

Chapter 9 Land Use

Vision

In the year 2020, Lake County will have a balanced mix of open space, residential, and commercial development that efficiently utilizes land and available infrastructure, protects natural resources, and meets the needs of all residents.

Significance

The Future Land Use Map and associated land use policies are intended to guide how and where future development occurs in Lake County. The map and policies will integrate and provide a spatial context for many of the policies contained in other chapters of the *Regional Framework Plan*. In particular, the Future Land Use Map will build upon the maps contained in Chapter 4, Environmental Resources, Open Space, and Farmland; the countywide land uses inventory for 2000, contained in this chapter; and a compilation of municipal future land use maps. This chapter will include calculation of the County's residential and non-residential development capacity based on the land use intensities provided for in the individual municipal plans. The Future Land Use Map and policies will provide officials with guidance for reviewing development proposals.

The single-use land use categories to be included on the Future Land Use Map represent a change in direction from the mixed-use districts contained in the 1994 *Plan*. In keeping with the concepts introduced during the adoption of the *Unified Development Ordinance*, in early 2000, this *Plan* specifies single-use future land use districts. The exception to the single-use district concept is the Transit Oriented Development and Employment Oriented Development overlay districts. These districts are intended to encourage pedestrian oriented, mixed-use development in appropriate locations, thereby creating an opportunity to preserve agricultural land, forest land, and grass land as open space.

The primary purpose of this chapter is to provide a Future Land Use Map and policies that reinforce the goals and policies contained in the other components of the *Plan* and are compatible with municipal land use plans. Towards this end, development of this chapter involved individual, one-on-one meetings with representatives of 48 of Lake County's 52 municipalities.¹

Issues and Opportunities

- The successful implementation of a countywide Future Land Use plan can only be accomplished with strong municipal support because: 1) municipalities can annex land without County approval; and 2) the majority of development occurs within municipal boundaries where the County has no zoning or subdivision authority.
- State statutes allow counties and municipalities to enter into intergovernmental land use planning and boundary agreements to implement the plans.

¹ Two municipalities reviewed maps and provided comments via telephone. The remaining two Lake County municipalities did not respond to repeated requests to meet.

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- Existing and proposed Metra commuter rail stations and employment centers provide an opportunity to develop new higher density mixed-use, pedestrian-friendly, Transit Oriented Developments (TOD) and Employment Oriented Developments (EOD).

Data Analysis

2000 Land Use Inventory

An accurate land use inventory is critical for determining appropriate future land uses. A 2000 Land Use Inventory Map is included in this *Plan*. The countywide inventory was created using Geographic Information System (GIS) technology. The 2000 Land Use Inventory is an update of the 1995 Regional Land Use Inventory conducted by the Northeast Illinois Planning Commission (NIPC). The 2000 land use inventory is based on aerial photography, as well as County tax assessment records and existing natural resource inventory maps. The inventory includes land use areas as small as 1/4 acre. Thus the land use inventory illustrates the pattern of development as it existed in April 2000. It should not be relied upon for determining the use of any individual parcel.

The 2000 Land Use Inventory Map presents land use in 14 categories. The Land Uses are listed below under the broad headings of Employment, Residential, and Other:

Employment

1. Government/Institutional: government, medical, educational, and religious facilities.
2. Industrial: industrial, warehousing, wholesale trade, and mining uses.
3. Office/Research: individual office buildings, and office and research parks.
4. Retail/Commercial: shopping malls, mixed-use buildings (which could include residential uses located above store fronts), hotels and motels, marinas, and cultural and entertainment uses.

Residential

5. Residential Single-Family: single-family homes, duplexes, townhomes (with shared walls and individual entrances), and mobile homes.
6. Residential Multifamily: apartment, condominium, and retirement complexes (buildings with shared walls and floors, common entrances, and internal hallways).

Other

7. Utilities/Waste Facilities: electricity, gas, water, sewage, communications, and solid waste infrastructure and facilities.
8. Transportation: public road rights-of-way, railroad facilities, and airports (it does not include most private roads and parking facilities).
9. Disturbed Land: vacant buildings, lots with rubble, abandoned rights-of-way, and land under development for residential and non-residential uses.

10. Forest/Grassland: areas with trees and grass cover that are not in agricultural use or within areas designated as Public/Private Open Space; includes individual lots as well as larger tracts of land.
11. Agricultural: cropland, pasture land, orchards, vineyards, and nurseries, confined feeding operations, and equestrian facilities.
12. Public/Private Open Space: Forest Preserves, parks, arboretums, bike trails, subdivision and neighborhood conservation areas, set-aside areas in commercial developments, and public and private golf courses.
13. Wetlands: wetlands and farmed wetlands that exceed 0.25 acres in size; may be on public or private property.
14. Water: rivers and streams 200 feet in width; lakes, ponds, and stormwater retention facilities larger than 0.25 acres.

For the purpose of analysis, the single-family residential category has been further divided into four density categories based on Lake County tax records.

1. Large Lot Residential: greater than 3-acre lot density;
2. Medium Lot Residential: 1 to 3-acre lot density;
3. Residential: 0.25 to 1-acre lot density; and
4. Small Lot Residential: less than 0.25-acre lot density.

These categories are not mapped for the 2000 Land Use Inventory. But they are included on the Future Land Use Map. In this Plan residential housing density is expressed as “Lot Density”. When used to describe current land use, Lot Density is defined as the average lot size as calculated from the total acreage of the surrounding area of similar land use. It may not be the minimum lot size found for individual lots with that area.

Figure 9.1 summarizes the countywide 2000 land use by category. Residential is the largest land use. Residential development of all types encompasses over 75,800 acres, or approximately 25% of the area of the County. Residential Single-Family development encompasses over 74,000 acres. The majority of single-family residential land has been developed with lots that range from 0.25 to 1-acres (31,710 acres) and lots that range from 1 to 3-acres (27,930 acres). By comparison, Residential Multifamily includes only 1,800 acres, which is less than 1% of the County. Despite occupying a very low percentage of the County area, multifamily housing accounts for 20% of Lake County’s total housing stock, according to the 2000 Census, as reported in Chapter 8, Housing.

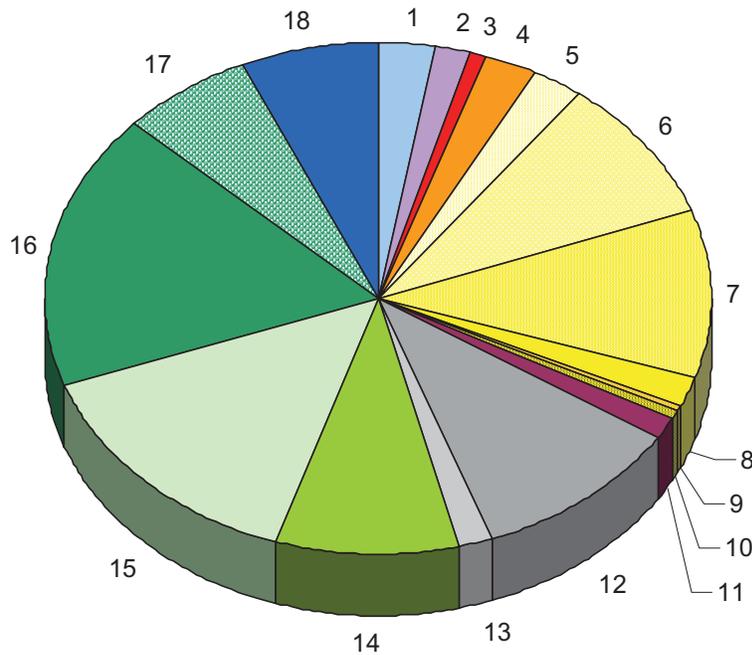
The second largest land use is Public/Private Open Space, which covers over 52,000 acres, which is more than 17% of the County. The third largest land use is Agricultural. Agricultural uses encompass over 43,500 acres, which is just under 15% of the area of the County. Taken together, Industrial (uses 5,478) acres, Office/Research (uses 2,241 acres), and Retail/Commercial (uses 7,077 acres), comprise less than 5% of the area of Lake County.

Figure 9.2 shows land use acreages for each Cooperative Planning Area and Figure 9.3 shows land use by percentage for each Cooperative Planning Area. With this table it is possible to

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compare the land use between various portions of the County. As shown in the table, much of the remaining agricultural land is concentrated in the North Central, West Central, and Greater Avon Township Cooperative Planning Areas (see the Cooperative Planning Areas Map in Chapter 1, Introduction), each of which have a higher percentage of Agricultural Land Use than the countywide average of 14.5%.

**Figure 9.1
2000 Land Use**



		Land Use	Acres	Percent
1	Employment	Government/Institutional	8,202	2.7%
2		Industrial	5,478	1.8%
3		Office/Research	2,241	0.7%
4		Retail/Commercial	7,077	2.4%
5	Residential	Residential Single Family Large Lot (>3 acres)	7,816	2.6%
6		Residential Single Family Medium Lot (1-3 acres)	27,930	9.3%
7		Residential Single Family Residential (0.25-1 acres)	31,710	10.5%
8		Residential Single Family Small Lot (<0.25 acres)	6,120	2.0%
9		Residential Single Family Undefined	490	0.2%
10		Residential Multifamily	1,827	0.6%
11	Other	Utility/Waste Facilities	4,186	1.4%
12		Transportation (incl. ROW)	30,818	10.2%
13		Disturbed Land	5,031	1.7%
14		Forest/Grassland	26,927	8.9%
15		Agricultural	43,530	14.5%
16		Public/Private Open Space	52,499	17.4%
17		Wetlands	19,045	6.3%
18		Water	20,087	6.7%
		Total	301,014	100%

**Figure 9.2
2000 Land Use Acres by Cooperative Planning Areas**

Cooperative Planning Area	Employment				Residential		Other								Total Acres
	Governmental / Institutional	Industrial	Office / Research	Retail / Commercial	Residential	Residential Multi-Family	Utility / Waste Facilities	Transportation (incl. ROW)	Disturbed Land	Forest / Grassland	Agricultural	Public / Private Open Space	Wetlands	Water	
Lakes Region	1355	762	1	1,036	10,067	226	193	3,683	697	4,553	7,663	9,454	4,276	10,569	54,535
North Central	612	642	89	998	6,745	237	903	3,849	465	5,296	10,732	6,122	2,843	1,155	40,688
Northeast	1,948	906	377	1,209	8,832	576	1,298	5,967	731	3,221	2,328	8,029	2,041	548	38,011
West Central	268	416	10	370	4,197	101	495	1,962	351	2,812	11,792	5,272	3,386	1,928	33,360
Greater Avon	607	184	31	799	4,176	92	302	2,143	590	1,500	3,553	3,225	1,479	1,355	20,036
Central Lake County	913	1,313	612	1,087	7,205	275	399	3,503	818	2,962	1,557	6,571	1,206	1,310	29,731
Southeast	1,481	195	458	691	11,842	188	252	4,007	288	1,588	409	4,946	517	382	27,244
Greater Barrington	233	138	53	124	6,446	12	22	1,423	296	1,607	1,399	2,492	1,318	1,037	16,600
Southern Route 12	424	307	99	426	9,535	24	101	2,676	538	2,488	3,596	3,108	1,750	1,335	26,407
South Central	361	615	511	337	5,021	96	221	1,605	257	900	501	3,280	229	468	14,402
Lake County Total	8,202	5,478	2,241	7,077	74,066	1,827	4,186	30,818	5,031	26,927	43,530	52,499	19,045	20,087	301,014

Figure 9.3
2000 Land Use Percentages by Cooperative Planning Areas

Cooperative Planning Area	Employment				Residential		Utility / Waste Facilities	Other							Total Percentage
	Government / Institutional	Industrial	Office / Research	Retail / Commercial	Residential	Residential Multi-Family		Transportation (incl. ROW)	Disturbed Land	Forest / Grassland	Agricultural	Public / Private Open Space	Wetlands	Water	
Lakes Region	2.5%	1.4%	0.0%	1.9%	18.5%	0.4%	6.8%	1.3%	8.3%	14.1%	17.3%	7.8%	19.4%	100%	
North Central	1.5%	1.6%	0.2%	2.5%	16.6%	0.6%	9.5%	1.1%	13.0%	26.4%	15.0%	7.0%	2.8%	100%	
Northeast	5.1%	2.4%	1.0%	3.2%	23.2%	1.5%	15.7%	1.9%	8.5%	6.1%	21.1%	5.4%	1.4%	100%	
West Central	0.8%	1.2%	0.0%	1.1%	12.6%	0.3%	5.9%	1.1%	8.4%	35.3%	15.8%	10.1%	5.8%	100%	
Greater Avon	3.0%	0.9%	0.2%	4.0%	20.8%	0.5%	10.7%	2.9%	7.5%	17.7%	16.1%	7.4%	6.8%	100%	
Central Lake County	3.1%	4.4%	2.1%	3.7%	24.2%	0.9%	11.8%	2.8%	10.0%	5.2%	22.1%	4.1%	4.4%	100%	
Southeast	5.4%	0.7%	1.7%	2.5%	43.5%	0.7%	14.7%	1.1%	5.8%	1.5%	18.2%	1.9%	1.4%	100%	
Greater Barrington	1.4%	0.8%	0.3%	0.7%	38.8%	0.1%	8.6%	1.8%	9.7%	8.4%	15.0%	7.9%	6.2%	100%	
Southern Route 12	1.6%	1.2%	0.4%	1.6%	36.1%	0.1%	10.1%	2.0%	9.4%	13.6%	11.8%	6.6%	5.1%	100%	
South Central	2.5%	4.3%	3.5%	2.3%	34.9%	0.7%	11.1%	1.8%	6.2%	3.5%	22.8%	1.6%	3.2%	100%	
Lake County Average	2.7%	1.8%	0.7%	2.4%	24.6%	0.6%	10.2%	1.7%	8.9%	14.5%	17.4%	6.3%	6.7%	100%	

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Office use is concentrated along the I-94 corridor. Office use in the South Central Cooperative Planning Area is five times higher than the countywide average of 0.7%. Office use in the Central Lake County Cooperative Planning Area is three times higher than the countywide average. Retail land use is also concentrated in the Central Lake County, Northeast, and Greater Avon Cooperative Planning Areas. Multifamily housing is concentrated in the Northeast Cooperative Planning Area, which has 2.5 times the countywide average of 0.6% multifamily land use.

2020 Land Use Demand Analysis

The planning process has included an analysis of the land area required to accommodate residential development, non-residential development, public road rights-of-ways, and Public/Private Open Space through 2020. The residential and non-residential land use demand is based on the ratios of housing units and jobs to residential and non-residential land use acres for 2000. Residential land use areas include the Residential Single-Family and Residential Multifamily land use categories, as determined by the 2000 Land Use Inventory. Non-residential land use areas include the Office/Research, Retail/Commercial, Industrial, and Governmental/Institutional land use categories.

The residential and non-residential land use demand analysis is based on net housing unit and employment densities. Land dedicated to public road rights-of-way, Public/Private Open Space, water, and wetlands are excluded from the analysis. The land use demand for future public road rights-of-way within residential and non-residential areas has been calculated based on the ratio of the acres of public road rights-of-ways to the total acres of residential and non-residential land for 2000. The land use demand for Public/Private Open Space has been calculated based on the total acres of Public/Private Open Space identified in the 2000 Land Use Inventory divided by the County's total population.

For population and employment areas, the 2020 Land Use Demand Analysis is intended as an analytical tool. The calculated densities have been utilized to help determine if adequate land is designated on the Future Land Use Map to accommodate population and employment growth. The calculated average housing unit and employment densities should not be interpreted as the recommended density for new residential and commercial developments.

As shown in Figure 9.4, the average net residential density in 2000 was 3.0 units per acre. The average net employment density was 13.4 jobs per acre. In 2000, Lake County had 0.28 acres of public road rights-of-way for each acre of residential and non-residential land use. Finally, in 2000, Lake County had 81.5 acres of Public/Private Open Space per 1,000 population.

These land use ratios have been multiplied by the 2020 population and employment forecasts, as presented in Chapter 2 and Chapter 3, respectively, to determine the acreage required for residential and employment development (including future public road rights-of-way) and Public/Private Open Space in 2020. As shown in Figure 9.4, nearly 24,000 acres of additional land is needed to accommodate residential development; just over 11,000 acres of additional land is needed to accommodate employment development; and over 11,500 acres of additional open space is required in order to maintain the open space ratio of 81.5 acres per 1,000 population.

The residential and employment densities presented in Figure 9.4 are generalized for the entire County. Residential density varied from a high of 5.9 units per acre in the Northeast Cooperative

Planning Area to a low of 1.1 in the Greater Barrington Cooperative Planning Area. Caution must be utilized in interpreting the land use demand and development capacity of the County.

Continuing residential development will create a demand for additional government facilities including schools, fire stations, and other uses. Because government facilities are also centers of employment, these uses are considered as part of the non-residential land use demand calculation, discussed above. Due to the importance of education, the demand for new schools to accommodate population growth deserves extra attention. Based on the school impact fee formula (the Naperville Formula), residential development will result in over 29,000 additional students in Lake County by 2020. This calculation assumes that the mix of detached homes, attached homes, and multifamily housing will remain the same as in 2000 and that there is an equal number of units with each number of bedrooms.

**Figure 9.4
Land Use Demand**

Residential Land Use					
Year	Population	Households	Housing Units	Housing Units / Acre	Residential Acres
2000	644,356	216,297	225,919	3.0	75,893
2020	786,478	269,434	281,528	3.0	94,574
Additional ROW in Residential Land Use Areas (0.28 acres/1 acre)					5,231
Total Residential Land Use Area					99,804
Additional Residential Land Use Area					23,911
Employment Land Uses (1)					
Year	Employment		Jobs/Acre		Non-Residential Acres
2000	309,313		13.4		22,998
2020	425,696		13.4		31,651
Additional ROW in Employment Land Use Areas (0.28 acres/1 acre)					2,423
Total Employment Land Use Area					34,074
Additional Employment Land Use Area					11,076
Public/Private Open Space					
Year	Population		Open Space / 1,000 Population		Open Space
2000	644,356		81.5		52,499
2020	786,478		81.5		64,078
Additional Public/Private Open Space Area					11,579

(1) Employment land uses include: Government/Institutional, Industrial; Office/Research; and Retail/Commercial

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Applying the school site areas specified in the Lake County Unified Development Ordinance (Lake County, 11-2:2001) accommodating these new students will require approximately 750 acres of additional land for school facilities. This is a rough estimate of the land needed for new school facilities. The land requirement may be higher if the number of new students in each school district does not allow for an optimally sized school, which will therefore require more land per student. The need for additional land for new school facilities will be lower if the school districts have previously acquired property in anticipation of growing enrollments.

It is beyond the scope of this *Regional Framework Plan* to identify all the sites required for new government uses and facilities. The location of these sites should be identified in municipal comprehensive plans. In municipalities where this has been accomplished, the Government/Institutional uses have also been included on the Future Land Use Map in this *Plan*.

Future Land Use

The Future Land Use Map is a culminating element of the *Plan*. Throughout the other chapters of the *Plan* there are many policy statements that provide direction for decisions regarding future land use. The Future Land Use Map and supporting policies should give a physical, spatial representation of the goals and policies contained throughout the *Plan*. The Future Land Use Map illustrates generalized patterns for types and locations of future development and redevelopment.

The Future Land Use Map primarily contains single-use districts that are similar to the single-use categories used on the 2000 Land Use Inventory Map. Single-use districts provide greater specificity for future land uses. In this way the *Plan* provides residents and businesses greater certainty regarding the new uses that are appropriate for a given area.

A Mixed Use district is included on the Future Land Use Map. Areas that may be designated as Mixed Use include:

1. Traditional downtowns, where communities want to reflect and promote the continuation of the existing mix of retail, office, and residential uses.
2. Geographic transition areas, which are areas located between areas with predominately residential uses and areas with predominately non-residential uses;
3. Temporal transition areas, which are areas undergoing a conversion from residential uses to non-residential uses, or vice-versa. Many of these areas are located along major arterials where houses are slowly being converted to non-residential uses; and
4. New mixed use districts, where communities want to encourage development (or redevelopment) of a well designed mix of residential, shopping, employment, civic, and/or transportation uses in order to encourage walking, bicycling, and transit use and promote community character.

In addition to the Future Land Use Districts, the Future Land Use Map shows street and utility rights-of-way and surface water from the 2000 Land Use Inventory. It is assumed that these land use features will not change. Unlike the 2000 Land Use Inventory Map, the Future Land Use Map does not designate areas as Wetlands, Forest/Grasslands, and Disturbed Land. Although they are not shown as a specific future land use designation, wetlands are not being removed from Lake County. Wetland areas are included in the Environmental Limitations overlay, as discussed below. Where wetlands have been identified on municipal future land use maps or dedicated as open space, they are designated as Public/Private Open Space on the Future Land Use Map. Areas identified in the 2000 Land Use Inventory as Forest/Grasslands and Disturbed Land are designated with appropriate future land uses. Through the development review process, environmental resources, including wetlands, and scenic corridors and vistas, as described in

Chapter 4, Environmental Resources, Open Space, and Farmland, need to be preserved and enhanced.

The Future Land Use Map has been developed based on municipal comprehensive plans and zoning maps and the Environmental Limitations and High Priority Open Space maps provided in Chapter 4, Environmental Resources, Open Space, and Farmland. Within existing municipal boundaries, future land use is generally shown directly from the municipal comprehensive plan and input received from local officials at individual municipal land use meetings.

In unincorporated areas identified as High Priority Open Space and Moderate Priority Open Space, as described in Chapter 4, future land use is generally designated consistent with the existing zoning and use of the property. Municipal future land use is generally shown for unincorporated areas that are not identified as High Priority Open Space or Moderate Priority Open Space, as described in Chapter 4. When two or more municipalities have planned for the same unincorporated area, the more intensive future land use is generally included on the Future Land Use Map.

The Future Land Use Map also indicates areas with Severe Environmental Limitations and Moderate Environmental Limitations. As presented in Chapter 4, Severe Environmental Limitations include Advanced Identification (ADID) Wetlands with 100-foot buffers, Floodways, and Nature Preserves. Moderate Environmental Limitations include floodplains, Flood of Record, SMC Flood Hazard Mitigation Areas, and Lake County Wetland Inventory (LCWI) Wetlands. Areas with Severe Environmental Limitations are generally undevelopable. Areas with Moderate Environmental Limitations can only be developed if certain mitigation measures are provided. This chapter contains Goals and Policies to limit and guide development of Severe and Moderate Environmental Limitations areas.

Agriculture is designated as the future land use for areas that appear to have long-term potential for agricultural use, if proactive actions are taken to preserve them, and that are not required to accommodate development through 2020. Agricultural use is intended as a permanent designation through 2020 and not a temporary holding zone. The County and municipalities should evaluate these properties and proactively protect these areas for agricultural use, as recommended in Chapter 4.

Public/Private Open Space has been designated for all areas identified in the 2000 Land Use Inventory and in the municipal comprehensive plans as Forest Preserves, parks, arboretums, bike trails, subdivision and neighborhood conservation areas, set-aside areas in commercial developments, and public golf courses.

The Future Land Use Map includes a separate designation for the Heartland Agreement properties, as identified in the October 16, 1986, Heartland Settlement Agreement and Release. Any future uses of these properties other than the uses specified in the Heartland Agreement will require the approval of the parties to the Heartland Agreement.

Residential land use is mapped on the Future Land Use Map using the same categories as described on page 9-3. When used to describe future land use, Lot Density is defined as the average minimum lot size as calculated from the total acreage of a development site, after resource areas are subtracted. It does not define the minimum lot size allowed for individual lots within the development site.

The Land Use Demand analysis in Figure 9.4 represents the projected demand for residential, employment, and Open Space land, as a countywide average, based on historic (2000) land use patterns. The Future Land Use Map represents the recommended land use pattern, based on the

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sources described above. In total, the mapped future land use for residential and employment areas exceeds the expected countywide demand.

Countywide future land use is summarized in Figure 9.5. On the Future Land Use Map, approximately 40% of the County (121,225 acres) is designated for residential uses, compared to the 25% identified by the 2000 Land Use Inventory. Residential Single-Family development encompasses over 116,940 acres. The majority of the single-family residential land is designated for Medium Lot Residential, which has 1 to 3-acre lot density (49,690 acres), and Residential, which has 0.25 to 1-acre lot density (34,361 acres). The Future Land Use Map includes approximately 4,290 acres of Residential Multifamily, which is less than 1.5% of the County area.

The Future Land Use Map contains more than sufficient area to accommodate residential development through 2020. As calculated in Figure 9.4, 99,804 acres of residential land is required to accommodate the County's 2020 population projection of 786,478 persons. This analysis assumed 0.28 acres of land is needed for new street rights-of-way for each net acre of residential development (22% of gross residential area), 3 units per acre, a 4% vacancy rate, and 2.9 persons per household. The Future Land Use Map includes 121,225 acres of residential land use, which exceeds the anticipated demand by over 20,000 acres.

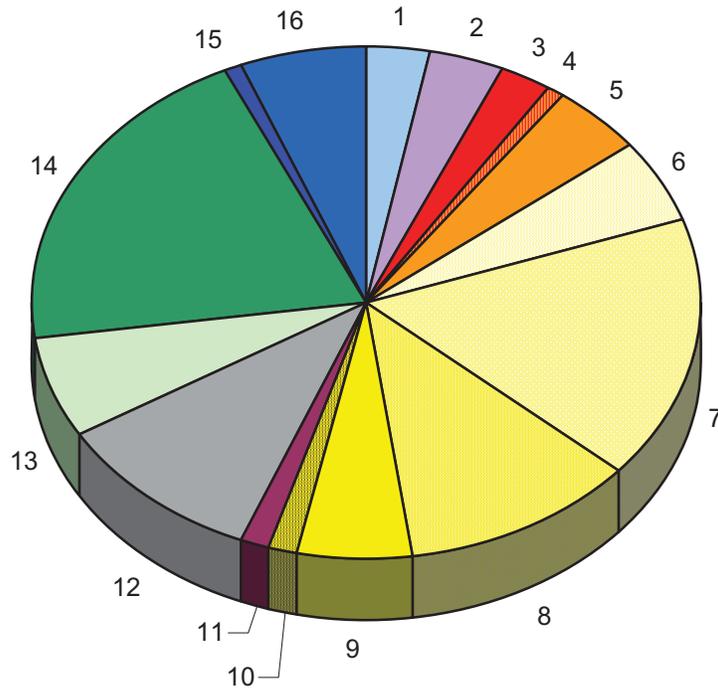
The Future Land Use Map designates 43,504 acres, which is over 14% of the area of the County, for employment land uses, compared to the 5% of the County occupied by such uses during the 2000 Land Use Inventory. The acreages designated for specific employment land uses are as follows: Government/Institutional (9,282 acres); Industrial (11,070 acres); Office/Research (7,505 acres); Mixed-use (2,438 acres); and Retail/Commercial (13,209 acres). The designated employment area exceeds the calculated demand for employment areas of approximately 34,100 acres. Assuming 13.4 jobs per acre, the 43,504 acres designated for employment uses, could accommodate employment of over 450,000 jobs, after subtracting future road rights-of-way areas. This exceeds the employment forecast by over 20,000 jobs.

The second largest land use on the Future Land Use Map is Public/Private Open Space. Approximately 61,282 acres, which is over 20% of the area of the County, is designated for Public/Private Open Space. This is an increase from approximately 52,500 acres in the 2000 Land Use Inventory. The area designated for Public/Private Open Space is slightly less than the 64,100 acres required to maintain the ratio of 81.5 acres of open space per 1,000 population. Dedication of additional open space can, and should, occur during the development review and approval process.

The Future Land Use Map designates nearly 20,000 acres for continued agricultural use. This represents a decrease of over 50% from the 43,500 acres identified in the 2000 Land Use Inventory. Agriculture is designated as the future land use for areas that appear to have long-term potential for agricultural use. Retaining these uses permanently requires that the County and municipalities proactively protect these areas from future development by purchasing the property, purchasing development rights, establishing conservation easements, or taking other appropriate measures.

Future Agricultural areas are concentrated in the Lakes Region, North Central, and West Central Cooperative Planning Areas, as shown in Figure 9.6 and Figure 9.7. These tables show the future land use acreages and percentages for each of the 10 Cooperative Planning Areas. It is possible to compare the mix of land use within and between the Cooperative Planning Areas using these tables.

**Figure 9.5
Future Land Use**



		Land Use	Acres	Percent
1	Employment	Government/Institutional	9,282	3.1%
2		Industrial	11,070	3.7%
3		Office/Research	7,505	2.5%
4		Mixed Use	2,438	0.8%
5		Retail/Commercial	13,209	4.4%
6	Residential	Single-family Large Lot (>3 acre Lot Density)	16,286	5.4%
7		Single-family Medium Lot (1-3 acre Lot Density)	49,690	16.5%
8		Single-family Residential (0.25-1 acre Lot Density)	34,361	11.4%
9		Single-family Small Lot (<0.25 acre Lot Density)	16,603	5.5%
10		Multifamily	4,285	1.4%
11	Other	Utility/Waste Facilities	3,838	1.3%
12		Transportation	31,008	10.3%
13		Agricultural	19,695	6.5%
14		Public/Private Open Space	61,282	20.3%
15		Heartland Agreement	1,773	0.6%
16		Water	18,819	6.2%
		Total	301,143	100%

**Figure 9.6
Future Land Use Acres By Cooperative Planning Areas**

Cooperative Planning Area	Employment					Residential					Other							Total Acres
	Government / Institutional	Industrial	Office / Research	Mixed Use	Retail / Commercial	Residential Large Lot	Residential Medium Lot	Residential Small Lot	Residential Multi-Family	Utility / Waste Facilities	Transportation (incl. ROW)	Agricultural	Public / Private Open Space	Heartland Agreement	Water			
Lakes Region	922	1,022	688	82	2,001	2,245	7,865	5,912	2,138	448	143	3,521	5,465	11,560	0	10,524	54,535	
North Central	632	1,319	2,235	58	2,766	3,552	6,955	5,182	398	249	847	3,783	3,344	8,369	0	999	40,688	
Northeast	2,058	1,667	669	976	1,957	152	1,909	4,351	5,652	1,597	1,218	5,935	118	9,497	0	350	38,106	
West Central	430	1,427	130	146	1,776	1,081	4,927	3,183	623	182	400	2,130	8,666	5,875	355	2,029	33,361	
Greater Avon	731	707	407	81	1,027	40	1,931	1,624	1,919	424	328	2,412	1,564	4,064	1,418	1,361	20,037	
Central Lake County	2,019	2,726	1,107	95	1,463	2,089	2,752	3,829	1,067	486	337	3,577	0	7,096	0	1,088	29,731	
Southeast	1,412	275	855	245	562	855	5,224	4,690	3,118	400	240	3,934	0	5,246	0	201	27,256	
Greater Barrington	296	314	78	62	171	4,473	5,393	503	212	13	46	1,437	88	2,618	0	899	16,601	
Southern Route 12	428	591	663	626	972	1,593	10,292	3,434	13	141	92	2,672	268	3,531	0	1,096	26,412	
South Central	354	1,023	674	67	514	206	2,442	1,653	1,464	344	187	1,608	182	3,426	0	272	14,416	
Lake County Total	9,282	11,070	7,505	2,438	13,209	16,286	49,690	34,361	16,603	4,285	3,838	31,008	19,695	61,282	1,773	18,819	301,143	

Figure 9.7
Future Land Use Percentages By Cooperative Planning Areas

Cooperative Planning Area	Employment					Residential					Other						Total Percentage
	Government / Institutional	Industrial	Office / Research	Mixed Use	Retail / Commercial	Residential Large Lot	Residential Medium Lot	Residential Lot	Residential Small Lot	Residential Multi-Family	Utility / Waste Facilities	Transportation (incl. ROW)	Agricultural	Public / Private Open Space	Heartland Agreement	Water	
Lakes Region	1.7%	1.9%	1.3%	0.2%	3.7%	4.1%	14.4%	10.8%	3.9%	0.8%	0.3%	6.5%	10.0%	21.2%	0.0%	19.3%	100%
North Central	1.6%	3.2%	5.5%	0.1%	6.8%	8.7%	17.1%	12.7%	1.0%	0.6%	2.1%	9.3%	8.2%	20.6%	0.0%	2.5%	100%
Northeast	5.4%	4.4%	1.8%	2.6%	5.1%	0.4%	5.0%	11.4%	14.8%	4.2%	3.2%	15.6%	0.3%	24.9%	0.0%	0.9%	100%
West Central	1.3%	4.3%	0.4%	0.4%	5.3%	3.2%	14.8%	9.5%	1.9%	0.5%	1.2%	6.4%	26.0%	17.6%	1.1%	6.1%	100%
Greater Avon	3.6%	3.5%	2.0%	0.4%	5.1%	0.2%	9.6%	8.1%	9.6%	2.1%	1.6%	12.0%	7.8%	20.3%	7.1%	6.8%	100%
Central Lake County	6.8%	9.2%	3.7%	0.3%	4.9%	7.0%	9.3%	12.9%	3.6%	1.6%	1.1%	12.0%	0.0%	23.9%	0.0%	3.7%	100%
Southeast	5.2%	1.0%	3.1%	0.9%	2.1%	3.1%	19.2%	17.2%	11.4%	1.5%	0.9%	14.4%	0.0%	19.2%	0.0%	0.7%	100%
Greater Barrington	1.8%	1.9%	0.5%	0.4%	1.0%	26.9%	32.5%	3.0%	1.3%	0.1%	0.3%	8.7%	0.5%	15.8%	0.0%	5.4%	100%
Southern Route 12	1.6%	2.2%	2.5%	2.4%	3.7%	6.0%	39.0%	13.0%	0.0%	0.5%	0.3%	10.1%	1.0%	13.4%	0.0%	4.2%	100%
South Central	2.5%	7.1%	4.7%	0.5%	3.6%	1.4%	16.9%	11.5%	10.2%	2.4%	1.3%	11.2%	1.3%	23.8%	0.0%	1.9%	100%
Lake County Average	3.1%	3.7%	2.5%	0.8%	4.4%	5.4%	16.5%	11.4%	5.5%	1.4%	1.3%	10.3%	6.5%	20.3%	0.6%	6.2%	100%

Lake County, Illinois

Lake Michigan represents one of the County's most important environmental and cultural resources. With the exception of Illinois Beach State Park and small isolated pockets, the entire shoreline is located within incorporated municipalities. Future land use along the lakefront has been designated consistent with municipal plans. Lakefront municipalities have an opportunity to establish, maintain, and enhance unique, high-amenity lakefront development. The County should proactively support the clean-up, development, and redevelopment of the lakefront with appropriate residential and non-residential land uses, including the restoration and preservation of environmental resources, recreation, and open space areas.

Transit and Employment Centers

As indicated in Chapter 7, Transportation, the Future Land Use Map includes transit and employment center overlay districts around existing and proposed transit stations and employment centers, within municipalities and unincorporated areas, as appropriate. In order to realize the potential benefits of these locations, neighborhoods must be carefully designed to encourage walking and bicycling, to facilitate bus service, and encourage transit use. A diagram depicting appropriate land use for station areas is provided in Figure 9.8. The diagram is reproduced (with permission) from Metra's *Residential Development Near Commuter Rail Stations*.

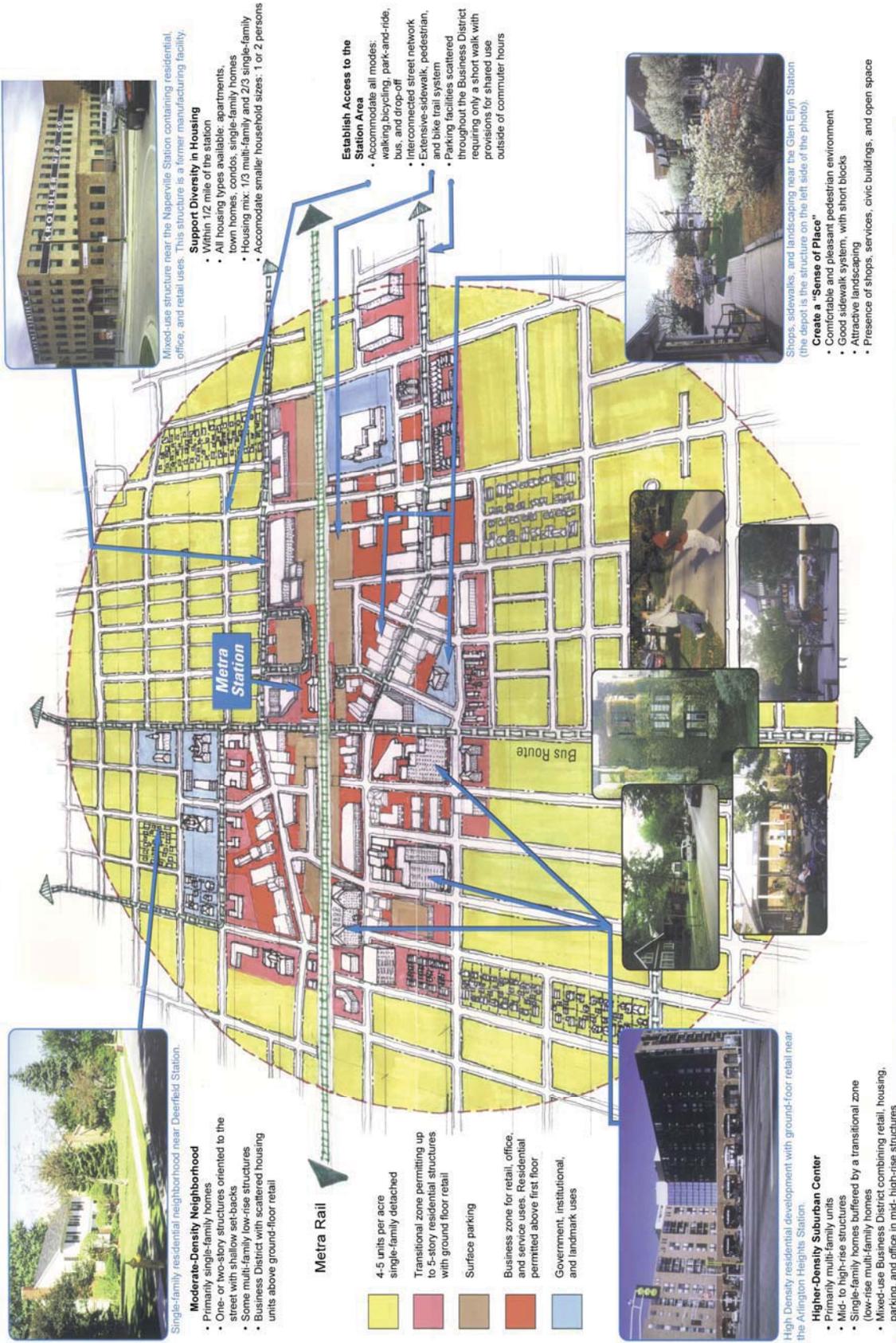
Appropriate land uses and urban design (which Metra refers to as "optimum characteristics") in station areas can serve to generate transit ridership from residential areas and attract transit ridership to employment destinations (Metra and NIPC, NP:1991), thereby reducing automobile usage; increase pedestrian access to stations (S.B. Friedman & Company, 2000), further reducing automobile usage; and provide local economic benefits as transit riders utilize convenience retail services (Metra and NIPC, NP:1991).

The following is a summary of the optimum characteristics of station areas based on Metra's research:

- "1,500 to 2,000 households within 1/2 mile [of station] resulting in 225 to 300 commuters, of whom 80% would walk to the station
- 5,000 to 6,000 households within 1/2 to 1 mile of the station, resulting in 350 to 420 commuters, of whom 41% would walk to the station
- 15% of all households use Metra within 1/2 mile of the station; from 1/2 mile to 1 mile of the station, 7% of the households use Metra
- 1/3 multifamily and 2/3 single-family dwellings within the first 1/2 mile
- 3/4 or more single-family dwellings within an area between 1/2 and 1 mile
- Interconnected streets and sidewalks leading to the station
- Sidewalks in an attractive environment (characterized by parkways and other landscaping)
- A business district surrounding the station with services *en route* to and from the train
- Feeder-bus staging facilities and auto passenger drop-off area

Chapter 1 Figure 9.8

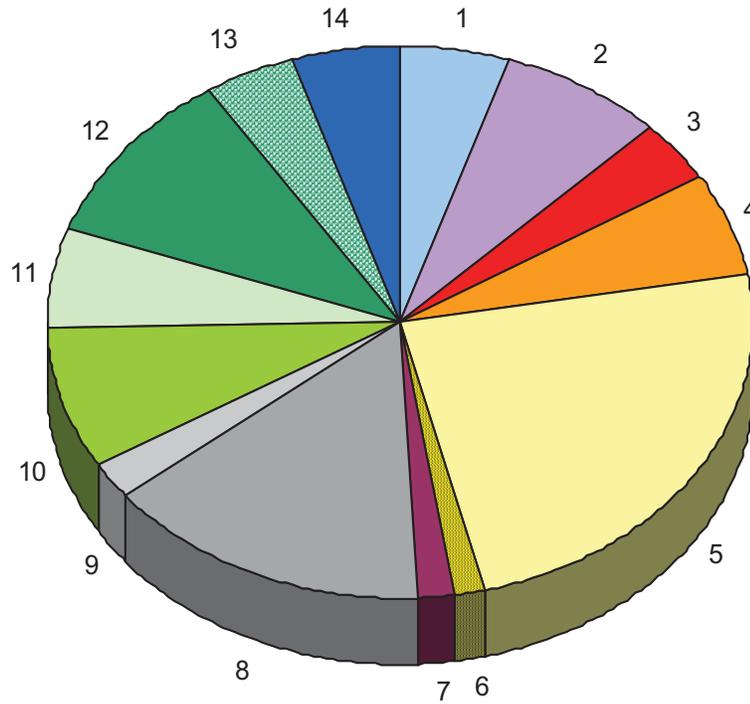
Synthesis of Study Findings: Approaches to Residential Development in Station Areas



This graphic depicts typical land-use patterns, within one-half mile of a commuter rail station, that attract higher levels of pedestrian access and high ridership overall.

Source: Approaches: Residential Development Near Commuter Rail Stations, prepared for Metra by S.B. Friedman and Company, Vleclides Schroeder Associates, Sjim Sööt and Nancy Seeger Associates
Graphic used with permission of Metra

Figure 9.9
2000 Land Use Within Transit and Employment Centers



		Land Use	Acres	Percent
1	Employment	Government/Institutional	1,415	5.1%
2		Industrial	2,118	7.6%
3		Office/Research	971	3.5%
4		Retail/Commercial	1,720	6.1%
5	Residential	Residential Single Family	6,664	23.8%
6		Residential Multifamily	397	1.4%
7	Other	Utility/Waste Facilities	450	1.6%
8		Transportation (incl. ROW)	4,214	15.1%
9		Disturbed Land	608	2.2%
10		Forest/Grassland	2,323	8.3%
11		Agricultural	1,641	5.9%
12		Public/Private Open Space	2,934	10.5%
13		Wetlands	1,171	4.2%
14		Water	1,361	4.9%
		Total	27,987	100%

- Sufficient commuter parking in a pattern that does not block walking access to the station (scattered pattern and/or stretched along the tracks)” (S.B. Friedman & Company, NP:2000).

To encourage maximum transit, pedestrian, and bicycle activity, a station area should provide as many of these optimum characteristics as possible, given the specific circumstances of the location.

The mix of single-family to multifamily dwellings presented in the Metra guidelines is based on the percentage of units, not the percentage of area. The desired one-third of housing can be multifamily without using 33% of the residential area because tall buildings take less land. The exact ratio of single-family to multifamily land use will depend on the relative densities of the single-family and multifamily dwellings. For example, if single-family residences are developed at 4 units per acre and multifamily units are developed at 16 units per acres, only 11% of the residential area will be multifamily. If single-family residences are developed at 4 units per acre and multifamily units area developed at 8 units per acre, only 20% of the residential area will be multifamily. Ideally, a portion of the multifamily units will be located above ground floor retail. This will further reduce the land area dedicated to multifamily development.

Within Transit and Employment Oriented Developments, multifamily dwellings can include both affordable renter-occupied apartment complexes and owner-occupied condominium complexes. Regardless of ownership status, the multifamily units should not be assumed to be affordable or attainable housing. Because these units are new and located in high amenity environments near transit, they may justify premium rents or prices. In many situations, these units may be most attractive to Chicago-bound commuters who can afford the higher prices in exchange for the convenience of living near the train station. In more modest communities with small, single-family homes, transit and employment area developments may diversify the housing stock by offering higher priced housing. In Lake County’s more expensive communities, these developments may offer lower cost housing than the existing large, single-family homes. In either case, providing a diversity of housing options is a secondary benefit of Transit and Employment Oriented Development; the primary objective is to make more efficient use of land, transportation infrastructure and services, and other infrastructure.

Most of the transit and employment center overlay districts included on the Future Land Use Map are already substantially developed. Existing land use for these areas based on the 2000 Land Use Inventory, is presented in Figure 9.9. As these areas contain little vacant land, accommodating significant additional growth in these areas will require redevelopment. This has already been occurring within parts of Lake County. For example, redevelopments in Highland Park and Deerfield have been designed to take advantage of their locations near transit stations. Observation of these redevelopments may serve to demonstrate the desirability of developing (or redeveloping) other areas. Several villages, including Grayslake, Libertyville, Round Lake, and Barrington, are in various stages of redeveloping their station areas to take better advantage of their locations.

The intent of promoting development near transit and employment centers in Lake County, is to target development to appropriate locations; the intent is not to encourage more growth and development. Development of these areas can serve to reduce development pressure elsewhere within the County. To the extent possible, developments within transit and employment centers should be designed to provide both affordable rental and home ownership opportunities.

Conclusion

This chapter provides a Future Land Use Map and goals and policies to guide how and where future development occurs in Lake County. The map and policies reinforce the goals and policies contained in the other chapters of the *Regional Framework Plan* and attempt to respect municipal land use plans. The analysis contained in this chapter indicates that Lake County can accommodate regionally forecast population and employment growth, while preserving and enhancing environmental resources and retaining significant areas of farmland and open space—if land resources are managed wisely. Towards that end, this chapter contains recommendations to minimize development in areas identified in Chapter 4, Environmental Resources, Open Space, and Farmland, as Priorities for Open Space and Environmental Limitations areas.

The chapter also contains recommendations to target development in transit and employment centers. These centers are intended to encourage pedestrian oriented, mixed-use development in appropriate locations, thereby creating an opportunity to preserve agricultural land and open space. To permanently preserve agricultural land and open space, the County and municipalities should proactively purchase property, purchase development rights, establish conservation easements, or take other appropriate measures.

Goals and Policies²

9.1 Goal: Create well-balanced communities that provide the locally planned mix of residential and commercial land use and Public/Private Open Space.

9.1.1 Policy: Provide land to accommodate potential business development and redevelopment that provides a variety of job opportunities and enhances the local sales and property tax base.

9.1.2 Policy: Provide the opportunity for the development and redevelopment of housing of various types, densities, and costs to meet the needs of the region's growing population.

9.2 Goal: Preserve and enhance natural resource areas and ensure future development does not negatively impact Environmental Limitations areas.

9.2.1 Policy: Establish interconnected networks of Public/Private Open Space, including Forest Preserves, local parks, multipurpose trails, sub-division set-aside areas, and other forms of open space that are protected from development.

9.2.2 Policy: Seek new state Transfer of Development Rights (TDR) and Purchase of Development Rights (PDR) enabling legislation authorizing municipalities and counties to implement TDR and PDR programs to preserve natural resource and agricultural areas.

9.2.3 Policy: Strictly limit development in areas identified as Severe Environmental Limitations.

² As stated in Chapter 1, Introduction, a Goal is defined as “the desired result to be achieved by implementing the *Plan*,” and a Policy is defined as “a general method or action designed to achieve a goal.”

- 9.2.4 Policy: Development of properties containing Environmental Limitations areas should be clustered in non-resource constrained portions of the property.
- 9.2.5 Policy: Development of properties containing Environmental Limitations areas should be limited in overall intensity so as to be compatible with the preservation and enhancement of the existing natural resources.
- 9.2.6 Policy: Identify and preserve scenic corridors and vistas by implementing larger front yard setbacks or other appropriate techniques.

9.3 Goal: Protect agricultural areas from premature development and preserve farmland permanently where feasible and appropriate.

- 9.3.1 Policy: Maintain rural transition areas (where they exist) with agricultural, Public/Private Open Space, and large lot residential uses to distinguish one community from the next.
- 9.3.2 Policy: Rezone property for development in accordance with the Future Land Use Map only when the land is necessary to accommodate desirable development and when appropriate infrastructure and services are available or will be provided by the developer.
- 9.3.3 Policy: The County and municipalities should proactively preserve and protect areas that are appropriate for permanent agricultural uses by purchasing the property, purchasing development rights, establishing conservation easements, or taking other appropriate measures.

9.4 Goal: Capitalize on the region's existing infrastructure and services and transportation system.

- 9.4.1 Policy: Locate concentrated, mixed-use development near transit and employment centers and to be appropriately designed to encourage bicycling, walking, and transit use.
- 9.4.2 Policy: Locate major residential development within municipalities, which provide a full range of public services.

Sources

Lake County, 2001, *Unified Development Ordinance*, Lake County Department of Planning, Building and Development, Waukegan, IL

Metra and Northeastern Illinois Planning Commission (NIPC), 1991, *Land Use In Commuter Rail Station Areas: Guidelines For Communities*, Chicago, IL

S.B. Friedman & Company, 2000, *Residential Development Near Commuter Rail Station*, prepared for Metra, Chicago, IL

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