Fire Protection District comprises a small section of the township's southeastern corner along the Fox River. No municipalities are included in this district.

Bristol Township

Bristol Township includes the Little Rock-Fox Fire Protection District, the Bristol-Kendall Fire Protection District, and the Oswego Fire Protection District. The land coverages of these three districts are depicted on the Fire Protection Districts Map.

The Little Rock-Fox Fire Protection District comprises a fairly small section along the township's western edge. No municipalities are included in this district. The Bristol-Kendall Fire Protection District comprises the majority of the township's land coverage. The entire United

City of Yorkville is part of the Bristol-Kendall Fire Protection District. A small section of the Village of Montgomery is also part of this district. The remainder of Montgomery and part of the Village of Oswego are part of the Oswego Fire Protection District, which is located along the township's eastern edge.

Oswego Township

Oswego Township includes the Bristol-Kendall Fire Protection District, the Oswego Fire Protection District, the Montgomery and Countryside Fire Protection District, and the Aurora Fire Protection District. The land coverages of these four districts are depicted on the Fire Protection Districts Map.

The Oswego Fire Protection District covers the majority of the township. Small parts of the Village of Montgomery, the Village of Plainfield, and the City of Aurora as well as the majority of the Village of Oswego are part of the Oswego Fire Protection District. The Boulder Hill Subdivision is also part of this district. The Bristol-Kendall Fire Protection District covers part of the southwest corner of the township. No municipalities are included in this district. The Montgomery and Countryside Fire Protection District covers a small area located west of the Fox River in the north-central part of the township. Part of the Village of Montgomery lies within this district. The Aurora Fire Protection District covers a small part of the northeast corner of the township. Part of the City of Aurora lies within this district.

ELECTRICAL SERVICE

Electrical power lines provided by ComEd are located throughout the Northern Three Townships. The locations of major transmission lines in each township are summarized below.







- ❑ **Little Rock Township**: Major power lines run in a west-east direction through the central part of the township. An extension runs from the eastern section of the main lines in a southerly direction through east Plano.
- ❑ **Bristol Township**: Major power lines run along the segment of railroad that passes through northern Yorkville and north of the Blackberry Oaks Golf Course. Another major line runs along the northwestern edge of Yorkville, continues northward between East and West Beecher Roads, and terminates at the Kendall-Kane County line. Major power lines also run south of the Kendall-Kane County line and continue into Kane County after passing through Montgomery's city limits.
- ❑ **Oswego Township**: Major power lines run in a west-east direction (from Boulder Hill's eastern edge to the Kendall-Will County line) in the northeast corner of Oswego Township.

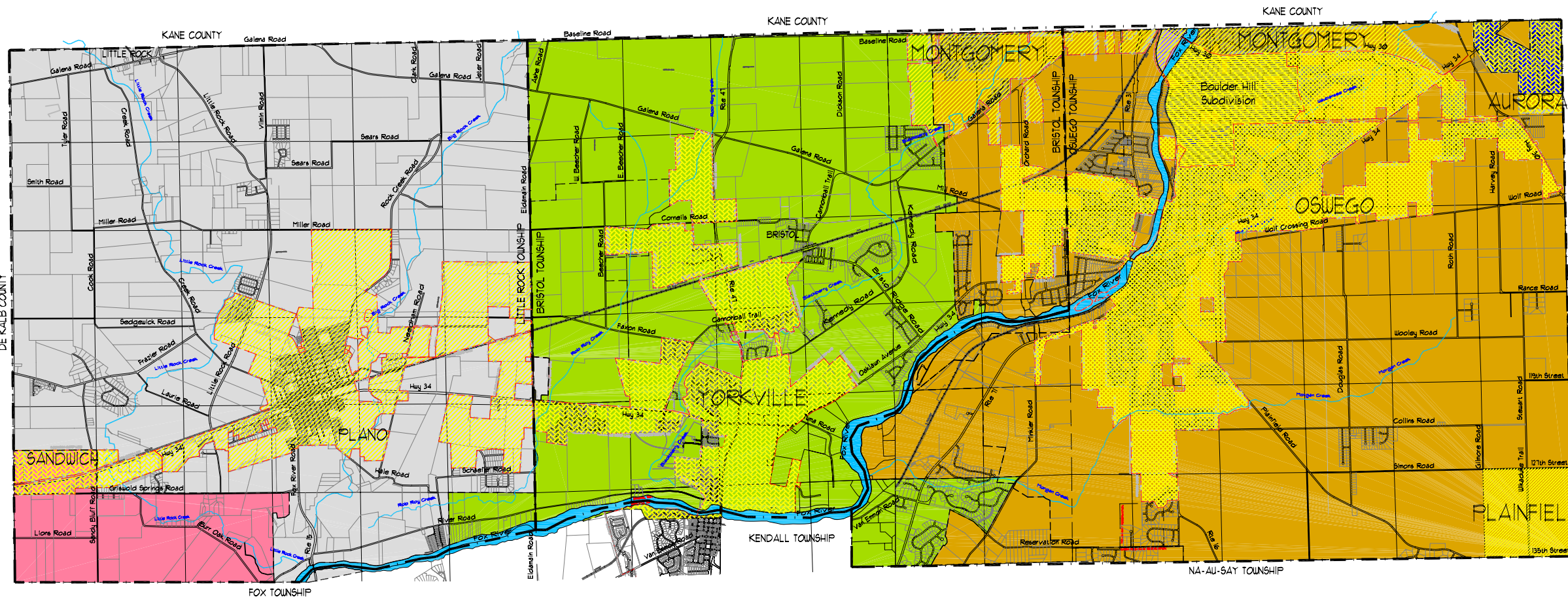
Fire Protection Districts

NORTHERN THREE TOWNSHIPS

Kendall County, Illinois

FIRE PROTECTION DISTRICTS LEGEND

-  Little Rock-Fox
FIRE PROTECTION DISTRICT
-  Sandwich
FIRE PROTECTION DISTRICT
-  Bristol-Kendall
FIRE PROTECTION DISTRICT
-  Oswego
FIRE PROTECTION DISTRICT
-  Montgomery & Countryside
FIRE PROTECTION DISTRICT
-  Aurora
FIRE PROTECTION DISTRICT








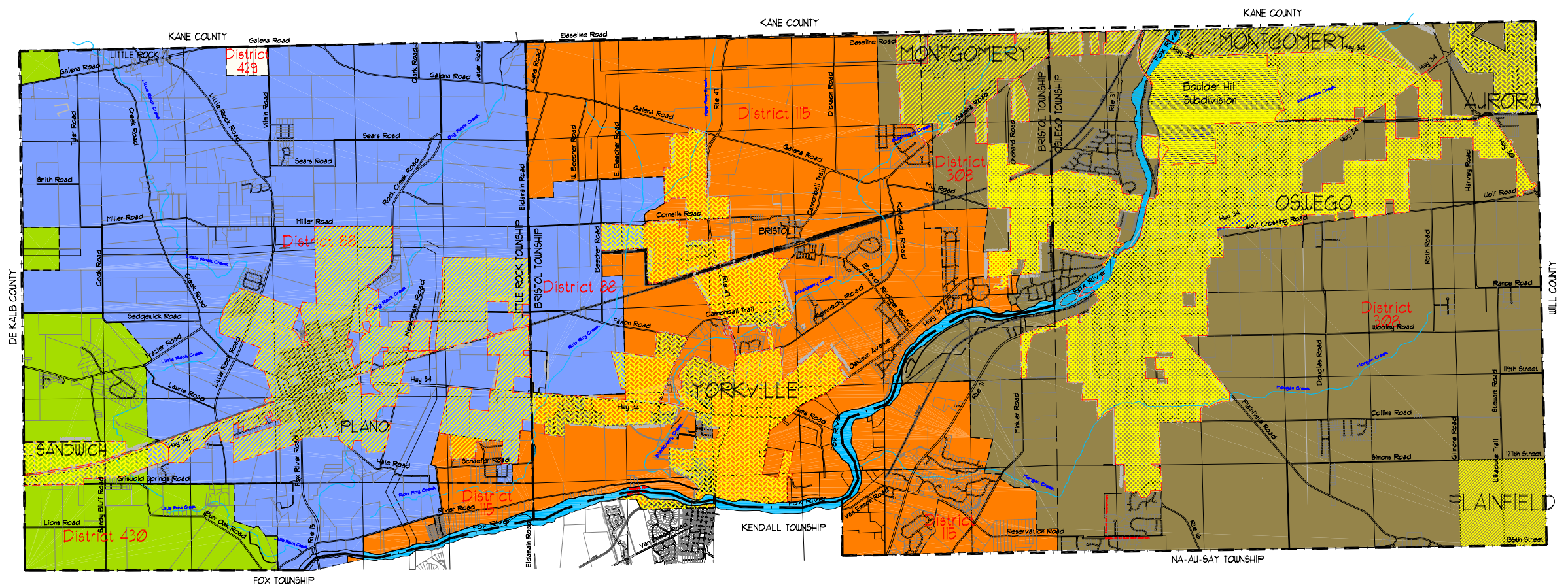
School Districts

NORTHERN THREE TOWNSHIPS

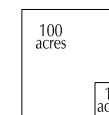
Kendall County, Illinois

SCHOOL DISTRICTS LEGEND

-  Plano School District
DISTRICT 88
-  Yorkville School District
DISTRICT 115
-  Oswego School District
DISTRICT 308
-  Hinkley-Big Rock School District
DISTRICT 429
-  Sandwich School District
DISTRICT 430



January 2003



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Evanston, IL 60201
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**WATER & SEWER SYSTEMS
IN LITTLE ROCK TOWNSHIP**

Residents living in the municipalities of the Northern Three Townships are generally served by municipal water and sewer services. A private water utility also provides service to residents in Little Rock Township. Residents living in unincorporated areas use private water sources and sewer systems. All capacity and demand data for the water and sewer systems (see Figures 10, 11, and 12) were compiled by the Illinois Department of Commerce and Community Affairs.

Water System

The Cities of Sandwich and Plano both supply municipal water service to their respective communities. Figure 10 lists the storage capacity, treatment capacity, and average and peak daily demand for the municipal water services serving the two municipalities. Both municipalities report excess water capacity. Residences located outside of the city limits of Sandwich and Plano access their water supplies from individual well systems.

Figure 10
**Municipal Water & Sewer Systems
Capacity & Demand**

Little Rock Township
(Plano & Sandwich)

	Gal/ons/Day
City of Plano	
Water System	
Water Sources Well	
Storage Capacity	750,000
Treatment Capacity	2,900,000
Average Daily Demand	900,000
Peak Daily Demand	1,750,000
Excess Capacity	1,150,000
Sewer System	
Treatment Capacity	950,000
Present Load	650,000
Excess Capacity	300,000

	Gal/ons/Day
City of Sandwich	
Water System	
Water Sources Other	
Storage Capacity	1,074,000
Treatment Capacity	2,016,000
Average Daily Demand	841,000
Peak Daily Demand	1,200,000
Excess Capacity	384,000
Sewer System	
Treatment Capacity	1,000,000
Present Load	575,000
Excess Capacity	425,000

Source: Illinois Department of Commerce & Community Affairs

Sewer System

Local sanitation in Sandwich and Plano is handled by each city's respective sewage treatment plant. Figure 10 lists the treatment capacity, present load, and excess capacity for the treatment plants for the two municipalities. Although both municipalities report excess sewage treatment capacity, future developments may warrant the expansion of the sewer systems. System expansions would require studies of the types and sizes of new developments. In lieu of the sewage treatment services provided by the plants in Sandwich and Plano, smaller lots located outside the two municipalities may be served by individual septic systems.

**WATER & SEWER SYSTEMS
IN BRISTOL TOWNSHIP**

Water System

The Villages of Montgomery and Oswego and the United City of Yorkville each supply municipal water service to its respective community. Figure 11 lists the storage capacity, treatment capacity, average and peak daily demand, and excess capacity for the municipal water services for the two municipalities. It should be noted that Oswego has zero water treatment capacity because its water source is the Fox River. Residences located outside of the village limits of Montgomery, Oswego, and Yorkville access their water supplies from individual well systems.

Figure 11
Municipal Water & Sewer Systems
Capacity & Demand

Bristol Township
(Montgomery, Oswego & Yorkville)

Gallons/Day	
Village of Montgomery	
Water System	
Water Source: Well	
Storage Capacity	1,800,000
Treatment Capacity	5,350,000
Average Daily Demand	2,350,000
Peak Daily Demand	3,300,000
Excess Capacity	1,960,000
Sewer System	
Treatment Capacity	42,000,000
Present Load	27,800,000
Excess Capacity	14,200,000

Gallons/Day	
Village of Oswego	
Water System	
Water Source: River	
Storage Capacity	750,000
Treatment Capacity	0
Average Daily Demand	850,650
Peak Daily Demand	2,313,000
Excess Capacity	500,000
Sewer System	
Treatment Capacity	42,000,000
Present Load	28,500,000
Excess Capacity	13,500,000

Gallons/Day	
United City of Yorkville	
Water System	
Water Source: Well	
Storage Capacity	800,000
Treatment Capacity	2,962,000
Average Daily Demand	500,000
Peak Daily Demand	1,400,000
Excess Capacity	1,562,000
Sewer System	
Treatment Capacity	993,000
Present Load	1,400,000
Excess Capacity	0

Source: Illinois Department of Commerce & Community Affairs

Sewer System

Local sanitation in Yorkville is handled by the Yorkville-Bristol Sanitary District. Montgomery and Oswego are both served by the Fox Metro Water Reclamation District, which is located in the township along Route 31. Although Montgomery and Oswego own and maintain their own smaller service lines, Fox Metro provides treatment as well as owns, maintains, and operates interceptors. The Bristol-Kendall Sanitary District also provides sewer service to the township.

Figure 11 lists the treatment capacity, present load, and excess capacity for the treatment plants for the three municipalities. Yorkville currently reports zero excess sewage treatment capacity, but treatment capacity is expected to increase from 993,000 to 3,600,000 gallons/day in October 2003. Although Montgomery and Oswego report excess sewer capacity, future developments may warrant the expansion of the sewer systems, which would require studies of the types and sizes of new developments. The villages would therefore need to work with Fox Metro in order to expand its capacity to provide sufficient service to new developments. Smaller lots located outside the three municipalities may be served by individual septic systems.

**WATER & SEWER SYSTEMS
IN OSWEGO TOWNSHIP**

Water System

The City of Aurora and the Villages of Montgomery, Oswego, and Plainfield each supply municipal water service. Figure 12 lists the storage capacity, treatment capacity, average and peak daily demand, and excess capacity for the municipal water systems. It should be noted that both Aurora and Oswego use the Fox River as their water source, but only Oswego has zero water treatment capacity. Residences located outside of the city limits of Aurora, Montgomery, Oswego, and Plainfield access their water supplies from individual well systems. The Boulder Hill subdivision receives water service from Montgomery.

Figure 12
Municipal Water & Sewer Systems
Capacity & Demand

Source: Illinois Department of Commerce &
Community Affairs

Oswego Township
(Aurora, Montgomery, Oswego & Plainfield)

Callons/Day	
City of Aurora	
Water System	
Water Source: River	
Storage Capacity	15,500,000
Treatment Capacity	23,000,000
Average Daily Demand	15,100,000
Peak Daily Demand	24,600,000
Excess Capacity	3,400,000
Sewer System	
Treatment Capacity	42,000,000
Present Load	29,990,000
Excess Capacity	12,010,000

Callons/Day	
Village of Montgomery	
Water System	
Water Source: Well	
Storage Capacity	1,800,000
Treatment Capacity	5,250,000
Average Daily Demand	2,250,000
Peak Daily Demand	5,300,000
Excess Capacity	1,950,000
Sewer System	
Treatment Capacity	42,000,000
Present Load	27,800,000
Excess Capacity	14,200,000

Callons/Day	
Village of Oswego	
Water System	
Water Source: River	
Storage Capacity	750,000
Treatment Capacity	0
Average Daily Demand	899,690
Peak Daily Demand	2,313,000
Excess Capacity	600,000
Sewer System	
Treatment Capacity	42,000,000
Present Load	23,500,000
Excess Capacity	18,500,000

Callons/Day	
Village of Plainfield	
Water System	
Water Source: Well	
Storage Capacity	1,960,000
Treatment Capacity	2,080,000
Average Daily Demand	660,000
Peak Daily Demand	1,390,000
Excess Capacity	738,000
Sewer System	
Treatment Capacity	1,710,000
Present Load	825,000
Excess Capacity	885,000

Sewer System

Local sanitation in Aurora is handled by the Water and Sewer Maintenance Division in the Aurora's Department of Public Works. Montgomery and Oswego are both served by the Fox Metro Water Reclamation District, which is located in the township along Route 31. Although Montgomery and Oswego own and maintain their own smaller service lines, Fox Metro provides treatment as well as owns, maintains, and operates interceptors. Figure 12 lists the treatment capacity, present load, and excess capacity for the treatment plants for the four municipalities. Although all four municipalities report excess sewer capacity, future developments may warrant the expansion of the sewer systems, which would require studies of the types and sizes of new developments. Each municipality may decide to expand its capacity in order to provide sufficient service to new developments. Smaller lots located outside the four municipalities may be served by individual septic systems.

Goals & Objectives

The following goals and objectives have been developed to guide planning efforts for the northern three townships of Little Rock, Bristol, and Oswego. Numbered goals have generally been extracted from the existing Kendall County LRMP, while more specific lettered objectives have been added to address concerns unique to the Northern Three Townships.

- 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 pre-mature development.
 - c. Evaluate the extent to which municipalities cumulatively envision development of the three townships.
 - d. The County should be the primary entity to be in charge of resolving regional transportation issues within the three townships and issues involving other counties, townships, and municipalities located outside Kendall County.
 - e. Encourage municipalities to provide a diversity of housing options.
 - f. Explore ways to amend County and municipal regulations to reduce potential conflicts between agricultural and non-agricultural uses and between other differing uses.
- 2. Use of land resources in a manner sensitive to inherent environmental limitations.**
 - a. Reduce flooding and generally prevent development within flood plain and wetland areas.
 - b. Enact measures to preserve existing trees and natural features as new developments occur in the three townships.
 - c. Increase connectivity of greenways within the three townships and to the surrounding townships and communities.

- d. Support creation of wetland banks to accommodate storm water management and to enhance the viability of wetland environments.
 - e. Pursue acquisition of key woodlands and open space corridors, where feasible.
 - f. Encourage expansion and maintenance of parkways along Route 34, and Route 71.
- 3. A strong base of agricultural, commercial and industrial uses that provide a broad range of job opportunities, a healthy tax base, and improved quality of services to County residents.**
- a. Evaluate economic development potential along the proposed Prairie Parkway corridor.
 - b. Ensure Lisbon/Eldamain Road is maintained as a commercial-industrial development corridor.
 - c. Ensure that Little Rock Road and the WIKADUKE Trail are maintained for commercial development.
 - d. Preserve Orchard Road, Route 34, and Route 47 for commercial uses both to create a tax base and to encourage local shopping opportunities.
 - e. Allow limited big-box development opportunities to encourage local shopping rather than encouraging spending in areas like the Randall Road and Route 59 Corridors.
 - f. Encourage opportunities for locally owned businesses.
- 4. A pattern of compact, urban development, countryside residential, and agricultural environments that enhance the quality of personal and community life.**
- a. Maintain the viability of agriculture and open spaces by promoting residential planned developments. Provide open space buffers between agriculture and residential developments. Such buffers are typically located along natural drainage ways or along existing roadways.
 - b. Encourage development to occur within areas that are readily accessible to public infrastructure and support services.

- c. Create a transition of development densities between suburban scale and agricultural/rural character.
- d. Consider creation of purchase of development rights program designed to encourage preservation of rural land and a transfer of development rights program, if legally feasible.

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 transitions between uses.
- b. Preserve designated scenic routes and vistas by maintaining open space, requiring careful placement and design of landscape features, and requiring residential buildings to have appropriate setbacks from the road centerline.

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

- a. Provide opportunities for appropriate types of residential development in and around areas adequately served by public roads, utilities, and services.
- b. Encourage cluster development that incorporates natural features with creative development planning.
- c. Establish a comprehensive and updated inventory of environmentally sensitive features, including wetland, flood plain areas, 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 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. Encourage the proposed extension of Miller Road (in Little Rock Township) into DeKalb County to relieve some of the traffic on Route 34.
- b. Continue planning for the WIKADUKE Trail.
- c. Explore opportunities to expand Metra service westward to Sandwich.
- d. Relieve congestion on Route 47 through Yorkville.
- e. Extend Eldamain Road south to Lisbon Road.
- f. Relieve heavy traffic on Route 34 (particularly from Route 47 to Sandwich).
- g. Mitigate traffic congestion at access points along major roads.
- h. Consider extending Little Rock Road southward to Fox Township.
- i. Increase access by providing more major arterial roads.
- j. Encourage interconnected street layouts between residential developments.

Transportation Issues

As Kendall County's Northern Three Townships face increasing pressure for development, the transportation infrastructure must be upgraded to handle the subsequent increase in roadway traffic. Various types of road improvements have been planned by IDOT as well as Kendall County. The most notable transportation issue facing the Northern Townships (particularly Little Rock Township) is the proposed Prairie Parkway Corridor. Road improvements and the proposed parkway are discussed below.

The scheduled road improvements for the Northern Three Townships in IDOT's highway capital improvement plan are outlined in the Situation Audit. Additional road improvements are also needed to enhance the overall transportation system.

ROADWAY NETWORK

The Transportation Plan shows a four-level roadway network as follows:

Expressways

Expressways are limited access roadways designed to carry regional and interstate traffic. Expressways are controlled by State or Federal government.

Arterial Roads

Typically state or federal roadways, arterial roads are designed to carry regional traffic through multiple municipalities and across counties. Route 47 and Route 34 are good examples of arterial roadways that are designed to move traffic through the area with limited access to abutting properties. Orchard Road is currently the only county-controlled arterial road in this part of Kendall County. Control of the WIKADUKE Trail is undetermined at this time.

Major Collector Roads

Major collector roads link homes and businesses to the regional arterial and freeway system. The majority of major collectors are controlled by the County, although stretches within municipalities may be locally managed.

Minor Collector Roads

Minor collector roads also connect homes and businesses to major collector roads and to the regional roadway system. Most minor collectors either serve a specific community or township. Minor collectors may fall under the control of Kendall County, the individual township, or the individual municipality. Many of the minor collectors shown on the trans-

portation plan for the three townships do not appear on the County's Transportation Plan due to their limited regional impact. However, they do provide critical local connections at the township and municipal levels and are important to consider at this planning scale.

PROPOSED ROAD IMPROVEMENTS

Proposed road improvements for each township are outlined below:

Little Rock Township

- ❑ Extension of Miller Road from Tyler Road westward into DeKalb County. When linked with a similar extension in DeKalb County, this extension is expected to relieve some traffic on Route 34 through Plano.
- ❑ Extension of Miller Road from Creek Road eastward to connect with Corneils Road.
- ❑ Extension of Eldamain Road from River Road southward to connect with Lisbon Road across the Fox River.
- ❑ Intersection improvements at the intersection of Route 34 and Fox River Road.
- ❑ Extend Millington Road north to Lions Road to connect with Route 34.
- ❑ Development of a trail system within Little Rock Township, which includes off-street and on-street trails that traverse the township and connect to the trail systems within the municipal limits of Plano, Sandwich, and Yorkville.

Bristol Township

- ❑ Realignment of Ashe Road with Eldamain/Lisbon Road at the Galena Road intersection providing improved north/south connections into Kane County and to the Aurora Airport in Sugar Grove.
 - ❑ Extension of Cannonball Trail to connect with Dickson Road at Galena Road and Gordon Street.
 - ❑ Intersection improvement at the intersection of Galena Road and Orchard Road.
-

- ❑ Extension of Light Road westward from the Burlington Northern Railroad (in Oswego Township) to Orchard Road.
- ❑ Intersection improvement at the intersection of Galena Road, Kennedy Road, and Mill Road.
- ❑ Development of a trail system within Bristol Township, which includes off-street and on-street trails that traverse the township and connect to the trail systems within the municipal limits of Montgomery, Plano, Oswego, and Yorkville.
- ❑ Development of a trail system within Bristol Township, which includes off-street and on-street trails that traverse the township and connect to the trail systems within the municipal limits of Montgomery, Plano, Oswego, and Yorkville.
- ❑ Development of a network of collector roads within the Village of Montgomery's planning area. Montgomery's 2002 Comprehensive Plan envisions a network of collector roads located north of Galena Road, south of Route 30, east of Route 47, and west of Orchard Road. Dickson Road is the only current collector road in this area, but Montgomery plans to develop additional collectors traveling in both east-west and north-south directions. The most prominent addition would be the Gordon Road Parkway, which connects with the intersection of Galena Road and Kennedy Road (east of Dickson Road) and curves northward past Route 30 into Kane County.
- ❑ Extension of Beecher Road and/or Countryside Parkway as potential river crossings over the Fox River in Yorkville. One alternative river crossing proposed by Yorkville is the north-south extension of Beecher Road, which would traverse just west of the P.N.A. Youth Camp grounds and cross the river at the Bristol-Kendall Township line. Another alternative is the western extension of Collins Road to connect with Countryside Parkway in Yorkville at Route 34. This extension would also tie into Route 71.

Oswego Township

- ❑ Realignment of Douglas Road from Wolfs Crossing Road northward to Route 34 (in the Village of Oswego).
- ❑ Extension of Collins Road eastward from Gilmore Road to Stewart Road. This extension will link to 119th Street, a strategic regional arterial roadway in Will County.
- ❑ Extension of Collins Road westward from Grove Road to Minkler Road and Route 71.
- ❑ Intersection improvements at the following intersections: Route 34 and Farnsworth Avenue (in the City of Aurora); Reservation Road/Van Emmon Road and Route 71; Plainfield Road and Collins Road; and Route 30 and Harvey Road.
- ❑ Realignment of the eastern segment of Reservation Road at Grove Road.
- ❑ Development of the WIKADUKE Trail, providing a continuous north/south arterial roadway between I-80 and I-88.
- ❑ Development of a trail system within Oswego Township, which includes off-street and on-street trails throughout the township and connects to the trail systems within the municipal limits of Aurora, Montgomery, Oswego, and Plainfield.

- Development of a network of collector roads within the Village of Oswego's planning area. Oswego's 2000 Comprehensive Plan envisions a network of collector roads primarily located southeast of Routes 34 and 71. Wolfs Crossing Road, Douglas Road, Collins Road, Plainfield Road, Grove Road, and Minkler Road comprise the current network of collector roads in this area. However, Oswego plans to develop additional collectors traveling in both east-west and north-south directions.

COMMUNITY TRANSITIONS

The Northern Three Townships are comprised of communities with varying sizes and characters. In order to maintain the unique qualities of each community, adjacent communities should be separated by a physical buffer to clearly define the edge of each community. Boulevards and greenways are two examples of “community transitions”. Although development may occur on either side of a community transition line, the unique identity of each community is enhanced by the physical boundary, particularly if the transition is attractively landscaped and well-maintained. The use of boulevards and greenways as community transitions is discussed below.



Landscaped berms provide an attractive boundary between residential neighborhoods and urban roadways such as Eola



A dedicated bike lane provides a safe path for bicyclists to travel along an urban roadway.



A landscaped median provides an attractive separation between travel lanes on an urban roadway.

Boulevards as Community Transitions

Urban roadways that travel between adjacent communities may be developed as attractive and well-maintained boulevards. Eola Road (shown in the three images to the left) in Aurora is a local example of an urban roadway that exudes a pleasant character in an urban environment. Lisbon/Eldamain Road, Galena Road, and Route 30 are examples of existing or future urban roadways in the Northern Three Townships. Although developing the entire paths of these three roadways as boulevards may not be feasible, certain segments should be developed as boulevards to optimize the views of and from the roadways. The treatment of each of the three roadways is described below:

- ❑ **Lisbon/Eldamain Road:** Based on a boundary agreement, Lisbon/Eldamain Road will be the dividing line between Plano and Yorkville. Based on the Future Land Use Plan, Lisbon/Eldamain Road will run along a variety of land uses, including a Mixed Use Business area, the Schaefer Woods residential development, and the Subat Forest Preserve. Despite the varying land uses, Lisbon/Eldamain Road should be developed as a boulevard along its entire stretch.
- ❑ **Galena Road:** A segment of the boundary agreement between Montgomery and Oswego follows along Galena Road. In particular, this segment follows along the part of Galena Road located between Cannonball Trail and Orchard Road. This segment of Galena Road should be developed as a boulevard to provide a clear demarcation between these two communities.
- ❑ **Route 30:** Another segment of the boundary agreement between Montgomery and Oswego follows along Route 30. In particular, this segment follows along the part of Route 30 located between Douglas Road (east of the Boulder Hill Subdivision) and the intersection of Routes 30 and 34 (east of the Kendall Point Industrial Park). This segment of Route 30 is also recommended to be developed as a boulevard. In addition, Route 30 should be maintained as a parkway as it enters communities.

Greenways as Community Transitions

A greenway is generally defined as an open space located along a creek, stream, or river. The Future Land Use/Transportation Plan map identifies greenways along the Fox River and creeks located throughout the Northern Three Townships. Greenways provide a natural break in the landscape, particularly in areas located between adjacent communities. In particular, the following two greenways may be defined as community transitions:

- **Fox River:** Segments of the Fox River act as dividing lines between adjacent communities. In particular, segments of the Montgomery/Oswego and Yorkville/Oswego boundary agreements are located along the Fox River. Despite dividing adjacent communities along certain segments, the Fox River is not necessarily the most definitive dividing line between communities. For instance, the incorporated areas of Yorkville and Oswego are completely separated by the river.
- **Little Rock Creek:** Little Rock Creek could be considered a natural dividing line between Sandwich and Plano. Currently, the shared corporate limits between the two communities is located south of Route 34 halfway between Sandy Bluff Road and Little Rock Road. However, since Sandwich and Plano do not currently have a boundary agreement, the division between the respective planning areas of the two communities may be defined by Little Rock Creek due to its natural appeal and the distinctive path that it follows.

Future Land Use Plan

The Future Land Use Plan depicts a pattern of land use that would accommodate growth and development in the Northern Three Townships over the next 20 years. Determination of future land use was based on the future land use plans of the municipalities comprising the northern townships (hereinafter referred to as *constituent municipalities*) and discussions with the advisory committee.

DETERMINING FUTURE LAND USES

In particular, the future land use plans for each of the constituent municipalities were sketched on separate layers on top of a large map of the Northern Three Townships. For the most part, the future land use plans were fairly consistent with each other. However, areas where two different plans had a conflict in the proposed future land uses were noted. For example, in the southeastern corner of Oswego Township near the eastern tip of Woolley Road, the Village of Oswego proposes residential uses at this location. However, the Village of Plainfield recommends light industrial/business park uses. These two different proposed uses conflict with each other, but appropriate usage of landscaped buffers and dedicated open space may help minimize the physical impacts of the conflict. Also, light industrial/business park uses are easier to blend with adjacent residential uses than heavy industrial/manufacturing uses.

Key land use issues include:

- ❑ **Residential densities should transition from more intense development near municipalities to less intense development near agricultural land.** The Future Land Use and Transportation Plan map shows denser residential development (i.e. infill developments) in and around each municipality. Residential densities decrease further away from municipalities. In addition, the denser residential developments are more likely to require access to adequate public water and sewer services due to their proximity to municipalities.
- ❑ **In the case where a development occurs near the boundary of two adjacent municipalities, the boundary agreement between the two municipalities would dictate which municipality has authority.** Some municipalities have existing boundary agreements (e.g. Oswego and Montgomery) while others do not have one as of yet (e.g. Sandwich and Plano). In the case where a boundary agreement does not exist, an agreement should be established in the very near future to avoid future land use and zoning disputes.
- ❑ **The location of potential Metra commuter rail stations may help determine the types of land uses around them.** The Metra commuter rail stations depicted on the Future Land Use and Transportation Plan map are all potential locations. Some

of the locations are situated in residential settings (e.g. one station near Route 47 and another near Mill Road), but neighborhood commercial developments may be built around a Metra station. Mixed use developments such as offices, commercial/retail, and residential uses may also be considered to make a Metra station into a destination point rather than just a pick-up/drop-off station.

FUTURE 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 flood plains and wetlands. Refer to the definition in the Residential Planned Development (RPD) section of the County Zoning Ordinance for more details.

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

Municipality. The Municipality category represents areas that are incorporated into one of the following municipalities: Sandwich, Plano, Yorkville, Montgomery, Oswego, Aurora, and Plainfield. These incorporated areas are governed by municipal zoning ordinances.

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 generally not be permitted unless it is directly associated with the operation of a local farm. Agricultural uses are primarily concentrated in Little Rock Township.

Countryside Residential. *(Not to exceed .33 dwelling units per gross buildable acre.)* The Countryside Residential land use category promotes large-lot and/or low density detached single family residential development in an area that primarily maintains an agricultural/rural environment. This land use category is generally consistent with the County's R-1 zoning district which requires a minimum 3 acre lot size. The district provides a rural or countryside setting, retaining a large amount of agricultural land or open space. Countryside residential uses are primarily proposed in Little Rock Township, particularly along the local creeks and north of the Fox River.

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 which permits 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.

Planned Rural Residential. *(Not to exceed .60 dwelling units per gross buildable acre.)* The Planned Rural Residential land use category promotes large-lot and/or low density detached single family residential development. This land use category is generally consistent with the County's RPD-2 zoning district which permits 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. 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.

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 which permits 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. It is important to note that the Boulder Hill Subdivision was developed at higher densities (2-3 dwelling units per acre) than what the County typically permits in this land use category. 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.

Neighborhood Commercial. The Neighborhood Commercial land use category provides for office and retail establishments that offer a limited range of goods and services in locations that have direct access to residential neighborhoods. This land use category permits the same general uses as the County's B-1 Local Shopping District which primarily includes neighborhood-oriented, limited retail, service, and repair

business activities serving the surrounding area. The purpose is to provide for commercial uses which are oriented to the automobile. These uses are concentrated along major collector roads such as Plainfield Road, Douglas Road, Ashe Road, and Little Rock Road.

Regional Commercial. The Regional Commercial land use category provides for office and retail establishments that offer a wide range of goods and services in locations that have access to heavily traveled expressways and arterial roadways. This land use category permits the same general uses as the County's B-2 General Business District which primarily includes general retail, service, and repair business activities serving persons and businesses in the County. The purpose is to provide for commercial uses which are oriented to the automobile. These uses are concentrated along major road corridors such as Route 34, Route 47, Orchard Road, Galena Road, and WIKADUKE Trail/Stewart 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. Because of their high trip generation rates, these uses are concentrated in areas located along Eldamain/Lisbon Road and northwest of the Burlington Northern Railroad between Montgomery and Oswego (just west of Route 31).

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 public/institutional uses shown on the Future Land Use Plan are primarily land belonging to or recently acquired by local schools. Montgomery also proposes a potential multi-use civic campus at the northeast corner of Route 47 and Galena Road.

Parks and Forest Preserve. The Parks and Forest Preserve land use category includes all State Park, Forest Preserve, and Park District public open space and recreation facilities such as parks, nature preserves, multi-use trails, picnic areas and other recreation facilities. Public open spaces provide for recreational opportunities for a growing population and provide opportunities for improved flood control and wetland banking.

Open Space. The Open Space land use category identifies lands that are sensitive to development containing unique environmental char-

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acteristics that should be preserved. These characteristics include primarily wetlands and floodplains. 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. Open space boundaries depicted on the Future Land Use Plan are only conceptual. Appropriate open space boundaries for a particular parcel shall be determined based on specific site analysis at the time of 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”.

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

LAND AREAS OF FUTURE LAND USES

The following table lists the land areas (in acres) of the future land uses in the Northern Three Townships.

Land Use Area Calculations

Land Use	All Townships		Little Rock Township		Bristol Township		Oswego Township	
	Area (acres)	Percent of Total	Area (acres)	Percent of Total	Area (acres)	Percent of Total	Area (acres)	Percent of Total
Countryside Residential	5,798	8.6%	5,798	25.4%	0	0.0%	0	0.0%
Planned Rural Estate Residential	4,631	6.9%	934	4.1%	315	1.7%	3,382	13.2%
Planned Rural Residential	7,731	11.5%	1,672	7.3%	2,341	12.4%	3,718	14.5%
Suburban Residential	16,204	24.0%	2,171	9.5%	6,270	33.1%	7,763	30.2%
Regional Commercial	1,183	1.6%	290	1.3%	615	3.2%	278	1.1%
Neighborhood Commercial	369	0.5%	89	0.4%	173	0.9%	107	0.4%
Mixed Use Business	4,070	6.0%	798	3.5%	2,069	10.9%	1,203	4.7%
Public/Institutional	371	0.5%	45	0.2%	108	0.6%	218	0.8%
Parks and Forest Preserve	687	1.0%	407	1.8%	58	0.3%	222	0.9%
Open Space	3,541	5.2%	1,314	5.8%	1,444	7.6%	783	3.0%
Agricultural	4,506	6.7%	4,506	19.7%	0	0.0%	0	0.0%
Utility ROW	845	1.3%	420	1.8%	365	1.9%	60	0.2%
Public ROW/Fox River	1,389	2.1%	296	1.3%	711	3.6%	382	1.5%
Municipalities (Incorp. Areas)	16,132	23.9%	4,076	17.9%	4,457	23.5%	7,599	29.6%
Total Land Area	67,457	100.0%	22,816	100.0%	18,926	100.0%	25,715	100.0%

POPULATION CAPACITY ANALYSIS

The population capacity analysis determines the anticipated population that the future residential land uses will produce based on the full build-out of the residential densities outlined in the future land use categories section (*Note: The land area for suburban residential uses located within incorporated areas were calculated using a density of 2.0 du/ac*). The figure to the right shows that the Future Land Use Plan for the Northern Three Townships will produce 124,684 residents, which will almost quadruple the 2000 population to a grand total of 168,440 residents. In other words, the townships could accommodate 200% growth in population based on the residential densities and land use areas depicted on the Future Land Use map. The figure shows 62,303 new residents in the County; however, it is important to note that most future residential developments in the County will be annexed and controlled by the municipalities.

Population Capacity Analysis

2000 Population	
Municipal	25,031
County	18,725
Total	43,756

Population Growth	
Municipal	62,381
County	62,303
Total	124,684

Total	168,440
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POPULATION PROJECTIONS

From 1990 to 2000, the total population of the Northern Three Townships grew from 30,797 residents to 43,756 residents, which is a 42% increase over the ten year time period. Using the same 42% population growth increase, the total population of the Northern Three Townships would increase to 62,134 residents by 2010 and 88,230 residents by 2020. The 168,440 residents projected from the population capacity analysis above is significantly higher than the anticipated populations at the 2010 and 2020 benchmarks growing at a steady 42% rate. The County and municipalities should accommodate residential growth by first providing development within incorporated areas (i.e. infill development) and areas located as close to municipalities as possible (i.e. avoid spot developments that are located too far from municipal services or too secluded). Once these areas are developed, the County and municipalities may develop areas located further away in County jurisdiction as long as water and

sewer services are provided (either by municipal services or individual wells and septic tanks).

Areas that are planned for residential development (based on the Future Land Use Plan) but do not develop due to a sufficient amount of housing opportunities (i.e. housing demands are satisfactorily met) should remain undeveloped and be used for agricultural purposes if possible.

Population Projections

	Expected Population
2000 Population	43,756
Population (at full build out) *	168,440
2010 Population **	62,134
2020 Population **	88,230

* Based on population densities

** The 42% growth rate is the same as the population growth rate of the Northern Three Townships from 1990 to 2000.

Successful implementation of the land use and transportation strategies outlined in this plan requires Kendall County to work with the three townships and all affected municipalities. Certain implementation steps will be carried out by each entity, but the implementation strategy as a whole will be guided by intergovernmental cooperation to ensure that different steps either complement each other or avoid conflicts with each other.

Implementation action steps are separated into steps completed by the County and steps carried out by the townships and municipalities. Also, guidelines for the establishment of effective transition spaces between residential and agricultural uses are outlined.

County Action Steps

- ❑ Replace the Township Summaries for Little Rock, Bristol, and Oswego Townships 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.
- ❑ 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.
- ❑ Encourage new residential developments to locate within municipal boundaries to prevent the construction of isolated subdivisions that have no link to any local municipality.
- ❑ Publish the LRMP for the Northern Three Townships on a webpage maintained by the County.

Municipal/Township Action Steps

- ❑ Adopt an intergovernmental agreement with Kendall County to promote continued joint planning and cooperation.
- ❑ Establish or extend boundary agreements with neighboring communities.

Residential/Agricultural Transition Guidelines

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.