Chapter 6
Land Use

DRAFT

Maps

6.1 Introduction

Overview
This Land Use Chapter will analyze existing conditions and trends to explain the current land use picture in Summit County. Then the current County planning issues will be discussed.

In this Land Use Chapter Summit County 2030 land use forecast data developed by AMATS will be presented and analyzed. Some alternative options to current land use policies will be presented. Land use planning and growth control techniques are discussed. A county residential build-out capacity analysis will be presented along with goals for future population distribution.

The goals and recommendations set forth in this Chapter are intended to support Smart Growth development principles. The majority of vacant land left in Summit County is zoned for residential uses. With proper planning, there is a real opportunity to use Smart Growth housing and development options to promote quality development as well as to preserve many of the current natural resources and special places which define Summit County. Smart Growth development principles promote infill development both for industrial, commercial and residential uses, and the reuse of brownfield sites after proper clean-up. In this Chapter, a main Smart Growth principle is discussed in conjunction with land use policies, which is to encourage future development in locations where public infrastructure and facilities already exist.

Key Land Use Issues
From a series of meetings with Summit County Planning staff and local governmental and planning officials the week of September 20, 2004, the following key land use issues were identified. There was a concern regarding how do local planners provide for the best balanced development between residential/ commercial and industrial uses? Other issues identified were how to control growth, preserve open space, maintain rural character, protect the environment and preserve natural resources. Additional issues were how to best promote open space conservation design and link green space between residential developments and parks. There was also a concern for preserving the remaining farm land.

Other concerns included how to limit retail development, and promote quality office and light industrial development. There were concerns regarding protecting existing residential development from commercial pressures. Other planning issues included concerns with traffic congestion and some communities are interested in preserving low residential densities. Other communities are concerned about encouraging the redevelopment of older commercial areas and there were some who wanted to develop more of a Central Town Center.

Future Vision
In an effort to gather opinions and identify key issues in the various Summit County jurisdictions, a Summit County Community Survey for Government Officials was sent to each township, village and city in October 2003 from the Summit County Planning Commission. The overall community response rate was over 85% and over 27 communities responded out of 32 Summit County

communities. Respondents were asked to choose whether the thought their community should be rural, suburban or urban in character 20 years from now. When mapped, the responses show a solid urban core for the county (with the City of Akron at the center) surrounded by suburban communities. "Rural" communities are clustered primarily around the Cuyahoga Valley National Park and in the southernmost portion of the County (refer to Map # 6.1). White areas on Map 6.1 indicate communities that have not yet responded to this question.

MAP 6.1

Summit County, Ohio General Plan

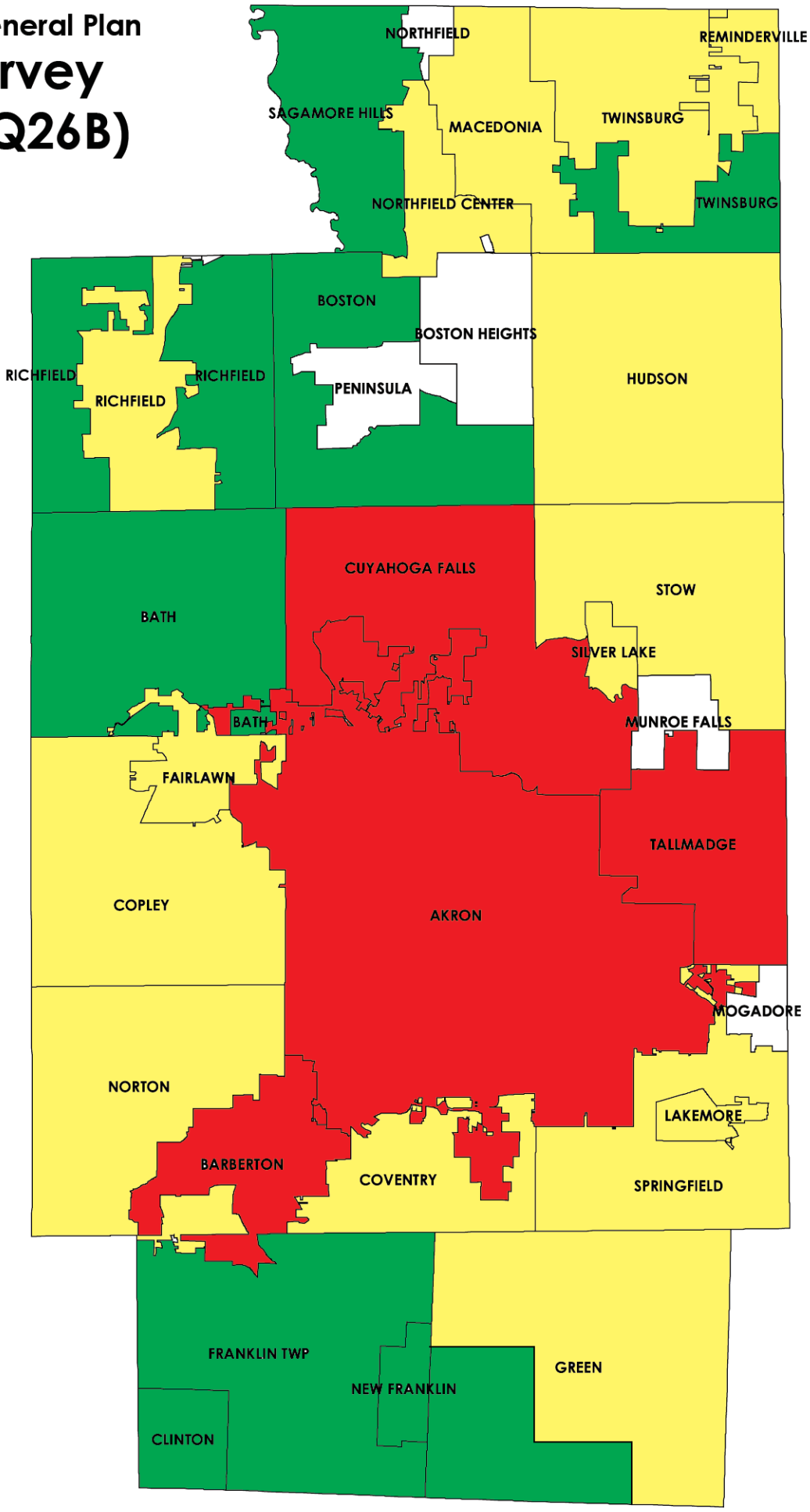
Community Survey Future Vision (Q26B)

Question 26B: "In 20 years, what would you like your community to be? (Note: communities not shaded did not answer)

"Rural"

"Suburban"

"Urban"



Map prepared by Summit County
Department of Community & Economic Development, Dec 2003

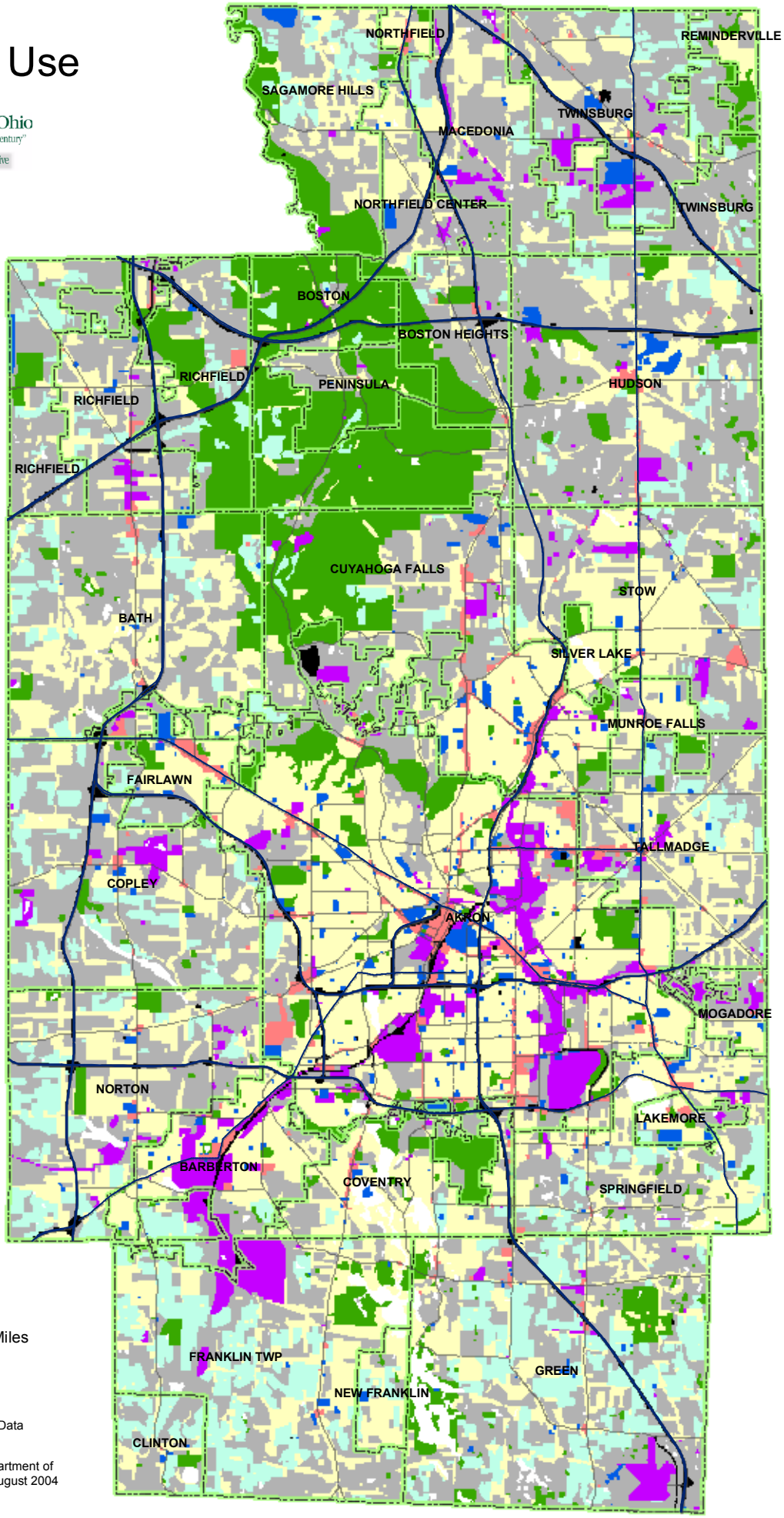
6.2 Existing Conditions and Trends

Generalized Land Use

Summit County has lost a sizeable amount of vacant land since 1970. Below is a comparison of two different Land Use Maps created for Summit County, Map 6.2 created by the Ohio Department of Natural Resources in 1979, based on aerial photography with local input and Map 6.3 created by the Summit County Department of Development in 2004 based on Summit County Auditor parcel data.

MAP 6.2
1979 Land Use

Summit County, Ohio
"Charting a Course for the 21st Century"
James B. McCarthy, Executive



1979 Land Use

- Residential
- Agricultural
- Vacant
- Industrial
- Commercial
- Parks and Open Spaces
- Transportation
- Public/Semi Public

GIS SUMMIT COUNTY

1:63,360
1 inch = 1 miles
0 0.5 1 2 3 4 Miles

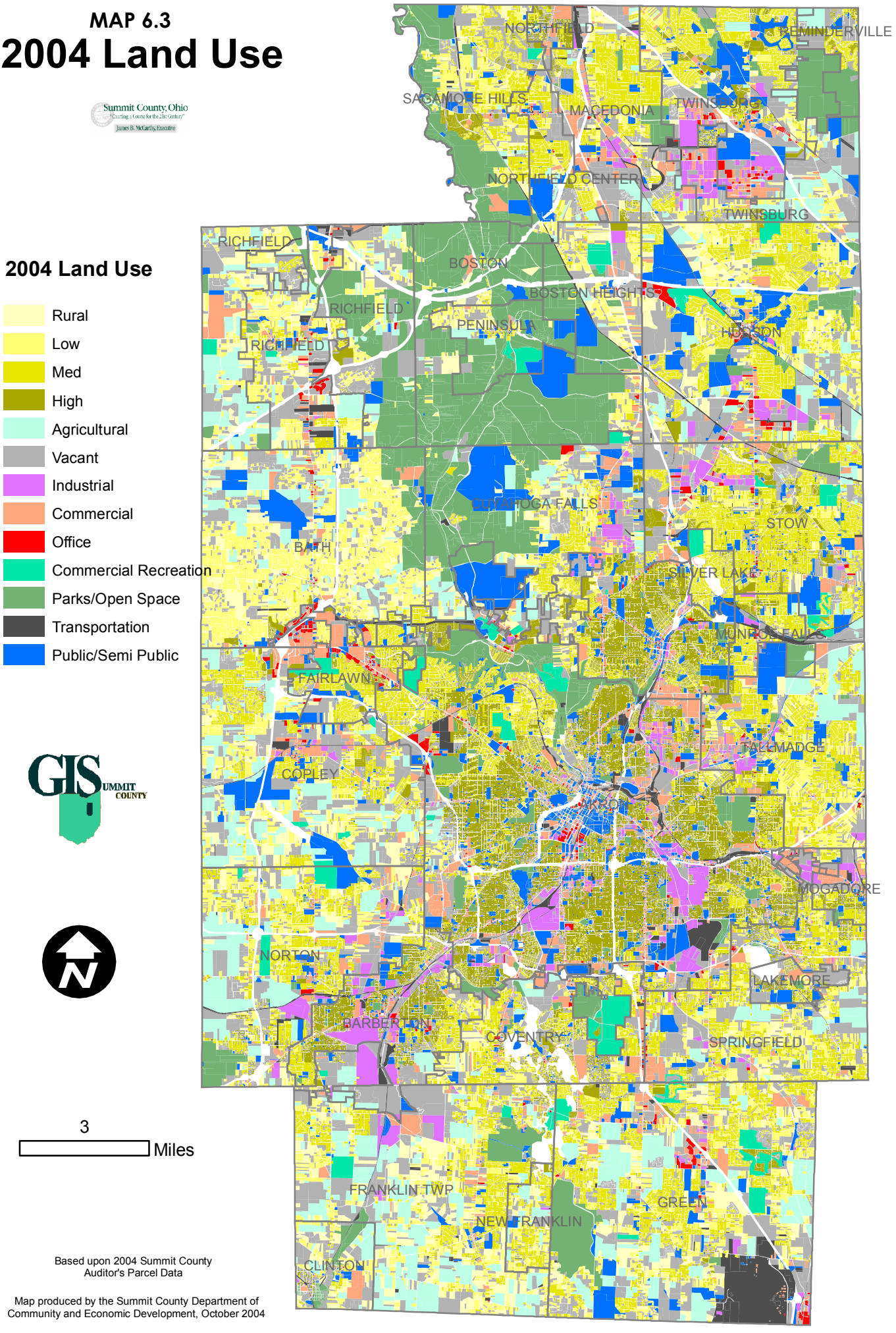
Resources based upon 1979 ODNR Data

Map produced by the Summit County Department of Community and Economic Development, August 2004

MAP 6.3

2004 Land Use

Summit County, Ohio
"Charting a Course for the 21st Century"
James B. McCarthy, Executive

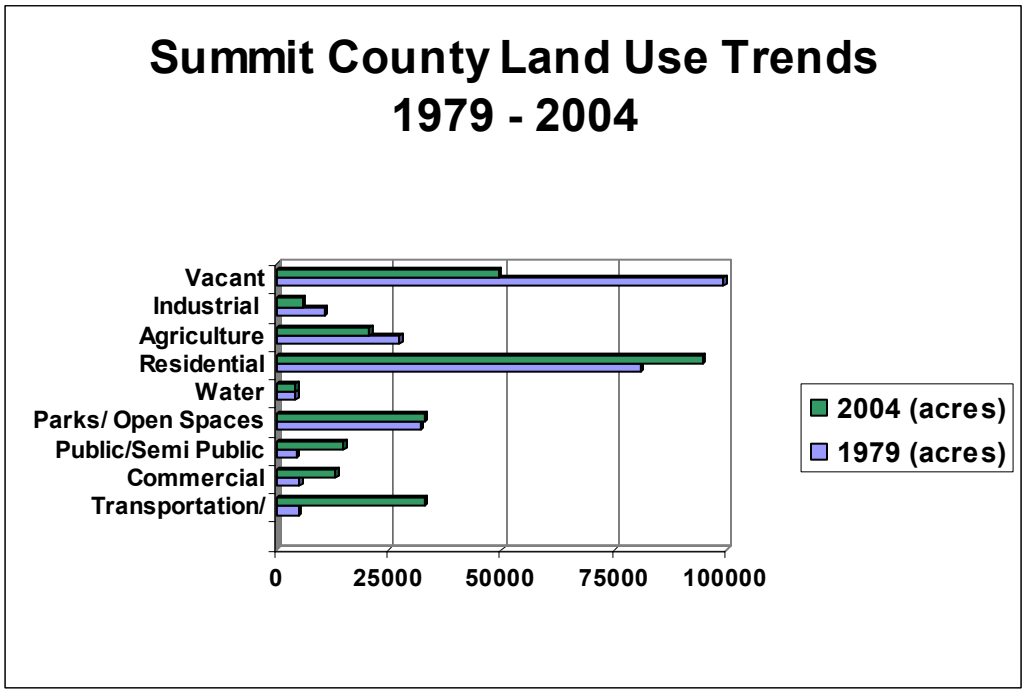


Based upon 2004 Summit County Auditor's Parcel Data

Map produced by the Summit County Department of Community and Economic Development, October 2004

Since these land use maps were created by different methods using different data, comparison is somewhat difficult. For example, the 2004 transportation/utilities figure includes roads classified in 1979 as residential. Also, the Akron-Canton Airport area was included in 1979 under industrial use.

Chart 1:



According to the Summit County Land Use Trends Chart above, the most significant changes over the past 25 years are the increases in commercial and residential land use, and the large decrease in vacant land of - 50% or loss of 49,858 acres and decrease in farmland of -24% or loss of 6,588 acres. According to the 2004 Summit County Auditor Parcel data, there are 49,427 vacant acres and 20,764 agricultural use acres left in Summit County.

The number of farms in Summit County was 523 according to the 1973 Ohio Almanac. In 2004 the number of farms in Summit County was 310, and the average size of each farm is 61 acres.

Below is a Table and Chart that illustrates the similar 20-year time frame using AMATS Land Use data. AMATS land use data is created from analyzing aerial maps and then field checking this data. Their data is more comparable between 1980 and 2000 because the basic methodology used is the same.

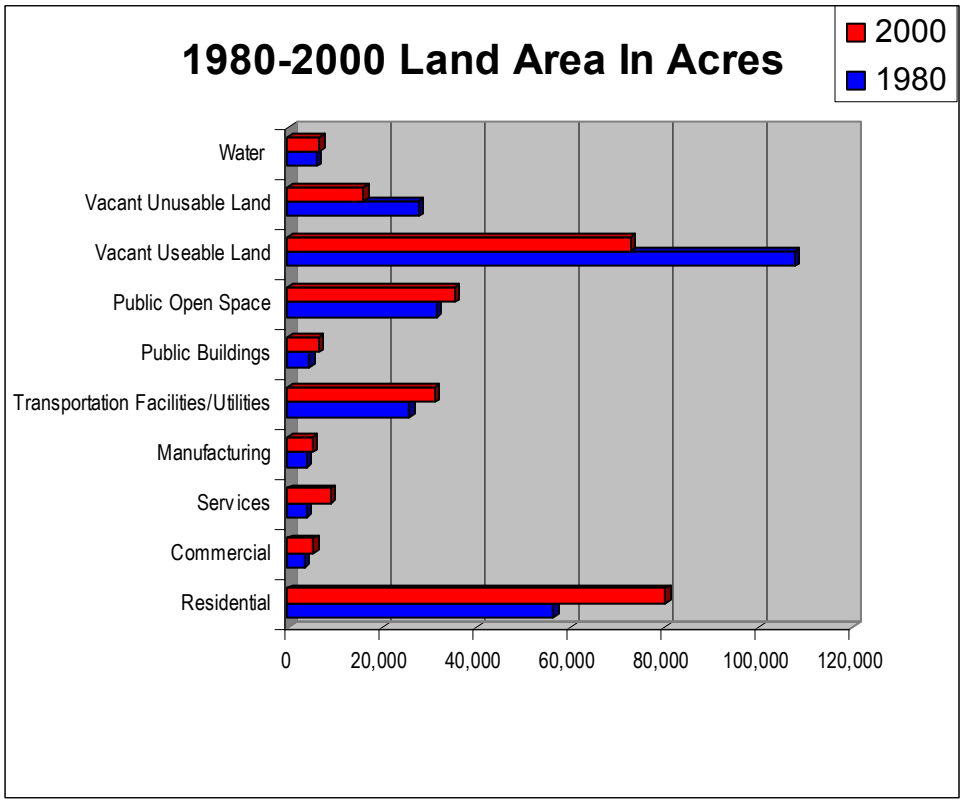
Table 1:

Summit County Land Use (1980 – 2000) AMATS

	1980 (acres)	2000 (acres)	Difference 1980-2000	% Difference 1980-2000
Residential	56,424	80,231	23,807	42%
Commercial	3,677	5,551	1,874	51%
Services	4,111	9,112	5,001	122%
Manufacturing	3,904	5,391	1,487	38%
Transportation Facilities/Utilities	25,936	31,054	5,118	20%
Public Buildings	4,650	6,515	1,865	40%
Public Open Space	31,689	35,427	3,738	12%
Vacant Useable Land	107,484	72,842	- 34,642	- 32%
Vacant Unusable Land	27,824	16,029	- 11,795	- 42%
Water	6,069	6,691	622	10%
Total	**271,768**	**268,843**	**(2,906)**	

Source: Akron Metropolitan Area Transportation Survey (AMATS)

Chart 2:



According to the AMATS Land Use data in Table 1, between 1980 and 2000, there was an increase of 23,807 acres in residential land use with a percentage increase of 42%. For the Commercial category, the categories of the AMATS Retail Goods and the Wholesale categories have been collapsed together. Between 1980 and 2000 there was a 51% increase in land area consumed for Commercial uses, with an acre increase of 1,874 acres. In the Services category, the increase between 1980 and 200 was 122%, with a land acre increase of 5,001 acres. Manufacturing between 1980 and 2000 shows an increase of 38% or 1,487 acres.

According to the Ohio Almanac 2004, most of the recent state job growth has occurred in the service producing sectors. These sectors account for 70% of the gross state product (equivalent to the nation's gross domestic product) and employ 75% of Ohio's workers (2004). Analysts predict most of the state's future job growth will occur in the services sector.

For the Transportation/ Utilities category, the AMATS categories of Transportation and Transport Terminals and Utilities Facilities have been collapsed into one category. Here there is an increase of 20% between 1980 and 2000 with a 5,118-acre increase.

AMATS does not have a separate category for agricultural land and they have two different categories of vacant land, vacant useable land and vacant unusable land. It is interesting to

note from the AMATS Land Use data that between 1980 and 2000 there appears to have been development on land that AMATS has characterized as vacant unusable land. The AMATS category of unusable land includes such categories as flood plains, slopes over 12%, extractive land such as gravel pits, mines and organic soil.

According to the AMATS data – between 1980 and 2000 - there was a loss of 32% or 34,642 acres of the available usable vacant land and a loss of 11,795 acres of vacant unusable land or 42%. It would be logical to assume that much of the vacant usable land that has been developed was previously farmland. The total of the vacant usable and vacant unusable land lost between 1980 and 2000, totals up to 46,437 acres. This is fairly close to the 49,858-acre loss in vacant land between 1979 and 2004, a 25-year time period illustrated by the previous Land Use Maps, and Chart 1 (produced by the Summit County Department of Development).

The AMATS category of vacant useable land includes agricultural land. To calculate the amount of vacant land, AMATS staff study air photos and try to estimate if more structures could be placed on the land. If a house was located on a parcel of five acres of land, only one acre may count as developed and the other four acres may be counted as vacant. Using the Summit County Auditor's land use data, vacant land is defined as land without structures on it. In Summit County agricultural land is defined as a separate land use category apart from the vacant land use category.

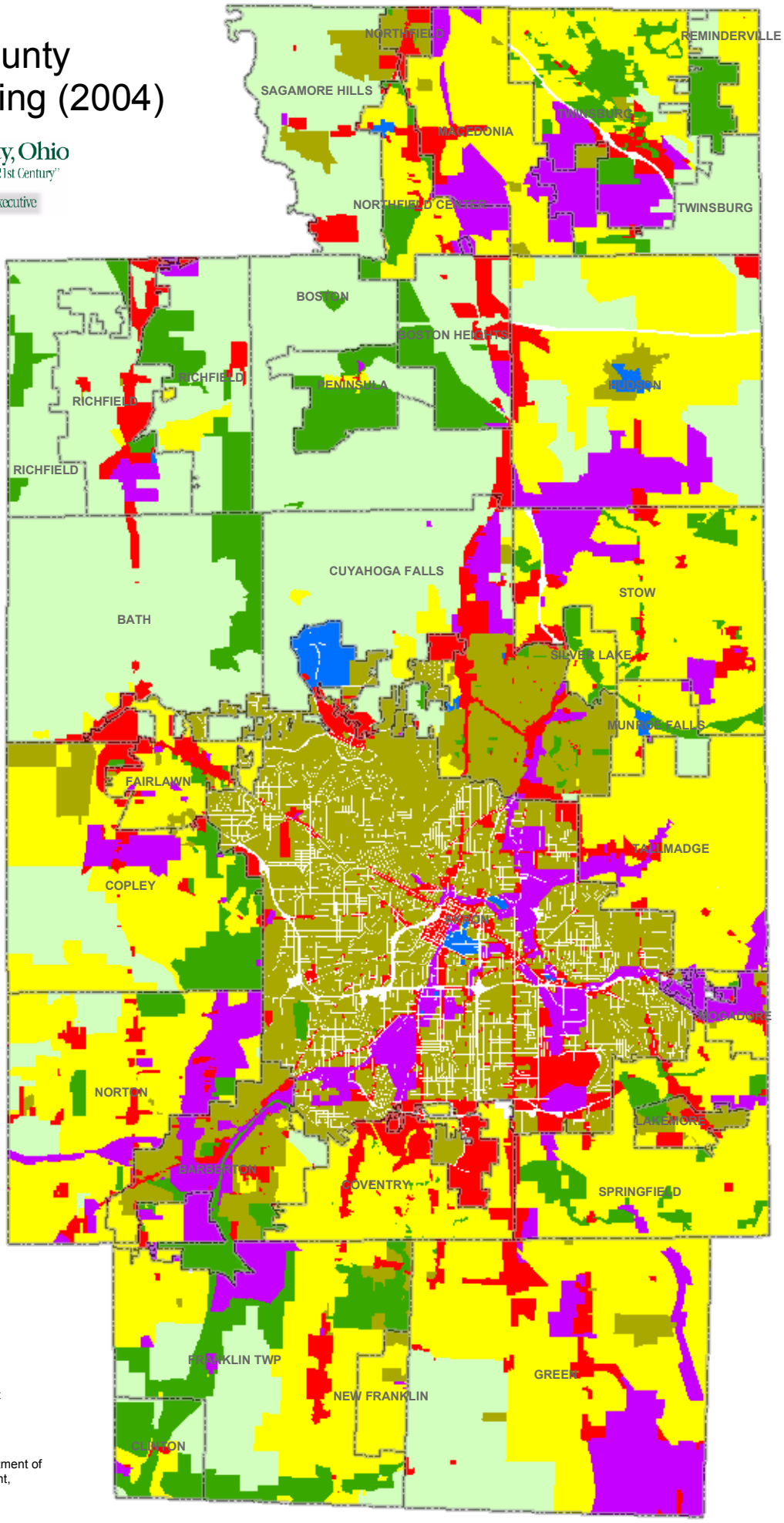
Therefore, some of the difference in the amount of vacant land indicated by the County Auditor data and the AMATS data is accounted for if one uses the Summit County Auditor's information and adds the amount of agricultural land acres to the vacant land use category. For example, using the Summit County 2004 vacant acres of 49,427 acres and adding the 20,764 farmland acres equals 70,191 acres. This is fairly comparable with the AMATS 2000 estimate of vacant land of 72,842 acres of vacant useable land. Another discrepancy between the two data bases and the estimation of vacant land is that AMATS may have included some park land in the vacant land use category.

Although population in Summit County only increased by 3.5% between 1982 and 1997, the urbanized land increased by 42.6 % during this same time period.[1] This results in a decrease in density of approximately 27%. In otherwords, essentially the same number of people consumed much more land.

[1] The Exurban Change Project, Ohio State University (data from the National Resource Inventory (NRI), U.S. Department of Agriculture.

MAP 6.4
Summit County Generalized Zoning (2004)

Summit County, Ohio
"Charting a Course for the 21st Century"
James B. McCarthy, Executive



Political Boundary

Zoning Classifications

- Rural
- Low
- Med
- High
- Commercial\Business
- Government
- Industrial\Manufacturing

GIS Summit County

1:190,080
1 inch equals 3 miles
Miles
0 0.5 1 2 3

Resources based upon 2004 Summit County Zoning Classifications

Map produced by the Summit County Department of Economic and Community Development, November 2004

Zoning Analysis

The Summit County Generalized Zoning Map 6.4 is based on each community's existing zoning code or resolution. As one can tell from the Table 2, most of the County is zoned for residential use. According to County current generalized zoning data compiled in the Summit County Department of Community and Economic Development GIS system – 83% of the County zoned land is zoned for residential use.

Table 2:

Summit County
Generalized Zoning Classifications

	Acres	%
Residential	217,484	83.0%
Commercial	19,437	7.4%
Industrial	23,460	9.0%
Government	1,387	.5%
Total	**261,768**	**100%**

Source: Summit County Auditor

Table 3. Vacant Land by Zoning Classification below shows the vacant land left in the County by generalized zoning category. Table 3 was generated by taking the vacant land parcels from the County Auditor's parcel data base and then cross-referencing it with the Department of Development zoning data. This table illustrates that 76% of the remaining vacant land is zoned for residential use. Approximately 10% of the vacant land or 4,760 acres is zoned for commercial uses and approximately 15% or 7,157 acres of the vacant land is zoned for industrial uses.

Table 3: Vacant Land by Zoning Classification

Vacant Land by Zoning Classification

General Zoning Category	Acres	% of Total Vacant Land
Rural Residential	3,968	8.05%
Low Density Residential	12,701	25.76%
Medium Density Residential	15,287	31.00%
High Density Residential	5,369	10.89%
Commercial	4,760	9.65%
Government	63	0.13%
Industrial	7,157	14.52%
TOTALS	**49,305**	**100.00%**

MAP 6.5
Residential Land Use Classification with Parks

Summit County, Ohio
"Charting a Course for the 21st Century"
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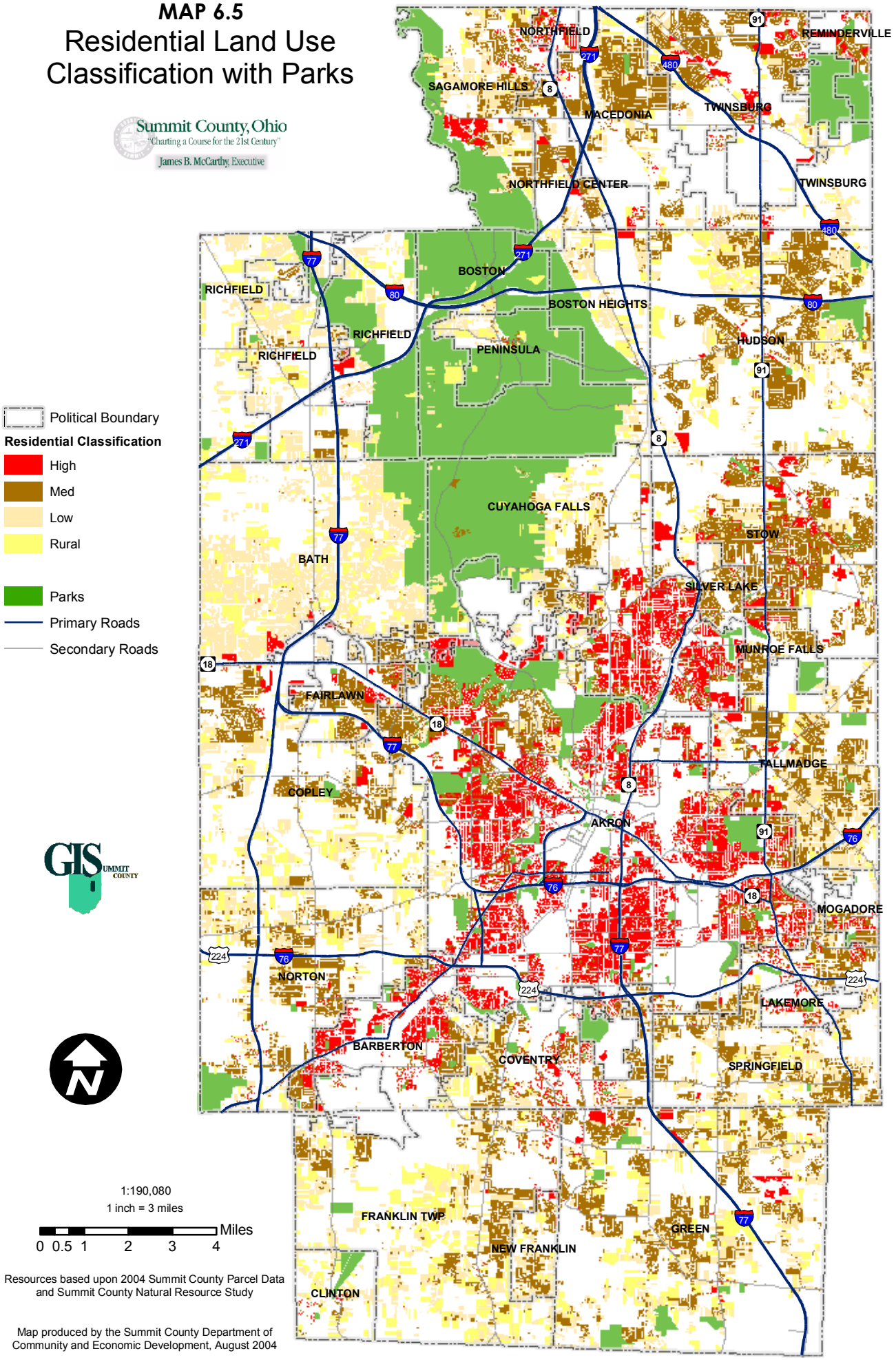

Political Boundary

Residential Classification

- High
- Med
- Low
- Rural

- Parks
- Primary Roads
- Secondary Roads

GIS Summit County

1:190,080
1 inch = 3 miles

0 0.5 1 2 3 4 Miles

Resources based upon 2004 Summit County Parcel Data and Summit County Natural Resource Study

Map produced by the Summit County Department of Community and Economic Development, August 2004

MAP 6.6
Residential Zoning Classification with Parks

Summit County, Ohio
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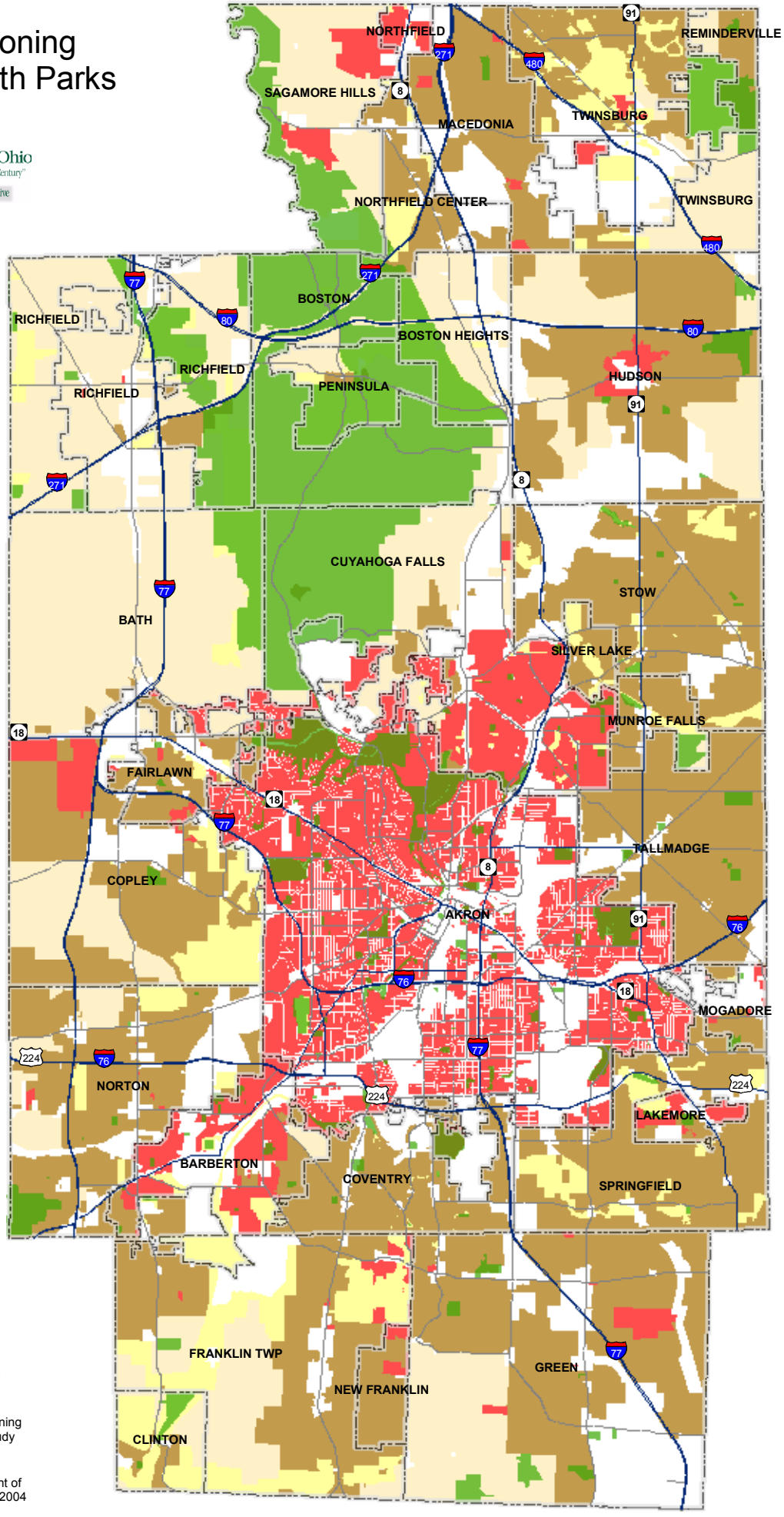

Political Boundary

Residential Zoning

- High
- Med
- Low
- Rural

- Parks
- Primary Roads
- Secondary Roads

GIS Summit County

1:190,080
1 inch = 3 miles

0 0.5 1 2 3 4 Miles

Resources based upon 2004 Summit County Zoning Data and Summit County Natural Resource Study

Map produced by the Summit County Department of Community and Economic Development, August 2004

Residential Zoning Analysis

Above are two Maps, one is the existing Residential Land Use areas in Summit County according to 2004 Summit County Parcel data, Map 6.5. The other Map 6.6 illustrates the current Residential Zoning based on the current zoning for communities in Summit County. Both Maps are color coded according to the generalized density of development or zoning classification as shown in Table 4 below. The densities are based on standard zoning classifications of various minimum lot size requirements for single-family dwellings.

Table 4:

Generalized Residential Zoning Classifications

	Density	Approximate Lot Size
High Density Residential (Red)	> 1 dwelling unit/ = or >.20 acre + <.21	< 8,999 sq.ft.
Medium Density Residential (Brown)	> 1 dwelling unit/ = or >.21 acre	=/> 9,000 sq.ft. and < 43,559 sq.ft.
Low Density Residential (Light Tan)	> 1 dwelling unit/ per acre	=/> 43,560 sq.ft. and < 217,799 sq.ft.
Rural Residential (Yellow)	> 1 dwelling unit/per 5 acres	=/> 217,800 sq. ft.

Residential development pressures have been coming from Cleveland with people moving to the northern part of Summit County and commuting to work to Cleveland. There has been a dwelling unit increase between 1990 – 2000 in the northern part of Summit County with an average 25% to 50% growth increase. This rapid growth has been shown in Sagamore Hills Township, Boston Heights Village, Macedonia, Northfield Center Township, Twinsburg City and Township and Hudson. Between 1990 and 2000 Summit County's population grew 5.4% overall, however in the northern part of the County, the population growth rate was 29.8%.

The very lowest density areas in the County are primarily along the south and west edges and the higher density areas surround Akron. Compared with the current residential densities of the County as a whole, some of the lower residential density areas include parts of the City of Green, Springfield, Bath, Copley and Franklin Townships, and Hudson, Twinsburg Township, Richfield Village and Township. Higher residential density areas include parts of the City of Akron, Cuyahoga Falls, Fairlawn, Stow, and Barberton as well as parts of Sagamore Hills Township and the City of Twinsburg.

As one would expect there is a close correlation with the current Residential Land Use data in Map 6.5 and the Residential Zoning Classification data in Map 6.6. According to the 2004 County Auditor's parcel data, approximately 6% of the total County land use is in the Rural Residential category, while there is Rural Residential Zoning of 8.5% of the total area zoned.

Table 5:

Generalized Residential Zoning Classifications

	Acres	Percent
Rural Residential > = 5 acres	22,358	8.5 %
Low Density Residential > 1 and < 5 acres	71,980	27.5 %
Medium Density Residential >= .21 and < 1 acres	87,554	33.4%
High Density Residential < .20 acres	35,592	13.6%
Total	**217,484**	**83%**

Approximately 12% of the total County land use is in the Low Residential density category, while there is Low Residential density Zoning of 27.5% of the total area zoned (See Table 5).

Approximately 14% of the total County land use is in the Medium Residential density category, while there is Medium Residential density Zoning of 33 % of the total area zoned (See Table 5).

Approximately 6.6 % of the total County land use is in the High Residential density category, while there is High Residential density Zoning of 13.6% of the total acres zoned (See Table 5).

Since this data is averaged for the whole County, it is hard to draw very specific conclusions. It appears that there is more land zoned in the Low and Medium residential zoning categories than the other residential zoning categories. According to the vacant land zoned there are 27,988 vacant acres in the Low and Medium residential zoning categories and this makes up 57% of the remaining vacant land in the County.

Zoning Analysis by Planning Area

The following tables illustrated the vacant land left in the County by planning area and by zoning classification. Table 6. below gives a more detailed break-out of the ranges of permitted lot sizes and density for each generalized residential zoning category. Also, refer to Map # 6.8 General Plan – Planning Areas to see the boundaries of each Planning Area. See the following tables below: Table 7. North Planning Area, Vacant Land by Zoning Classification, Table 8. Central Planning Area, Vacant Land by Zoning Classification and Table 9. South Planning Area, Vacant Land by Zoning Classification.

Table 6:

Generalized Residential Zoning Classifications

	Density	Approximate Lot Size
High Density Residential	> 1 dwelling unit/ = or >.20 acre + <.21	< 8,999 sq.ft.
Medium Density Residential	> 1 dwelling unit/ = or >.21 acre	=/> 9,000 sq.ft. and < 43,559 sq.ft.
Low Density Residential	> 1 dwelling unit/ per acre	=/> 43,560 sq.ft. and < 217,799 sq.ft.
Rural Residential	> 1 dwelling unit/per 5 acres	=/> 217,800 sq. ft.

Table 7:

North Planning Area, Vacant Land by Zoning Classification

General Zoning Category	Residential Density	Acres	% of Total Vacant Land
Rural Residential	> = 5 acres	526	3.38%
Low Density Residential	> 1 and < 5 acres	6,636	42.68%
Medium Density Residential	>= .21 and < 1	3,629	23.34%
High Density Residential	< .20 acres	562	3.61%
Commercial		1,680	10.80%
Government		27	0.17%
Industrial		2,490	16.01%
TOTALS		**15,550**	**100.00%**

Source: Summit County Auditor

Table 8:

Central Planning Area, Vacant Land by Zoning Classification

General Zoning Category	Residential Density	Acres	% of Total Vacant Land
Rural Residential	> = 5 acres	1,057	6.25%
Low Density Residential	> 1 and < 5 acres	3,818	22.57%
Medium Density Residential	>= .21 and < 1	4,233	25.02%
High Density Residential	< .20 acres	3,783	22.36%
Commercial		1,843	10.89%
Government		35	0.21%
Industrial		2,150	12.71%
TOTALS		**16,919**	**100.00%**

Source: Summit County Auditor

Table 9:

South Planning Area, Vacant Land by Zoning Classification

General Zoning Category	Residential Density	Acres	% of Total Vacant Land
Rural Residential	> = 5 acres	2,383	14.16%
Low Density Residential	> 1 and < 5 acres	2,245	13.34%
Medium Density Residential	>= .21 and < 1	7,423	44.12%
High Density Residential	< .20 acres	1,023	6.08%
Commercial		1,236	7.35%
Government		0	0.00%
Industrial		2,515	14.95%
TOTALS		**16,825**	**100.00%**

Source: Summit County Auditor

When one sums the total of vacant residential land for each planning area, the amount of acres is roughly comparable. In the North Planning Area, there are 11,353 total acres of residentially zoned vacant land. In the Central Planning Area, there are 12, 891 total acres of residentially zoned vacant land and in the South Planning Area, there are 13, 074 total acres of residentially zoned vacant land. It should be kept in mind that the remaining vacant land may have some challenging topographical or other development constraint.

There is quadruple the amount of vacant rural residential zoned land in the South Planning Area compared with the North Planning Area. The North Planning Area has 526 acres left of vacant rural density zoned land, while the South Planning Area has 2,383 acres of vacant rural density zoned land. The Central Planning Area has 1,057 acres of vacant rural density zoned land left. The Rural Residential zoning classification requires a minimum lot size of 5 acres or greater per house.

The North Planning Area has more acres of low-density zoned land than the Central or South Planning Areas. There are 6,636 acres of vacant low density zoned land in the North Planning Area; in the Central Planning Area there are 3,818 acres of vacant low density zoned land; while in the South Planning Area there are 2,245 acres of vacant low density zoned land. Approximately, 43% of the vacant land left in the North Planning Area is zoned for residential low-density use. The low-density residential zoning classification requires a minimum lot size of between 1 acre up to 4.99 acres per house. This low density zoning classification may be one of the best to implement the Open Space Conservation Zoning model, since greater percentages of land can be preserved when conservation development practices are applied at relatively low densities typical of large lot zoning. A 120-acre tract with a 1 unit per 3-acre density can support 40 units grouped on 1-acre lots, and a minimum of 50% could be preserved as permanent open space.

There is double the amount of vacant medium density residential zoned land in the South Planning Area compared with the North Planning Area. Forty-four percent of the vacant land left in the South Planning Area is zoned for medium residential density use. The North Planning Area has 3,629 acres left of vacant medium density residential zoned land while the South Planning Area has 7,423 acres of vacant medium residential density zoned land. The Central Planning Area falls between the other two planning areas in the amount of vacant medium residential density zoned land with 4,233 acres.

The Central Planning Area has considerably more vacant high density zoned residential land than does the North or South Planning Areas. In the Central Planning Area there are 3,783 acres of vacant residential high-density zoned land, in the North Planning Area, there are 1,023 acres of vacant residential high-density zoned land. The makes sense because the City of Akron is in the Central Planning Area.

Commercial Vacant Land
When one totals the amount of vacant zoned commercial land for each Planning Area, the amount of acres is roughly comparable. In the North Planning Area, there are 1,680 acres of commercial zoned vacant land. In the Central Planning Area, there are 1,843 acres of commercial zoned vacant land, and in the South Planning Area, there are 1,236 acres of commercial zoned vacant land.

Industrial Vacant Land
Similarly, when one totals the amount of vacant zoned industrial land for each Planning Area, the amount of acres is roughly comparable. In the North Planning Area, there are 2,490 acres of industrial zoned vacant land. In the Central Planning Area, there are 2,150 acres of industrial zoned vacant land, and in the South Planning Area, there are 2,515 acres of industrial zoned vacant land.

So the three Planning Areas are roughly comparable in the total amount of residentially zoned vacant land, commercial and industrial zoned vacant land. The main differences between each Planning Area are in the residential density zoning categories and how much vacant land is available in each.

Residential Subdivision Activity
Map 6.7 shows new Major Subdivisions approved in Townships by Location and Year. It does not show any data for the cities and villages. Map 6.7 indicates that between 1993 and 1999 there were on average, approximately 25 major subdivisions approved per year. Compared with the preceding years, the major subdivision activity between 2000 and 2003 appears to have slowed down.

One can tell from Map 6.7 that there has been significant Major Subdivision activity going on in the northern part of the County since 1993, especially in Sagamore Hills and Northfield Center Township. The central part of the County – especially in Copley Township shows quite a few major subdivisions approved since 1993. This may be showing that people are moving from Akron to Copley Township since it is a close commute to Akron.

MAP 6.7

Major Subdivisions in Townships

by Location and Year

Summit County, Ohio
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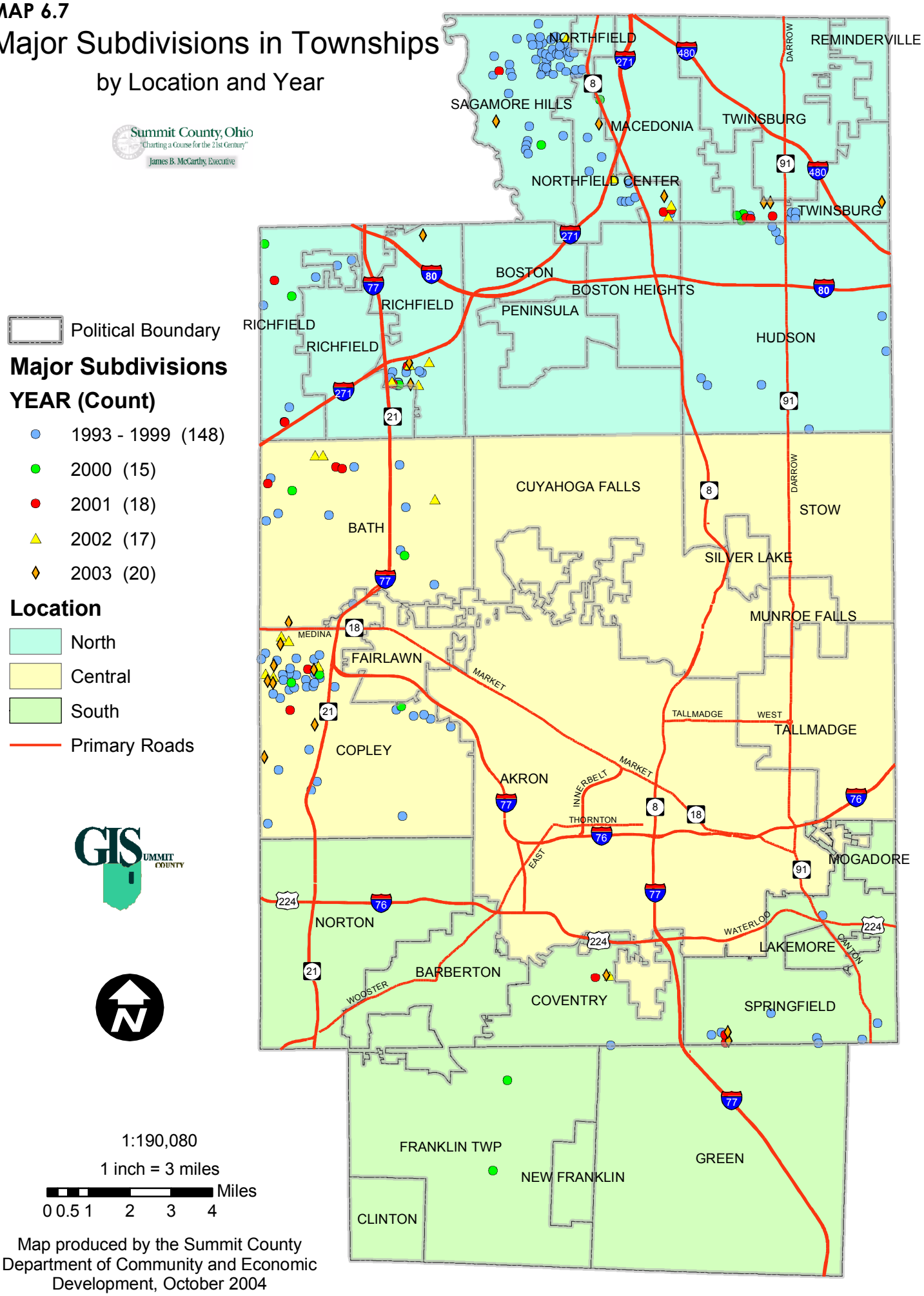


Political Boundary

Major Subdivisions

YEAR (Count)

- 1993 - 1999 (148)
- 2000 (15)
- 2001 (18)
- 2002 (17)
- 2003 (20)

Location

- North
- Central
- South
- Primary Roads

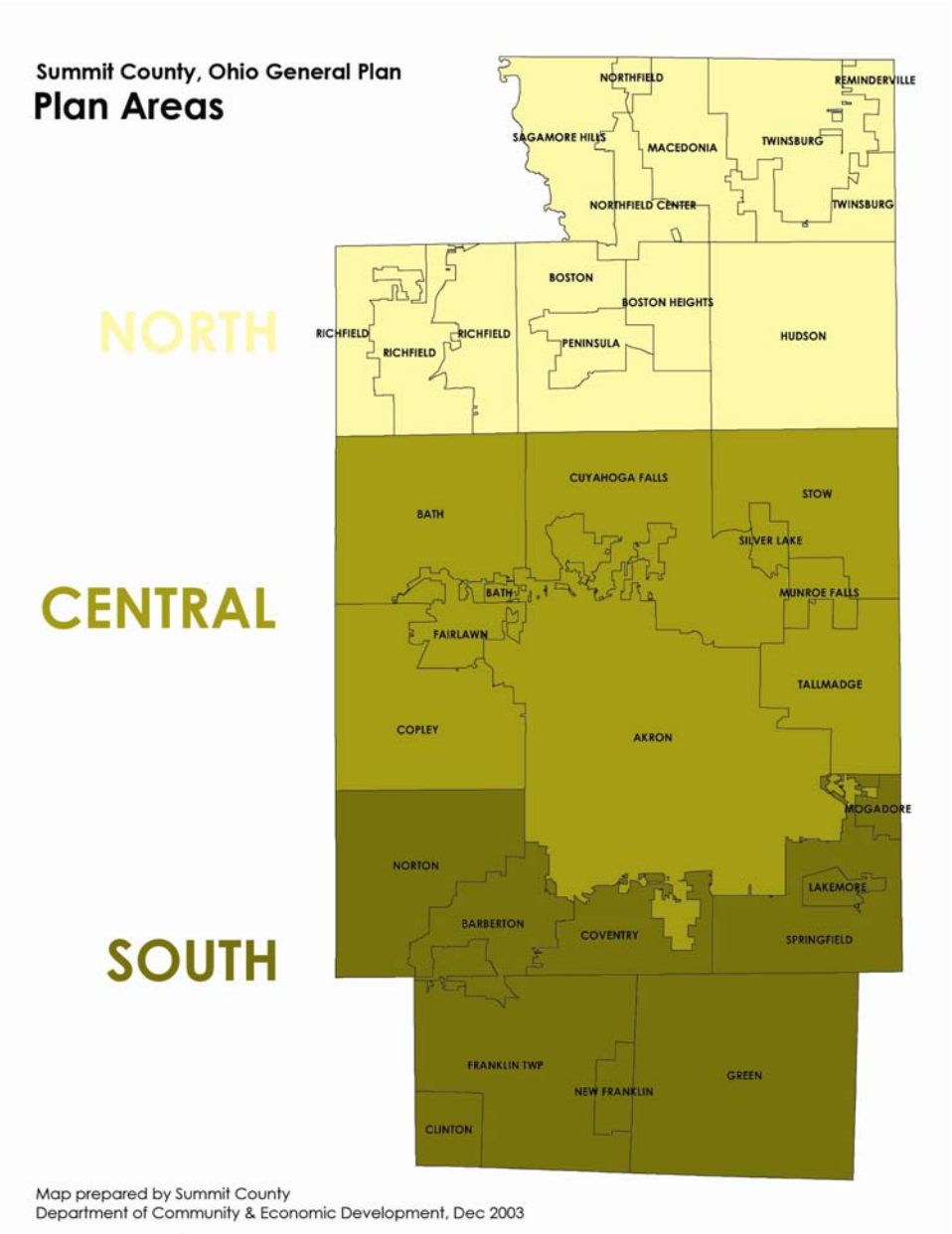
GIS Summit County

1:190,080

1 inch = 3 miles

Miles
0 0.5 1 2 3 4

Map produced by the Summit County Department of Community and Economic Development, October 2004



Map 6.8 General Plan – Planning Areas

Vacant Land Analysis

According to the 2004 land use data (Summit County Auditor's Parcel data) 18.4% of Summit County or 49,427 acres consists of vacant land. Vacant land is defined as land without structures on it. Using the Summit County Planning sub-area categories, 19% of the North Planning Area is vacant or 15,555 acres, 15.5% of the Central Planning Area is vacant land or 17,026 acres, while 21.8% of the South Planning Area is vacant or 16,846 acres.

Table 10:

Summit County Land Use (2004)

Land Use	Summit County (% of total)	North (% of total)	Central (% of total)	South (% of total)
Rural Residential (>= 5 acres per unit)	5.3%	5.3%	3.9%	7.3%
Low Residential (>= 1 and <5 acres per unit)	11.2%	10.6%	10.6%	12.6%
Medium Residential (>=.21 and <1 acres per unit)	12.8%	11.3%	12.7%	14.4%
High Residential (<.021 acres per unit)	5.9%	1.9%	11.1%	2.8%
Residential (Total)	35.1%	29.1%	38.3%	37.1%
Agriculture	7.7%	6.2%	5.5%	12.5%
Vacant	18.4%	19.0%	15.5%	21.8%
Industrial	2.2%	1.8%	2.3%	2.5%
Commercial	4.3%	3.4%	5.2%	4.1%
Office	0.6%	0.7%	0.7%	0.3%
Commercial Recreation	1.5%	1.2%	1.7%	1.6%
Parks/Open Space	10.7%	21.7%	7.6%	3.6%
Transportation/Utilities	12.2%	9.9%	13.7%	12.7%
Public/Semi Public	7.1%	7.1%	9.4%	3.9%
Total (Acres)	**268,852**	**81,913**	**109,568**	**77,371**

Source: Summit County Auditor

According to the 2004 land use data, there is 10.7% of the total Summit County land in Park land use (see Table 10). In the North Planning Area which includes the Cuyahoga National Park (16,890 acres) 21.7% of its land is in Park land use. In the Central Planning Area there is 7.6% of its land in Park land use. While in the South Planning Area, there is only 3.6% of its land in Park land use. So although the amount of vacant land in the South Planning Area is fairly equivalent to the Central Planning Area, there is less Park land in the South Planning Area. So as there is more development pressure in the South Planning Area, if one wants to maintain the current rural feeling, then it would be necessary to convert some of the existing vacant land to Park land use. If the amount of Park land were increased in the south, this would also help maintain some of the rural open space as more agricultural land is converted into developed areas.

The County as a whole has 7.7% of the total land in agricultural use or 20,764 acres left of agricultural land according to the 2004 County Auditor's parcel data. The South Planning Area has 12.5% of its total land use or 9,685 acres of agricultural land left in agricultural land use.

In the North Planning Area, there is 5,041 acres of agricultural land or 6.2 % of the North planning area is in agricultural use. The Cuyahoga Valley National Park is now encouraging farming in the National Park by leasing out farms to private individuals. Through the Park's Countryside Initiative, they have a goal to revitalize some 30 farms, encompassing 1,500 acres or so – over the next decade. One of the reasons to promote farming in the National Park is to preserve the rural landscape and rural character of the Cuyahoga Valley. In June 2004, a farmers market started in Peninsula, with crops produced in the Cuyahoga Valley National Park. These efforts will increase the amount of agriculture in the North Planning area, but this increase will likely be limited to the Cuyahoga Valley National Park.

In the Central Planning Area, there is 6,038 acres or 5.5% of the Central planning area is in agricultural use.

There is more land in agricultural use in the South planning area than in the other planning areas. Approximately 47% of the remaining agricultural land in Summit County is located in the South planning area.

A recent American Farmland Trust Study done in Butler County near Cincinnati, Ohio compared the costs of providing services to various land uses. This study showed that Butler County residential development requires $1.12 in services for each dollar in taxes and fees, while farms cost the public only 49 cents and industrial and commercial projects cost 45 cents. This cost of Community Services Study shows that residential growth costs Butler County more than twice as much as anything else.[2] Other cost of community services studies done around the country have showed similar results.

[2] Smart Growth News online 12/21/04.

6.3 Planning Issues

Analysis
In Summit County, extensive development has occurred, even with a decrease of population between 1970 and 2000. The population was 553,371 in Summit County in 1970 and in 2000 the population was 542,899 according to U.S. Census data. This is the result of a serious decline of the number of persons per household, the desire of families for more land and larger houses, increasing wealth among some sectors of the population, and the redistribution of homes, businesses and industries from existing cities to outlying areas of the region.

In recent decades both Summit County and the surrounding region have experienced significant development without significant real growth. While infrastructure has expanded to serve new areas, the infrastructure in older areas is often underutilized. For example, many schools have been built in outlying sectors of the county while many schools have been closed in older cities. The duplication, or underutilization, of infrastructure further increases per capita costs.

The average household size in Summit County decreased from 2.72 in 1980 to 2.45 in 2000. Summit County added 30,514 new housing units between 1980 and 2000, while during the same time period the population only increased by 3.5 %. In 1980, the Summit County population was 524,472 and in 2000 the population was 542,899 according to U.S. Census data.

Expanded incomes, relatively cheap land, the expansion of infrastructure, lower interest rates and the tax advantages of a large mortgage provided the incentives for many people to move from older neighborhoods to new homes in outlying locations. Most of this new residential development that has taken place since 1970 is in the form of single family housing on large lots. Lots and home sizes are quite a bit larger than they were a generation ago. In 1970, the size of a new home was approximately 1,200 square feet. Today it is about 2,000 square feet. According to the American Housing Survey, the median new house size grew from 1,725 square feet in 1993 to 1,928 square feet in 1999, an 11 percent increase in just six years, despite a shrinking average household size of just 2.61 persons. Some of this growth is the result of consumer demand, but some of it is also due to nonmarket incentives such as zoning and tax breaks, that encourage larger homes. Similarly, in the last 30 years, the amount of retail space has grown four-fold from five square feet per person to 20 square feet.[3] These consumptive patterns consumed nearly 30,027 acres of the remaining developable land within the county between 1970 and 2000.[4]

These consumptive development patterns require a lifestyle with higher land and building maintenance costs and longer distances to be traveled using more cars. All of this requires greater infrastructure expenditures in the form of schools, roads, sewer/water and utilities. This growth is not self-sustaining and in fact, must be subsidized by other members of the community. Dispersed low-density growth is subsidized partly because utility pricing is based on average – rather than the actual costs of providing services. Residents in more urban, higher density areas in effect subsidize those in edge areas.

[3] *Getting to Smart Growth- 100 Policies for Implementation.*
[4] AMATS Land Use Data.

Running Out of Land Suitable for Development

According to a 2004 Land Use Map and data prepared by the Summit County Department of Development based on Summit County Auditor parcel data (refer to Map 6.3), there are approximately 49,427 vacant acres remaining in Summit County. Not all of that is estimated to be developable. According to Map 6.2 1979 Land Use, there were 99,285 vacant acres in 1979, there was a 50% decrease in vacant land between 1979 and 2004.

A shortage of suitable land places more pressure on developing land that is not suitable for development, e.g. wetland areas and steep slopes. While some lands designated as unsuitable for development were developed in recent years, there will be greater temptations to build on unsuitable land as land becomes scarcer. Development on sensitive lands could result in very costly maintenance and significant damage to the natural environment. Rapid development would also quickly diminish the County's remaining rural character and the little land that is still used for agricultural purposes. The existing rural character is greatly valued by local residents and agricultural uses are also prized by some. Although Summit County no longer has the support infrastructure that exists in more rural counties, there is significant community support for small-scale production and sale of locally grown food. Community policies should support and preserve such small-scale farms.

The random redistribution of population in recent years has produced patterns of development that have consumed much of the county's remaining developable land. It has put greater pressure on developing land that is not suitable for development due to its sensitive natural conditions. Wetlands have been filled in, riparian corridors for wildlife have been severed, woodlands have been reduced, and scenic areas have been destroyed. Agricultural uses within the county have almost disappeared. Many previously natural areas have been replaced with hard surfaces; this has increased storm water runoff and diminished groundwater recharge.

Local Zoning Ordinances May Promote Urban Sprawl

A number of Summit County communities have zoning ordinances that do not recognize the unique qualities of the natural landscape. Many communities assume that all land is developable, i.e., there are no provisions for land that have sensitive environmental characteristics. Some assume that deep setbacks and large lots will serve as a substitute for open space zoning. Others believe that low density will keep problems at bay. Some think single-family homes are the only acceptable building type and all people should be required to live in them. Still others do not especially want commercial or industrial uses within their communities. Most seem to want to ensure that future residential development will attract people who have more money than the people who typically live in the community at present. Collectively, these issues suggest the current land use policies need to be modified to produce more efficient and effective patterns of development.

Redistribution of Wealth

Wealth is concentrated in outlying areas. Stores and shops follow residents to locations with the greater buying power. Industries too are attracted to outlying locations because of lower land costs, room for expansion, tax incentives, better educated work force, and fewer development controls. Such changes in land use often result in disinvestment in older cities. They also leave people with below average incomes in the city with a diminished tax base. Older housing stock, mostly located in older cities, often results in a "trickle down" effect that puts the poorest people in housing units that require the greatest maintenance. The growing separation of rich and poor results in fewer housing choices for the most needy.

The redistribution of the population has produced social impacts. The gap between rich and poor has become greater. Generally, only wealthier people can afford to move to new large homes on large lots in outlying areas. Therefore, older central cities have become increasingly poor. The demand for services is great in older cities but fewer tax dollars are available because wealth has moved out, and the poor have remained.

There is also concern about social issues among those who have moved to suburbia. Large lots consume much time in maintenance. Large lots also mean that the driving time and distance to go for services are much larger. When land uses are distributed over a wider area, the catchment area for stores, schools, and other community facilities increases. As distance between these facilities and homes increase, people become more dependent on their cars and spend more time in them. This creates a demand for more roads or increases congestion on existing ones. It also consumes more energy and more time, and increases air pollution.

The dispersion of the population and the separation of uses from one another and from other uses contribute to a greater demand for parking. For example, when commercial uses are built as stand alone buildings and scattered along highways, people can no longer walk to stores, walk between stores, or complete several tasks from a single parking location. Because there are no sidewalks or places for chance meetings with other people, residents living in outlying locations often experience a feeling of social isolation and yearn for a sense of community and place.

Health Effects of Sprawl

The Vermont Forum on Sprawl defines sprawl as "dispersed, auto-dependent development outside of compact urban and village centers, along highways, and in rural countryside." Available evidence supports the concept that sprawl is associated with more driving, less walking and less transit use.[5]

Akron Children's Hospital hosted a Conference on January 12, 2005 entitled "Preventing Childhood Obesity: A Summit County Community-Wide Planning Conference." One of the options discussed during a morning brainstorming session was implementing zoning and planning practices that promote walking or biking.[6] The public health community has become more interested in promoting planning to create more walkable communities; this interest has

[5] *Urban Sprawl and Public Health.*
[6] *Akron Beacon Journal*, Jan. 13, 2005.

been sparked by the soaring rates of obesity nationwide. There is a current planning effort underway by the Summit County Health Department to work with the Village of Lakemore in Summit County to connect more residents to Springfield Lake for more walking and recreational opportunities. The Summit 2010 Quality of Life Study completed in 2004 by the Summit County Executive's Office and the Social Services Advisory Board directed this planning effort by the Summit County Health Department. As part of this Summit 2010 Quality of Life Study, the Village of Lakemore developed recommendations to improve the quality of life of their residents and these recommendations included the notion of improving recreational opportunities by adding walkway trails around Springfield Lake.

According to an article entitled "Suburban Sprawl and Physical and Mental Health" by Roland Sturm and D.A. Cohen,[7] it was found that people who live in areas with a high degree of suburban sprawl are more likely to report chronic health problems such as lung disease, abdominal illnesses, arthritis and headaches than those who live in urban areas. The study results propose that suburbanites' dependence on cars to get around may be responsible for their higher rates of health problems. "We know from previous studies that suburban sprawl reduces the time people spend walking and increases the time they spend sitting in cars, and that is associated with higher obesity rates," says researcher Roland Sturm, a health economist at the RAND Corp., in a news release. "This probably plays an important role in the health effects we observe." These results point to the possibility that urban form is a determinant of the physical health of the population.

Inactivity seems to encourage people becoming overweight and associated conditions such as diabetes have emerged as major public health challenges. There is growing evidence that the physical features of urban sprawl discourages physical activity thereby contribute to the epidemic problem of obesity.[8] Research has identified many determinants of physical activity. These include density, land use mix, the presence and quality of sidewalks and footpaths, enjoyable scenery, and the presence of other people who are physically active and healthy.[9]

According to the book Urban Sprawl and Public Health, to the extent that Smart Growth changes current development patterns into new development patterns that encourage "walkability", it can be considered a public health paradigm. Smart Growth principles promote mixed land use; a balance of density and preserved greenspace; a balance of automobile transportation with walking, bicycle and transit – these and other strategies offer the potential to increase physical activity and decrease air pollution.

[7] *Journal of Public Health*, May 2004.
[8] *Urban Sprawl and Public Health.*
[9] *Urban Sprawl and Public Health.*

There are numerous changes that can be made to zoning ordinances or regulations to create neighborhoods where residents have more opportunity to be active.[10] One option is to revise ordinances to permit more compact traditional neighborhood developments with front porches, and sidewalks to encourage walkability. Other tools include:

- Increasing development densities
- Requiring sidewalks and trails in new developments
- Retrofitting already developed area with sidewalks, trails and bike paths
- Linking open spaces
- Requiring street connectivity
- Instituting traffic calming measures such as narrower streets

Summit County is fortunate that it has major infrastructure that encourages physical exercise. This includes the Cuyahoga Valley National Park (CVNP) that is convenient to residential communities in the northern portion of the county. The popular Tow Path Trail is nearly complete for hiking and bicycling through the CVNP and to the southern boundary of the county. The southern portion of the county has its extensive network of Portage Lakes that provide water-related activities. Metro Parks Serving Summit County has provided parks throughout the county with extensive hiking trails. Finally, the Summit County Trail and Greenway Plan is providing links between these recreational resources and residential and business communities throughout Summit County.

Economic Concerns

Economically, the increasing consumption of land and other resources on a per capita basis cannot be sustained over time. The cost of building new facilities and providing new services to developing areas while vacating them in older areas is not an effective use of capital. While it is good news that the population of the county has increased between 1990 and 2000, the fact remains that the county's population is less in 2000 than it was in 1970. Moreover, the internal redistribution of population within the county is very costly. It has consumed land in outlying areas and created a demand for extending streets and utilities, schools, parks, health and safety services.

At the same time, in older areas, disinvestment has occurred. Buildings and land have been vacated and services are less efficient; the same area must be served but there are fewer taxpayers.

In recent decades most builders have constructed big houses on big lots in suburban areas that are attractive to families with children. However, in 2000, the traditional family (i.e., a married couple with kids) represented less than one in four households. With household growth concentrated in older age groups, the traditional family is projected to account for only one in

[10] *Zoning Practice*, June 2004 "Zoning to Promote Health and Physical Activity."

five households in 2025. [11] In 2000, the national average household contained 2.6 people (down from 3.6 as recently as 1970) and only 68 percent of them were families (down from 81 percent). Nationally single person households now account for over 25 percent of all households. These national trends are consistent with Summit County trends. Locally the percentage of people living alone has increased by 42% between 1980 and 2000. There were 42,891 single person households in Summit County in 1980 and in 2000, there were 60,913 single person households.[12]

The vast consumption of resources for land development without the equivalent level of population growth is not the most productive use of local assets. In recent years a significant portion of money has been spent to expand infrastructure and services that have enabled more private citizens to have larger lots and bigger homes. Instead of development patterns that spread out and use large amounts of land, the Smart Growth movement promotes more compact development patterns, which could be compatible with the trend in smaller household sizes. One of the principles of Smart Growth is to take advantage of compact building design. Communities could incorporate more compact building design as an alternative to conventional, land consumptive development. Traditional Neighborhood Development (TND) is a type of neo-traditional mixed-use neighborhood design promoted by architects Andres Duany and Elizabeth Plater-Zyberk that has implemented these compact building design principles.

Mixed-Use Development

Mixed-use developments are developments that are patterned often after traditional villages, and that usually include a mix of retail, residential and office uses, and pedestrian friendly sidewalks. A mixed-use development contains different land uses that are in close proximity, planned as a unified complementary whole, and functionally integrated to the use of shared vehicular and pedestrian access and parking areas. Mixed-use developments are often cited as ways to reduce traffic generation, particularly where homes and jobs are planned and developed within easy commuting distance and shopping is located close to residences.[13]

There is a positive relationship between encouraging more compact patterns of development and making it more feasible for mixed use developments to occur. Land use mix is a measure of how many types of uses – offices, housing, retail, entertainment, services, etc. are located in a given area. A high level of land use mix should reduce the need to travel outside of that area to meet one's needs.[14] Mixed-use developments often encourage more walking and less dependence on automobiles.

[11] Issue Papers on Demographic Trends Important to Housing: "How Changes in the Nation's Age and Household Structure will Reshape Housing Demand in the 21st Century" by Martha Farnsworth Riche, Prepared for: U.S. Department of Housing and Urban Development, Office of Policy Development and Research, February 2003
[12] U.S. Census
[13] *The New Illustrated Book of Development Definitions.*
[14] *Urban Sprawl and Public Health*.

City Center – Englewood, Colorado – Mixed use development

The City of Englewood, Colorado, developed a mixed-use transit oriented development on 55 acres of land formerly occupied by the Cinderella City Mall. The photograph above shows the two-acre public square, the civic center building is located on the left. The civic center houses a library, Municipal Court and the Museum of Outdoor Arts for the City of Englewood. There are apartments on the right of the photograph. One can also see in the photograph the steel truss bridge that creates a gateway into City Center from the light rail station. The City Center development includes a good mix of civic, cultural, retail, office and residential uses.

City of Hudson, First & Main new mixed-use development

A new mixed-use development opened in 2004 in Summit County in the City of Hudson, called First & Main. First & Main is a planned 200,000 square-foot mixed-use development that will include retail, restaurants, office space, library and town homes. This project has been a joint public- private partnership. The City of Hudson provided land, public improvements, and both off-street and on street parking. The developer produced the site and architectural plans, purchased land, constructed buildings and recruited and leased tenants. The City sought a development firm to buy the land and create historically compatible layout and buildings, since this First & Main development increases the size of Hudson's downtown. The First & Main buildings that make up the nearly 200,000 square feet of retail, dining, residential and office space are built in the same unique New England style in which the adjacent historic Hudson downtown buildings were crafted. Also, provided in the new mixed use development are sidewalks, green spaces, as well as retail stores, restaurants and a new library.

Another mixed-use development, Crocker Park has recently opened in Westlake, Ohio in 2004. This is a 75-acre mixed-use development that includes restaurants and retail shops, along with condominiums and office buildings.

Transit Oriented Development

Transit Oriented Development (TOD) refers to residential and commercial areas designed to maximize access by transit. A TOD neighborhood has a center with a rail or bus station,

surrounded by relatively high-density development, with progressively lower density spreading outwards. A TOD neighborhood includes the following design features:[15]

- The neighborhood is designed for cycling and walking, with adequate facilities and attractive street conditions
- Mixed-use development that includes shops, schools, and other public services, and a variety of housing types and prices, within each neighborhood
- Streets have good connectivity and traffic calming

Encouraging compact, denser types of development allows for transit-oriented development (TOD), which generally requires about 7 residential units per acre in residential areas and 25 employees per acre in commercial centers and about twice that for premier quality transit, such as rail service.[16] These densities created adequate transit ridership to justify frequent service, and help create active street life and commercial activities, such as grocery stores and coffee shops within convenient walking distance of homes and worksites. However, other factors are also important besides simple density. Transit ridership is also affected by factors such as employment density and demographic mix with students, seniors and lower-income persons tending to be heavy transit users.[17]

Transit oriented development is another approach to reduce sprawl and preserve open space. A recommended Smart Growth Strategy is for states and regions to finance and provide incentives for multimodal transportation systems that include supportive land use and development. It is recommended that states can improve the cost-effectiveness of their transportation investments by ensuring that transportation and development are coordinated. Project selection criteria should give priority to those projects that demonstrate supportive land uses for example – transit service for areas with transit oriented development.[18]

In the November 2, 2004 election Denver region voters decided to okay "FasTracks", a $4.7 billion initiative to build about 119 miles of light rail and commuter rail with extensions to such suburban targets as Boulder and the Denver International Airport. Similar measures were approved in November in California, Texas, Arizona, Michigan and Kentucky. Fifty-one of the 57 stations envisioned along FasTracks lines are expected to pose major opportunities for TOD – transit oriented development. The variant to subdivisions marching along the Front Range of the Rockies may be compact, new transit-served communities in which people can live, work, dine or shop in town-like settings with significantly reduced auto needs. Backers suggest that population focused into the Denver area TOD's will take a significant bite into regional vehicle miles traveled, saving close to 50 square miles of open space, through mixed uses and more intensive development.[19]

[15] Morris.
[16] Online TDM Encyclopedia – Transit Oriented Development.
[17] Online TDM Encyclopedia – Transit Oriented Development
[18] *Getting to Smart Growth – 100 Policies for Implementation*
[19] The Plain Dealer, Nov. 14, 2004 – Neal Peirce "Public transit fares well as voters call for sprawl control"

City of Englewood, Colorado, Transit-Oriented Village, light rail station. This is a mixed-use development that contains a civic center, retail, office and apartments.

Englewood City Center TOD mixed use development, retail on first floor and apartments on the upper stories.

A point is made in the TDM Encyclopedia[20] that the assumption that transit cannot be effective except in large cities with high population densities can be a self-fulfilling prophecy, because it results in transport and land use decisions that favor automobile travel over transit.

There are areas in Summit County that are being planning for more transit-oriented development. The Northside train station located near the Mustill store In Akron has potential for transit oriented development. The Northside Train Station, located near the corner of Ridge and Howard Streets in Akron, was opened in 2001. This development was a joint effort by the Cuyahoga Valley National Park and the City of Akron with funding from the Ohio & Erie Canal Association. The proposed site area plan will integrate the Northside Train Station, CVNP's Towpath and Mustill complex and area businesses.

Other potential areas in Summit County where some innovative transit oriented connections could be instituted include the Cuyahoga Valley National Park and adjacent areas. There was a Cuyahoga Valley National Park Transit Access Study done in 2002. According to this Study, the METRO bus system could, with minor route adjustments, enable METRO customers access to the

[20] Victoria Transport Policy Institute Transit Oriented Development Report, July 9, 2004.

Towpath trail at two locations: (1) North Street at the Mustill store and (2) on Memorial Parkway. In addition, bicycle racks could be placed on METRO buses that could encourage more intermodal transportation opportunities and recreational use of the park by bicyclists. These types of changes could reduce automobile traffic in the Park and make the Park more accessible to local residents. These improved transportation linkages could also spur more local tourism development associated with the National Park and Towpath Trail.

Preservation Issues

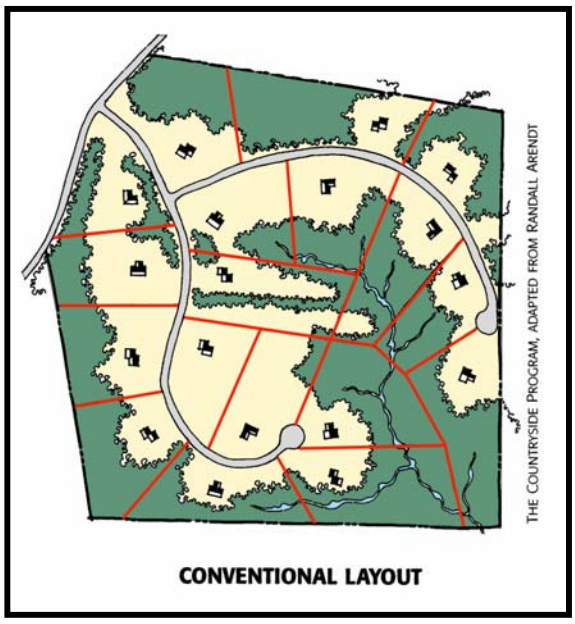
There has been a previous discussion of various ways to encourage densities and development in certain areas in a planned fashion. There are also land use tools that can be used to preserve rural character, open space and farmland areas. One growth management tool is the extension of water and sewer infrastructure and road infrastructure.

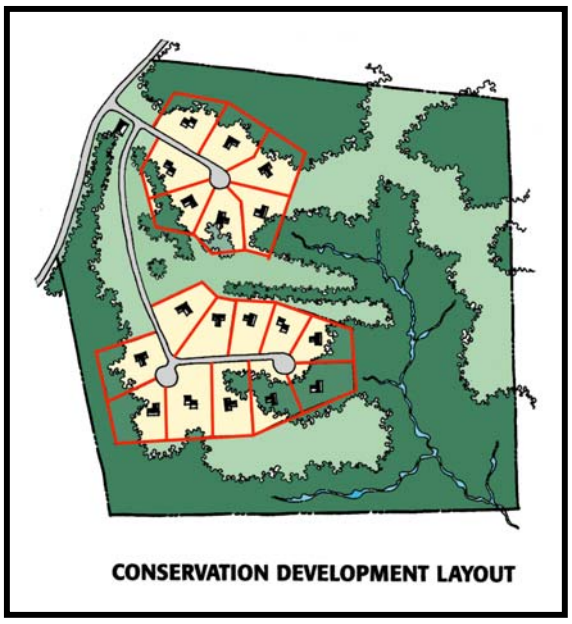
It was indicated through the results of the Summit County Community Survey for Government Officials in the fall of 2003 and again in the Land Use Meetings held in September 2004, that loss of open space, farmland and natural resources are major concerns.

The concern about the loss of open space is understandable, especially in an urban county that is already so developed, the remaining open space becomes even more precious because it is so scarce. Open space can provide scenic views that shape the special places of a community. Open space can also provide separation and buffers between communities so a community boundary is clear and attractive gateways to the community can be provided. Open space can be a design element in a community's design toolbox, and can be used as an organizational element. Open space can assist in structuring the form of urban development.

Open space can be preserved in some cases as parkland through local efforts working with local park boards and Metroparks Serving Summit County. There are currently many local efforts underway to implement the Summit County Trails and Greenways Plan. Many of the areas that are being proposed for preservation in the Summit County Trails and Greenways Plan are narrow linear areas that would provide links for trails.

Farmland can provide open space as well as the value of continued agriculture to the local economy and rural amenities to the community.





Area	*36 acres*	*Acres*	*36 acres*
Lots	*18 lots*	*Lots*	*18 lots*
Undisturbed Open Space	*None*	*Undisturbed Open Space*	*53%*
Road Length	*3,808 feet*	*Road Length*	*2,072 feet*

Open space can also be preserved as a community develops through conservation developments where a developer clusters the houses and preserves 40 to 50% of the site in permanent open space. See illustration above of Conventional Development compared to Conservation Development. One can cluster homes to preserve significant wooded areas, wetlands, other natural features or farmland by the flexible arrangement of permitted units. This also will reduce road length, which reduces the amount of impervious surface, which reduces flooding and stormwater management problems.

If each community in Summit County would promote this type of open space conservation design that preserves 40 to 50% of the total site in permanent open space, many acres of the total remaining open space could be preserved in Summit County. In addition, Summit County, in conjunction with local communities, could develop a County wide Open Space Plan that would complement the Summit County Trail and Greenway Plan to provide a County wide vision for preservation of open space areas to form a County wide open space network. A County wide open space map could conceptually indicate how residentially zoned areas, as they are developed, could form greenways that could be linked together through the provision of permanent open space provided when residential Conservation Development becomes reality. In addition, natural resources, including wetlands and wildlife habitat could be preserved.

In a series of meetings with Summit County Planning staff and local governmental and planning officials the week of September 20, 2004, there was discussion of various land use issues. There was a Land Use Survey handed out that asked a question whether they thought that certain areas of the County should remain rural and unsewered: out of 21 respondents, 18 agreed that certain areas of the County should remain rural and unsewered.

There was also a question asked whether they thought that certain areas of their Community should remain rural and unsewered and the majority of planning officials answered yes to this question as well. Many also answered that they didn't know whether this preference was reflected in the 208 Water Quality Plan. Planning officials from Richfield Village and Township, Bath, Boston, Sagamore Hills, Copley, Franklin, and Springfield Townships answered yes to this question. Also, planning officials from the City of Hudson, Cuyahoga Falls, Green and the Village of Clinton answered yes to this question. The location of water and sewer infrastructure is an important growth management tool and should be utilized in conjunction with local planning efforts in the County.

Another question on the Land Use Issues Survey was do you have farms in your community that you would like to see preserved? Over half of the respondents answered yes to this question, some of the planning officials were from cities and villages that do not have any farmland left. The planning officials that agreed with the statement that they would like to see some of the farms they have preserved because they provide open space and attractive views for their community included officials from; Richfield Township and Village, Boston Township, City of Twinsburg, Copley Township, Cuyahoga Falls, Bath Township, City of Green, Franklin Township, New Franklin Village, Clinton Village and Springfield Township.

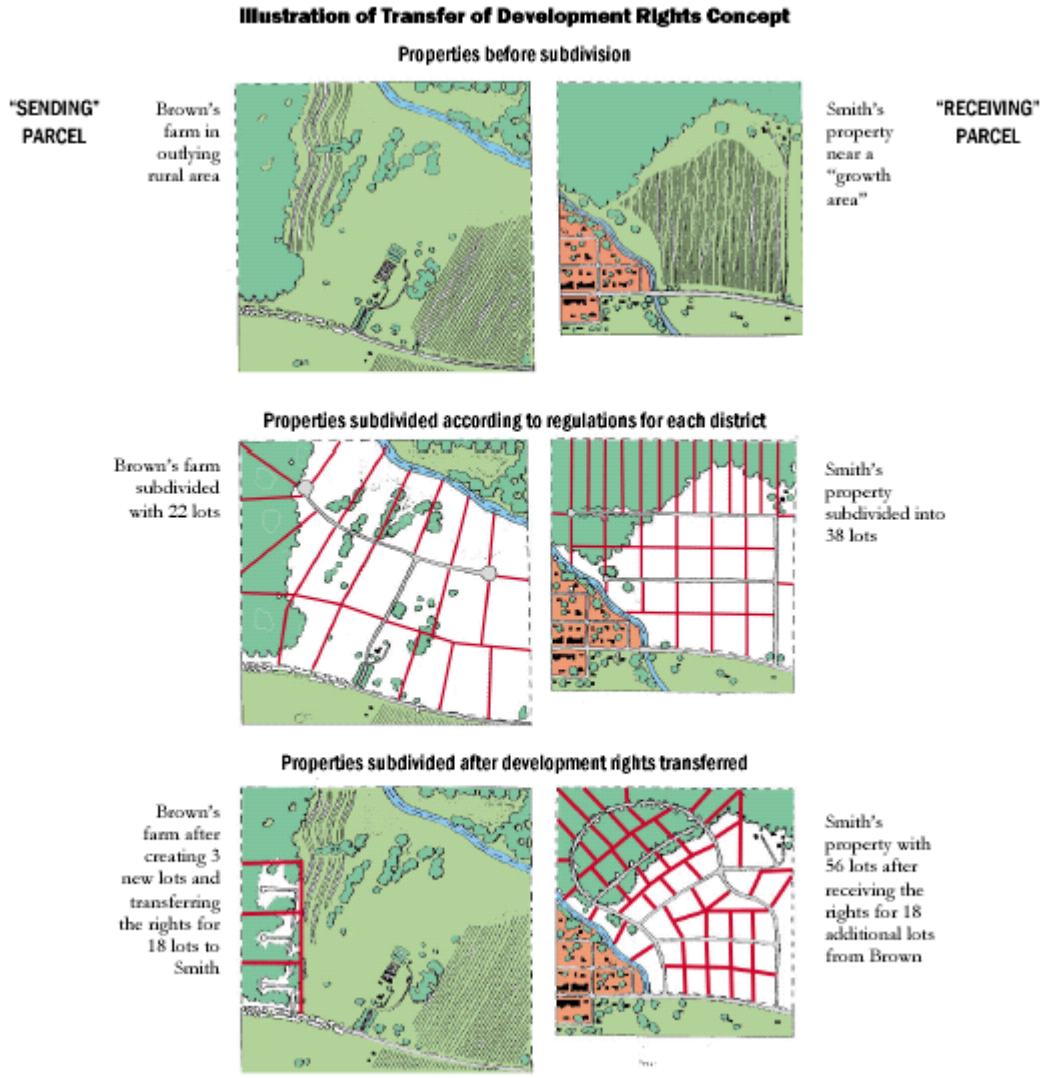
Farmland can be preserved by the Purchase of Development Rights (PDR). The State of Ohio's PDR program is officially known as the Agricultural Easement Purchase Program (AEPP). Ohioans have access to the AEPP as a result of the Clean Ohio legislation (that will end in a few years if not put forth again as a new bond issue for Ohioans to vote on). With the purchase of development rights program, the farmer sells the right to develop his/her land and a permanent conservation easement is placed on the land. If development rights are sold then the land should be valued accordingly for property taxes. This provides an additional incentive for farmland preservation.

A conservation easement is a deed restriction landowners voluntarily place on their property to protect resources such as productive agricultural land, stream corridors, wildlife habitat, historic sites or scenic views. Typically easements are held by governmental agencies, land trusts or other nonprofit organizations designed for this purpose.

A land trust is a nonprofit organization that protects land from development by purchasing or accepting donations of land and by purchasing or accepting donations of conservation easements. Some local land trusts active in Summit County include the Medina-Summit Land Conservancy, Hudson Land Conservancy, and the Tinkers Creek Land Conservancy. National land trusts that have Ohio offices include the American Farmland Trust and the Trust for Public Land.

Agricultural zoning is another tool that can be used to protect farmland. This type of zoning establishes where farming is the primary land use and discourages non-agricultural uses. There is no agricultural zoning currently being used in Summit County.

Transfer of development rights (TDR) is another possible farm or land preservation tool that could be explored. TDR allows landowners to transfer the right to develop one parcel of land (sending area) to a different parcel of land (receiving area). It is designed to shift development from agricultural areas to areas that have the infrastructure capacity to support increased development. The benefits to this type of program is that it offers permanent protection, is a voluntary – market driven process, and farmers can retain equity without developing their land. Currently, it is questionable whether counties, municipalities and villages have the authority to transfer development rights. It is believed that townships do not have the authority to transfer development rights according to the Center for Farmland Preservation in Northeast Ohio. See Illustration below of Transfer of Development Rights concept.

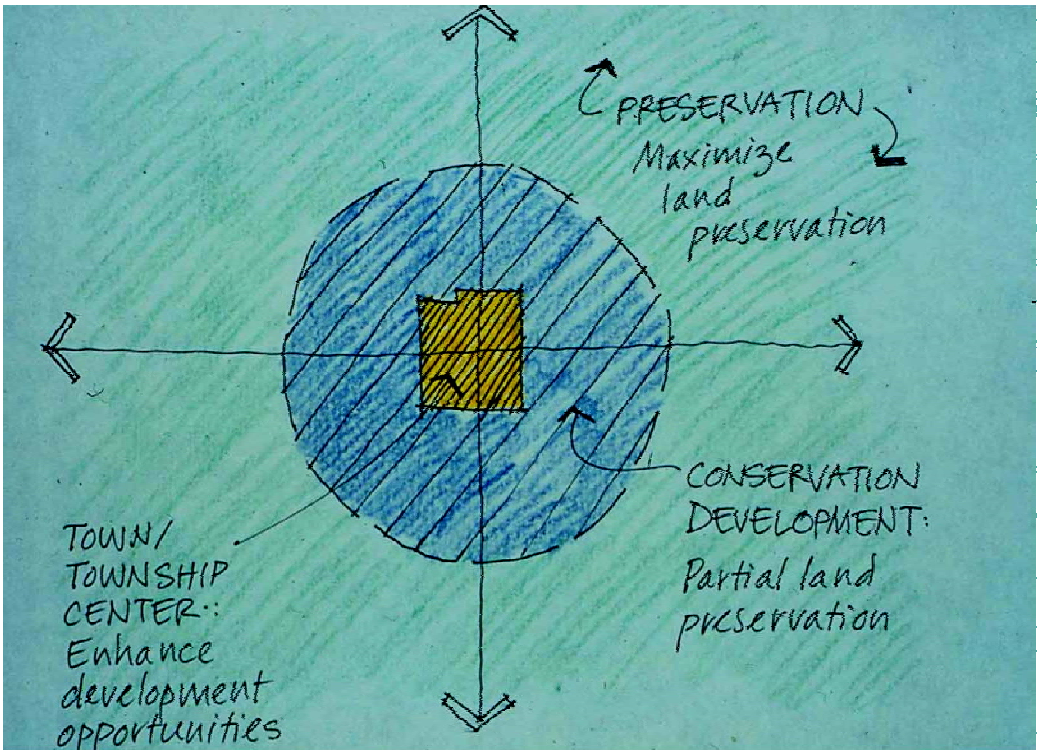


Three Tier Typology

The Western Reserve Countryside Program promotes thinking about planning issues in terms of a Three Tier Typology. This typology was developed in terms of preserving rural countryside areas but can be used conceptually for planning purposes on a countywide basis.

Kirby Date of the Countryside Program developed this Three Tier Typology Model. She states that through the comprehensive planning process we can find good places to accommodate three tiers of development and conservation in a community. The Tier 1 area is where the local community would want to enhance development opportunities, it would be called the Town or Township Center (refer to Three Tier graphic). This is where infrastructure is concentrated and here is where neo-traditional mixed-use pedestrian friendly development would be promoted. On a county basis – this could also be a city or village center. It is important to emphasize that infrastructure is located here and the vision is to provide places with character to live and work.

In the Tier 2 area is the Preservation area where the community would want to maximize land preservation. These preservation areas are areas with unique natural resources or may contain farm communities. Here are areas where the community would want to preserve large blocks of land.



Three Tier Graphic from Western Reserve Countryside Program

This area could include wetlands or floodplain areas that serve important green infrastructure functions in absorbing stormwater and reduces the costs of property damage from flooding. It may also include areas suitable for open space preservation due to providing important wildlife habitat for endangered species or possibly providing an area where a regional stormwater basin is needed.

Then in the Tier 3 area is the "Conservation Development Zone" where partial land conservation is the appropriate approach. Through a patchwork of development and open spaces, which is the "Conservation Development Zone," steps can be taken to reduce the impact of development, while allowing it to occur. In these areas, just outside of the Town Center (Tier 1), open space conservation residential development is encouraged as a way to preserve open space. In open space conservation development, a developer can get the same number of houses built as under the underlying zoning but can cluster the houses together which reduces the amount of impervious surfaces, yet 40 to 50% of the site can remain in permanent open space. Local zoning has to be provided by the community to allow the real estate entrepreneur to develop an open space conservation development. If no central sewer is available then approval may have to be given for innovative sewage treatment systems in order to be able to cluster the houses. With a local Community Parks and Open Space Plan and/ or Countywide Open Space Plan, these protected open space areas in Conservation Developments can be linked together to form linear greenways that could be used for recreational hiking or even form bicycle transportation links.

Many Summit County communities are currently working to implement trail connections proposed in the Summit County Trail and Greenway Plan completed in 2001, jointly coordinated by Metro Parks Serving Summit County, Summit County Department of Development, Ohio & Erie Canal Corridor Coalition, Ohio Department of Natural Resources, Cuyahoga Valley National Park, City of Akron and City of Barberton. The Ohio & Erie Canal National Heritage Corridor and Metro Parks Serving Summit County's Bike and Hike Trail comprise the framework used to establish a greenway and trail system throughout the county. The open space and pedestrian connections developed in new residential Conservation Developments should also be linked to the overall Summit County Trail and Greenway Plan.

Each of these Tier areas has its own character, with its own set of appropriate uses and development patterns. Across a community and a region, they form a vision for a landscape that will sustain economic growth, while preserving quality of life.

Growth Management Issues
Managing growth involves the following key items:

- Use land productively and in an efficient manner. Treat it as a finite resource.
- Local governments should define and protect community character when making development decisions.
- Environmental impacts should be carefully evaluated. Natural resources should be examined as part of the County's "green infrastructure."
- Regulatory tools such as zoning and subdivision regulations should be utilized to guide development.
- Local land use and comprehensive plans need to be periodically updated and should be in harmony with zoning regulations.

6.4 Summit County 2030 Forecast Characteristics

AMATS recently completed a 2030 Planning Data Forecast in 2004. AMATS forecasts population, dwelling units, household vehicles, employment, and non-residential floor area in order to prepare the 2030 AMATS Regional Transportation Plan. The main input for this process is the Ohio Department of Development Office of Strategic Research (OSR) 2005-2030 county projections. When NEFCO convened the local planning agencies in the fall of 2003 to assist in developing the 2030 population forecast for the area's political units, it was with the understanding that the results would conform as closely as possible, to the OSR county totals. These population projections are based on past trends and an analysis of available vacant land.

Planning Area Analysis
This AMATS forecast analysis data has been collapsed into the three Summit County General Plan planning areas of north, central and south Summit County, for the purpose of analysis in this Chapter. The base year of all three planning areas is 2000. The tabular data for this analysis is included on the following pages.

The North Planning area consists of the following communities:

- Boston Heights Village
- Boston Township
- Hudson
- Macedonia
- Northfield Center Twp
- Northfield Village
- Peninsula Village
- Reminderville Village
- Richfield Twp
- Richfield Village
- Sagamore Hills Twp
- Twinsburg
- Twinsburg Twp

The North Planning Area is expected to lose 5,864 acres (a loss of 27.5%) of vacant usable land between 2000 and 2030. The residential land area will be increased by 3,986 acres or 19.3% during this same time period. The total housing units is expected to increase by 7,124 units or by 23.4% in the North Planning Area between 2000 and 2030. The total population in the North Planning Area is expected to increase by 19.3% or by 15,385 persons.

Table 11: North Planning Area

	2000	*2030 (PROJECTED)*	*CHANGE 2000 -2030*
POPULATION	79,541	94,926	19.3%
TOT HOUSING UNITS	30,448	37,572	23.4%
LAND AREA (ACRES)			
RESIDENTIAL	20,610.5	24,596.8	19.3%
VACANT USABLE LAND	21,310.8	15,446.5	-27.5%

The Central Planning Area consists of the following communities:

- Akron
- Bath Twp
- Copley Twp
- Cuyahoga Falls
- Fairlawn
- Munroe Falls
- Silver Lake Village
- Stow
- Tallmadge

The significant increases that were projected for the North Planning Area are not projected for the Central Planning Area for this same time period. Actually there is a projected decrease in population of 1.4% with a projected loss of 5,013 persons in the Central planning area between 2000 and 2030. The number of total housing units is expected to increase by 2,349 units or by 1.5%. The residential land area will be increased by 1,944 acres or by 5.2% between 2000 and 2030. During this same time period the Central Planning Area is expected to lose 3,183 acres of vacant usable land or -12.7%.

Table 12: Central Planning Area

	2000	*2030 (PROJECTED)*	*CHANGE 2000 - 2030*
POPULATION	357,007	351,994	-1.4%
TOT HOUSING UNITS	155,943	158,292	1.5%
LAND AREA (ACRES)			
RESIDENTIAL	37,127.8	39,071.6	5.2%
VACANT USABLE LAND	25,062.7	21,879.9	-12.7%

The South Planning Area consists of the following communities:

- Barberton
- Clinton Village
- Coventry Twp
- New Franklin Village
- Green
- Lakemore Village
- Mogadore Village
- Norton
- Springfield Twp

The South Planning Area projections are, in general, a middle ground between what is projected for the North and Central planning areas. The South Planning Area is expected to lose 4,040 acres of vacant usable land between 2000 and 2030, a loss of -15.3%. The residential land area is projected to increase by 3,010 acres or by 13.4% during this same time period. The 3,010 residential acre increase is fairly close to what is projected for the North Planning Area with a projected increase of residential acres by 3,986 acres. The number of total housing units is expected to increase by 5,952 units or by 13.4% between 2000 and 2030. The total population in the South Planning Area is expected to increase by 9.0% or by 9,702 persons.

Table 13: South Planning Area

	2000	*2030 (PROJECTED)*	*CHANGE 2000 - 2030*
POPULATION	107,259	116,961	9.0%
TOT HOUSING UNITS	44,489	50,441	13.4%
LAND AREA (ACRES)			
RESIDENTIAL	22,493.0	25,503.3	13.4%
VACANT USABLE LAND	26,468.3	22,428.6	-15.3%

AMATS did an analysis of this data by their own defined subareas. A map of the Summit County AMATS region with subareas is attached (see Map 6.9).

AMATS Subarea Analysis

The following subareas comprise the Summit County AMATS analysis region:

- Akron
- Barberton
- Cuyahoga Falls
- Northern Summit County
- Near Northern Summit County
- Southeastern Summit County

The subareas are also shown on Map 6.9 AMATS 2030 Planning Data Forecast Subareas for Summit County. The overall AMATS planning area includes Summit, Portage, Stark and Wayne Counties. During the 30-year period from 2000 to 2030, the AMATS area is expected to experience increases in population of 4.4%, total dwelling units of 8.2%, household vehicles of 8.3% and total employment of 14.3% (Refer to Tables on the following pages).

The largest increase in employment is expected to be in service-related businesses. The AMATS area is forecasted to see an increase of 30,000 employees, or 35% in the service sector.

Manufacturing is expected to continue to exhibit an overall decline of 16% from 2000 to 2030, in employment in the area as a whole, with exceptions in certain areas. Changes in land area and non-residential floor area correspond roughly to changes in the number of dwelling units or the amount of employment.

According to the AMATS 2030 Planning Data Forecast, Summit County overall is expected to see an increase in population of 3.7% between 2000 and 2030, while Akron is expected to lose 7.7% of its population and Barberton is expected to lose .2% of its population. Northern Summit

County (same as North Planning Area see following Table) is expected to increase in population by 19.3% and Near Northern Summit County is expected to increase in population by 13.6 %. Southern Summit County is expected to increase in population for the same time period between 2000 and 2030 by 12.3%.

Summit County is expected to have an increase of 15% in total employment between 2000 and 2030 with an increase of 37% expected in the service area, and a decrease of 17.7% in the number of persons employed in the manufacturing sector. The City of Akron can expect to have an increase of 1.4% in total employment between 2000 and 2030 (Refer to following Table). The City of Barberton is projected to have a decrease of 3.6% in employment for this same time period. The City of Cuyahoga Falls is projected to have an increase in employment of 18.3% between 2000 and 2030. Northern Summit County is projected to increase in employment by 30.6% and Near Northern Summit County is projected to increase in employment by 31%. Southern Summit County is projected to increase in employment by 20.2% between 2000 and 2030.

If development was encouraged to occur in areas that already have infrastructure and in locations with urban services, then maybe the future development patterns would be projected differently.

Smart Growth would direct development towards communities already served by infrastructure, seeking to utilize the resources that existing neighborhoods offer. By encouraging development in existing areas, communities benefit from a stronger tax base, closer proximity of jobs and services, increased efficiency of already developed land and infrastructure, reduced development pressure in fringe areas, and preservation of farmland and open space.

NORTH PLANNING AREA
2030 FORECAST CHARACTERISTICS

	2000	2030 (projected)	Change 2000-2030
POPULATION	79,541	94,926	19.3%
TOTAL HOUSING UNITS	30,448	37,572	23.4%
OCCUPIED HOUSING UNITS	29,214	36,037	23.4%
HOUSEHOLD VEHICLES	58,868	70,238	19.3%
EMPLOYMENT			
Retail Goods	6,864	9,701	41.3%
Services	14,587	23,838	63.4%
Wholesale	5,356	8,085	51.0%
Manufacturing	12,685	11,419	-10.0%
Term. & Utilities	3,777	3,755	-0.6%
Public	4,587	5,685	23.9%
Total Employment	47,856	62,483	30.6%
LAND AREA (in acres)			
Residential	20,610.5	24,596.8	19.3%
Retail Goods	468.2	628.8	34.3%
Services	2,977.3	3,836.3	28.9%
Wholesale	606.4	798.0	31.6%
Manufacturing	1,244.6	1,082.6	-13.0%
Term. & Utilities	560.5	610.0	8.8%
Transport. Facilities	7,380.2	7,891.9	6.9%
Public Bldg.	1,536.1	1,732.9	12.8%
Public Open Space	19,977.3	20,049.1	0.4%
Vac. Usable Land	21,310.8	15,446.5	-27.5%
Vac. Unusable Land	4,237.6	4,236.6	0.0%
Water	1,003.8	1,003.8	0.0%
Total Land Area	81,913.3	81,913.3	0.0%
NON-RESIDENTIAL FLOOR AREA (square feet in '000s)			
Retail Goods	2,299.7	3,275.4	42.4%
Services	7,944.0	12,995.4	63.6%
Wholesale	3,793.6	5,624.4	48.3%
Manufacturing	11,394.1	11,112.2	-2.5%
Term. & Utilities	2,731.0	3,093.5	13.3%
Public Bldg.	5,250.6	6,268.0	19.4%
Total Floor Area	33,413.0	42,368.9	26.8%

Source: AMATS

CENTRAL PLAN AREA
2030 FORECAST CHARACTERISTICS

	2000	2030 (projected)	Change 2000-2030
POPULATION	357,007	351,994	-1.4%
TOTAL HOUSING UNITS	155,943	158,292	1.5%
OCCUPIED HOUSING UNITS	146,157	148,386	1.5%
HOUSEHOLD VEHICLES	263,529	240,063	-8.9%
EMPLOYMENT			
Retail Goods	38,608	44,999	16.6%
Services	51,998	67,694	30.2%
Wholesale	8,490	10,873	28.1%
Manufacturing	27,932	21,510	-23.0%
Term. & Utilities	5,545	6,324	14.0%
Public	37,075	55,861	50.7%
Total Employment	169,648	207,261	22.2%
LAND AREA (in acres)			
Residential	37,127.8	39,071.6	5.2%
Retail Goods	1,912.0	2,018.7	5.6%
Services	4,352.5	4,999.9	14.9%
Wholesale	1,477.1	1,868.8	26.5%
Manufacturing	2,367.2	2,217.8	-6.3%
Term & Utilities	1,189.3	1,316.4	10.7%
Transport. Facilities	14,305.7	14,595.8	2.0%
Public Bldg.	3,546.1	3,837.9	8.2%
Public Open Space	11,822.7	11,707.4	-1.0%
Vac. Usable Land	25,062.7	21,879.9	-12.7%
Vac. Unusable Land	5,172.5	5,121.5	-1.0%
Water	2,024.3	2,024.3	0.0%
Total Land Area	110,359.9	110,660.0	0.3%
NON-RESIDENTIAL FLOOR AREA (square feet in '000s)			
Retail Goods	19,618	21,869	11.5%
Services	33,365	39,864	19.5%
Wholesale	11,308	15,585	37.8%
Manufacturing	32,431	27,865	-14.1%
Term. & Utilities	2,563	3,502	36.6%
Public Bldg.	31,113	32,837	5.5%
Total Floor Area	130,398	141,522	8.5%

Source: AMATS

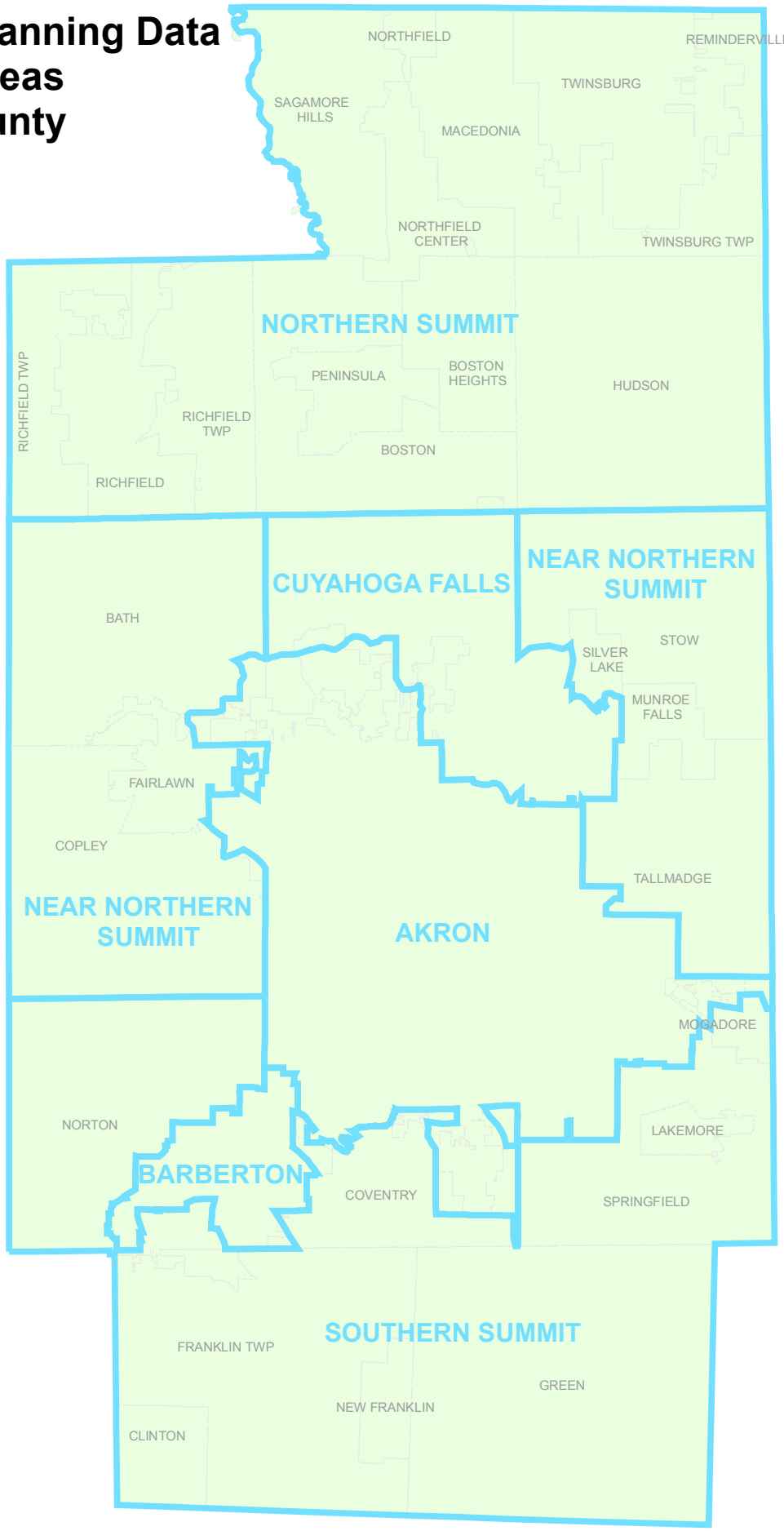
SOUTH PLANNING AREA
2030 FORECAST CHARACTERISTICS

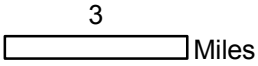
	2000	2030 (projected)	Change 2000-2030
POPULATION	107,259	116,961	9.0%
TOTAL HOUSING UNITS	44,489	50,441	13.4%
OCCUPIED HOUSING UNITS	42,363	48,029	13.4%
HOUSEHOLD VEHICLES	80,841	91,947	13.7%
EMPLOYMENT			
Retail Goods	7,985	9,128	14.3%
Services	9,072	12,128	33.7%
Wholesale	2,608	3,670	40.7%
Manufacturing	9,790	8,537	-12.8%
Term. & Utilities	2,626	3,325	26.6%
Public	6,226	6,401	2.8%
Total Employment	38,307	43,189	12.7%
LAND AREA (in acres)			
Residential	22,493.0	25,503.3	13.4%
Retail Goods	631.3	683.3	8.2%
Services	1,782.1	2,021.1	13.4%
Wholesale	455.8	527.6	15.8%
Manufacturing	1,479.3	1,466.1	-0.9%
Term & Utilities	470.2	554.3	17.9%
Transport. Facilities	7,148.0	7,517.0	5.2%
Public Bldg.	1,433.0	1,626.7	13.5%
Public Open Space	3,626.6	3,800.6	4.8%
Vac. Usable Land	26,468.3	22,428.6	-15.3%
Vac. Unusable Land	6,618.6	6,487.6	-2.0%
Water	3,663.1	3,663.1	0.0%
Total Land Area	76,269.3	76,279.3	0.0%
NON-RESIDENTIAL FLOOR AREA (square feet in '000s)			
Retail Goods	3,596.6	3,933.3	9.4%
Services	7,682.6	9,586.8	24.8%
Wholesale	2,070.3	2,645.1	27.8%
Manufacturing	9,731.2	9,946.9	2.2%
Term. & Utilities	1,432.1	1,784.8	24.6%
Public Bldg.	6,203.9	7,383.1	19.0%
Total Floor Area	30,716.7	35,280.0	14.9%

Source: AMATS

MAP 6.9

AMATS 2030 Planning Data Forecast Subareas for Summit County





SUMMIT COUNTY
2030 FORECAST CHARACTERISTICS

	2000	2030 (projected)	Change 2000-2030
POPULATION	543,807	563,881	3.7%
TOTAL HOUSING UNITS	230,880	246,305	6.7%
OCCUPIED HOUSING UNITS	217,734	232,452	6.8%
HOUSEHOLD VEHICLES	376,238	402,248	6.9%
EMPLOYMENT			
Retail Goods	53,457	63,828	19.4%
Services	75,657	103,659	37.0%
Wholesale	16,454	22,648	37.6%
Manufacturing	50,407	41,466	-17.7%
Term. & Utilities	11,948	13,404	12.2%
Public	47,788	49,065	2.7%
Total Employment	255,711	294,070	15.0%
LAND AREA (in acres)			
Residential	80,231.3	89,171.6	11.1%
Retail Goods	3,011.5	3,330.8	10.6%
Services	9,111.9	10,861.1	19.2%
Wholesale	2,539.3	3,194.4	25.8%
Manufacturing	5,391.1	4,756.5	-11.8%
Term. & Utilities	2,220.0	2,480.6	11.7%
Transportation. Facilities	28,833.9	30,004.6	4.1%
Public Bldg.	6,515.2	7,198.8	10.5%
Public Open Space	35,426.6	35,557.1	0.4%
Vac. Usable Land	72,841.8	59,750.0	-18.0%
Vac. Unusable Land	16,028.7	15,845.7	-1.1%
Water	6,691.2	6,691.2	0.0%
Total Land Area	268,842.5	268,842.4	0.0%
NON-RESIDENTIAL FLOOR AREA (square feet in '000s)			
Retail Goods	25,514.5	29,077.9	14.0%
Services	48,991.6	62,469.2	27.5%
Wholesale	17,171.8	23,854.3	38.9%
Manufacturing	53,556.0	48,924.4	-8.6%
Term. & Utilities	6,725.8	8,379.9	24.6%
Public Bldg.	42,567.5	46,488.1	9.2%
Total Floor Area	194,527.2	219,193.8	12.7%

Source: AMATS

AKRON
2030 FORECAST CHARACTERISTICS

	2000	2030 (projected)	Change 2000-2030
POPULATION	220,634	203,566	-7.7%
TOTAL HOUSING UNITS	98,588	94,143	-4.5%
OCCUPIED HOUSING UNITS	91,404	87,352	-4.4%
HOUSEHOLD VEHICLES	137,080	129,168	-5.8%
EMPLOYMENT			
Retail Goods	20,413	21,383	4.8%
Services	30,283	35,764	18.1%
Wholesale	5,645	6,342	12.3%
Manufacturing	18,187	12,878	-29.2%
Term. & Utilities	4,223	4,716	11.7%
Public	27,318	26,472	-3.1%
Total Employment	106,069	107,555	1.4%
LAND AREA (in acres)			
Residential	14,953.7	14,418.3	-3.6%
Retail Goods	898.9	842.5	-6.3%
Services	1,757.1	1,865.5	6.2%
Wholesale	1,063.3	1,225.2	15.2%
Manufacturing	1,664.2	1,247.1	-25.1%
Term. & Utilities	850.9	934.6	9.8%
Transport. Facilities	7,879.1	7,882.9	0.0%
Public Bldg.	1,723.1	1,754.7	1.8%
Public Open Space	5,043.8	5,041.8	0.0%
Vac. Usable Land	4,838.0	5,464.5	12.9%
Vac. Unusable Land	1,091.5	1,086.5	-0.5%
Water	540.0	540.0	0.0%
Total Land Area	42,303.6	42,303.6	0.0%
NON-RESIDENTIAL FLOOR AREA (square feet in '000s)			
Retail Goods	10,421.2	10,661.7	2.3%
Services	20,547.3	22,013.7	7.1%
Wholesale	9,421.3	11,807.0	25.3%
Manufacturing	23,897.8	19,604.6	-18.0%
Term. & Utilities	2,000.0	2,569.5	28.5%
Public Bldg.	23,866.1	24,762.0	3.8%
Total Floor Area	90,153.7	91,418.5	1.4%

Source: AMATS

Alternative Direction
If development was encouraged to occur in areas that already have infrastructure and in locations with urban services, then maybe the future development patterns would be projected differently.

Smart Growth would direct development towards communities already served by infrastructure, seeking to utilize the resources that existing neighborhoods offer. By encouraging development in existing areas, communities benefit from a stronger tax base, closer proximity of jobs and services, increased efficiency of already developed land and infrastructure, reduced development pressure in fringe areas, and preservation of farmland and open space.

Regional Tax-Base Sharing
A range of options exists to begin to "level the playing field" between greenfield and infill development and to help direct new investment dollars to strengthen existing neighborhoods. One of which is to institute regional tax base sharing to limit regional competition and to support schools and infrastructure throughout the region. When one community underwrites a new mall with costly incentives like undeveloped land, tax discounts or road projects, other communities in the same region are forced to offer incentives of an equal scale to their malls in order to remain competitive. This type of regional competition can spur development at the edge, because in most cases, the new mall or retail outlet will use undeveloped lands, thus requiring new roads, infrastructure and larger parcels for construction.

Regional tax-base sharing allows the revenues collected (most often property tax assessments or sales tax revenues) to be distributed both to the locality where they where generated and to other localities in the region based on their size, population, or other measures of disparity. By minimizing regional competition for large commercial projects and business, such as malls and corporate headquarters, tax base sharing can ensure that new development occurs where it makes the most sense, not for the sole purpose of raising the tax base of one jurisdiction.[21]

Providing Incentives
Another option is to create economic incentives for businesses and homeowners to locate in areas with existing infrastructure. For example, communities can offer favorable lending terms through dedicated bond issues, direct grants or loans through tax-increment financing or from special assessments, tax abatements, credits or waivers, density bonuses or other zoning waivers or expedited permitting treatment.[22]

Modify Average Cost-Pricing in Utilities
Another option to encourage development to communities already served by infrastructure is to modify average cost pricing in utilities to better account for costs of expanding infrastructure in greenfield areas. Low-density, dispersed developments generally enjoy subsidized utility costs because utility pricing is based on average - rather than the actual costs of providing services. Because all customers pay average costs, residents in more urban, higher density areas in effect subsidize those in edge areas. Linear utilities such as cable television, water and sewer, phone

[21] *Getting to Smart Growth -100 Policies for Implementation*.
[22] *Getting to Smart Growth -100 Policies for Implementation*.

service and even mail delivery fail to reflect the efficiencies associated with clustered development. The City of San Diego has created service areas designed for impact fee financing, in which impact fees are lower for areas served by existing infrastructure and higher for those without. This "step" approach to calculating impact fees encourage development to occur in existing service areas by offering lower impact fees to the builders of new units. Conversely, higher fees (that more closely approximate the true cost) discourage development in unserviced areas.[23]

[23] *Getting to Smart Growth -100 Policies for Implementation*.

6.5 Population Projections

This NEFCO 2030 Forecast was developed by sub-allocating the projections for the Summit County communities based on the Ohio Department of Development Office of Strategic Research (OSR) 2005-2030 county projections. These figures were released in 2003. NEFCO worked with the local planning agencies, including AMATS and the Summit County Department of Development to assist in developing the 2030 population forecast for the communities and it was with the understanding that the results would conform to the OSR County total of 564, 212 as closely as possible. Table 14 on the following page has the NEFCO 2030 Population Forecast by community.

Table 14:

NEFCO 2030 Population Forecast

	1980 Census	1990 Census	2000 Census	NEFCO 2030 Forecast
Cities				
Akron	237,177	223,019	217,074	200,275
Barberton	29,751	27,623	27,899	27,845
Cuyahoga Falls	50,526	48,950	50,272	50,718
Fairlawn	6,100	5,779	7,307	7,568
Green	17,625	19,179	22,817	28,837
Hudson	12,645	17,128	22,439	24,369
Macedonia	6,571	7,509	9,224	11,722
Munroe Falls	4,731	5,359	5,314	5,532
Norton	12,242	11,475	11,512	12,509
Stow	25,303	27,998	32,139	35,814
Tallmadge	15,269	14,870	16,180	18,577
Twinsburg	7,632	9,606	17,006	21,308
Villages				
Boston Heights Village	781	733	1,186	1,135
Clinton	1,277	1,175	1,337	1,515
Lakemore	2,744	2,684	2,561	2,650
Mogadore	3,061	2,967	2,951	2,758
New Franklin	See Franklin Twp	See Franklin Twp	See Franklin Twp	See Franklin Twp
Northfield	3,913	3,624	3,827	3,587
Peninsula	604	562	602	631
Reminderville	1,960	2,163	2,347	2,613
Richfield	3,437	3,117	3,286	4,097
Silver Lake	2,915	2,756	3,019	2,807
Townships				
Bath Twp	8,476	9,015	9,635	10,972
Boston Twp	1,460	1,317	1,062	1,099
Copley Twp	9,810	11,130	13,641	17,647
Coventry Twp	11,951	11,295	10,900	11,305
Franklin Twp & New Franklin	16,142	14,910	14,530	15,569
Northfield Center Twp	4,294	3,982	4,931	5,581
Richfield Twp	1,504	1,893	2,138	3,542
Sagamore Hills Twp	7,189	6,503	9,340	10,783
Springfield Twp	16,125	14,773	15,168	16,472
Twinsburg Twp	1,257	1,896	2,153	4,175
Summit County Total	**524,472**	**514,990**	**543,797**	**564,012**

Source: US Census and NEFCO (Northeast Ohio Four County Regional Planning & Development Agency)

Residential Build-Out Capacity Analysis

A build-out analysis was performed for all of Summit County communities based on existing residential zoning classifications (see Table 15). For each political jurisdiction, undeveloped residential parcels greater than or equal to the largest minimum single-family residential lot size were identified and summed. The unbuildable land area was subtracted according to Scenario 1 or Scenario 2 parameters (see below) to determine buildable land. Total buildable land area was multiplied by the maximum permitted density in each residential zoning district to determine potential dwelling unit capacity. The potential total dwelling units were multiplied by the 2000 Census average persons per household for each community to determine potential population. The following build-out population calculation is an estimate, as it does not incorporate small lot infill opportunities, nor does it take minimum open space requirements into consideration.

- Under Scenario 1, land is deducted if it is unbuildable due to riparian areas and water bodies. Riparian areas are only included if covered under community or county regulation.

- Under Scenario 2, land is deducted if it is considered unbuildable due to the following environmental constraints: riparian areas, water bodies, slopes greater than 12%, wetlands (same environmental constraints as the Summit County Natural Resources Study)

The intent of the data is to guide the decision-making process of the County with respect to future development. The results demonstrate the linkage between zoning regulations and land use policies and the impacts such regulations and policies may have on the long-range development of the community. The County may choose other growth simulation scenarios and the conclusions, of course, will vary accordingly. A similar build-out projection was done in the Summit County Natural Resources Study (2003). The Natural Resources Study model looked at changes in land use by projections of acres of vacant land converted to residential, commercial and industrial uses. The same natural resource constraints were used to develop Scenario 2 – Build-out with current land use controls and protection of environmentally constrained areas, for the Natural Resources Study and this Plan. It was found in the Natural Resources Study model that thirty-six percent more land was preserved when environmental land use controls were in place.

In essence, this current build-out analysis reflects that a balance of single-family residential development and environmental protection may be reasonably accommodated. However, the realities of development are that as communities reach the build-out stage, there is more pressure to develop environmentally sensitive lands. So communities need to plan and implement natural resource protection measures before development is proposed, if they wish to preserve natural areas and the public health and safety functions they provide. It also demonstrates that for many communities, build-out is to be expected within 25 years or so. For many communities, the build-out projections and the NEFCO 2030 projections are fairly equivalent.

Table 15:

Summit County Residential Build-Out Capacity Analysis

Community	2000 Census Population	Increase from 2000 Census	Capacity Scenario 1 Build-Out Population Estimate 1	Increase from 2000 Census	Capacity Scenario 2 Build-Out Population Estimate 2	2030 NEFCO Projection Increase from 2000 Census	2030 Population Projection
Akron	217,074	12.8%	244,872	9.8%	238,340	-7.7%	200,275
Barberton	27,899	16.3%	32,434	8.2%	30,186	-0.2%	27,845
Bath Twp	9,635	13.5%	10,937	9.9%	10,586	13.9%	10,972
Boston Heights	1,186	62.7%	1,929	57.2%	1,865	12.6%	1,335
Boston Twp	1,062	10.9%	1,177	9.3%	1,161	3.5%	1,099
Clinton	1,337	24.8%	1,668	16.1%	1,552	13.3%	1,515
Copley Twp	13,641	37.8%	18,801	28.3%	17,504	29.4%	17,647
Coventry Twp	10,900	10.3%	12,019	6.6%	11,619	3.7%	11,305
Cuyahoga Falls	49,374	5.2%	51,944	3.9%	51,305	2.7%	50,718
Fairlawn	7,307	11.4%	8,138	6.5%	7,785	3.6%	7,568
Franklin	14,530	34.8%	19,582	30.1%	18,904	7.2%	15,569
Green	22,817	31.2%	29,943	23.6%	28,196	26.4%	28,837
Hudson	22,439	28.6%	28,856	17.8%	26,430	8.6%	24,369
Lakemore	2,561	145.6%	6,291	113.3%	5,463	3.5%	2,650
Macedonia	9,224	52.5%	14,063	47.6%	13,614	27.1%	11,722
Mogadore	2,951	43.2%	4,227	25.5%	3,705	-6.5%	2,758
Munroe Falls	5,314	9.1%	5,796	8.1%	5,744	4.1%	5,532
Northfield	3,827	9.5%	4,192	7.2%	4,104	-6.3%	3,587
Northfield Ctr. Twp	4,931	11.9%	5,519	4.9%	5,171	13.2%	5,581
Norton	11,512	85.1%	21,304	73.2%	19,940	8.7%	12,509
Peninsula	602	3.5%	623	3.4%	622	4.8%	631
Reminderville	2,347	102.1%	4,743	27.4%	2,991	11.3%	2,613
Richfield Twp	2,138	92.0%	4,105	82.8%	3,908	65.7%	3,542
Richfield Village	3,286	25.6%	4,128	24.0%	4,075	24.7%	4,097
Sagamore Hills Twp	9,340	11.9%	10,452	10.5%	10,319	15.4%	10,783
Silver Lake	3,019	1.2%	3,056	0.9%	3,045	-7.0%	2,807
Springfield Twp	15,168	32.2%	20,051	24.3%	18,850	8.6%	16,472
Stow	32,139	17.6%	37,785	9.9%	35,334	11.4%	35,814
Tallmadge	16,180	38.7%	22,446	28.5%	20,788	14.8%	18,577
Twinsburg	17,006	11.6%	18,973	8.2%	18,402	25.3%	21,308
Twinsburg Twp	2,153	164.1%	5,687	89.2%	4,074	93.9%	4,175
Summit County	**542,899**	**20.8%**	**655,740**	**15.2%**	**625,583**	**3.9%**	**564,012**

6.6 Goals for Future Population Distribution

Goals
The Ohio Department of Development's Office of Strategic Planning has projected Summit County to grow by 3.9 % between 2000 and 2030. According to the U.S. Census in 2000, Summit County had a population of 542,899, the Ohio Department of Development's Office of Strategic Planning has projected the Summit County population will be 564,212 in 2030.

- In contrast to the population patterns that have evolved over the last thirty years, the goal for future population distribution is to direct a greater percentage of population growth to areas that are already served by centralized utilities, near existing transportation facilities, and in close proximity to employment centers.
- To conserve resources, reduce initial building costs, and diminish the long range cost of services, greater consideration should be placed on restoring, rehabilitating and reusing existing structures, and finding sites suitable for infill development in locations near existing services.
- Fewer homes should be constructed on clear and open sites in outlying locations where urban services are not available.

Objectives
The objectives that follow reflect a desire to conserve more natural land for the benefit of future generations, establish more egalitarian neighborhoods and communities, and make more efficient use of infrastructure investments and services. The strategic policies that are listed under each objective suggest practices that should be undertaken to achieve the stated objectives.

A. Encourage a higher density of population in locations with existing or planned urban services.
   - In locations adjacent to central business districts, regional shopping centers, universities, major hospitals, office and research parks, other large-scale employment centers, or nodes of significant activity, encourage a minimum average residential density of 10 or more housing units per acre when good access and public utilities are available.
   - In locations adjacent to community shopping centers, commuter rail stations, medium size employment centers, major public facilities and urban parks, encourage an average residential density of 6-10 housing units per acre when appropriate transportation and services are available.
   - In neighborhoods provided with centralized utilities, encourage a mix of uses, including commercial, public, semi-public, and open space uses, and a minimum average residential density of 3-6 housing units per acre.

B. Encourage a higher density of population in older areas where existing structures are not fully utilized and where opportunities for infill development exist.

- In good locations with scattered vacant land and generally sound structures, develop programs for code enforcement of appropriate structures, selective clearance of inappropriate structures, and encourage new infill development of vacant and recently cleared sites.
- In good locations with significant deteriorating or dilapidated structures, or brownfield sites, provide financial incentives for clearing and cleaning of land for appropriate new uses.
- In all sound underutilized structures with good locations, provide financial incentives to improve buildings to full and productive use via restoration, rehabilitation or reuse.
- In areas with significant but underutilized potential, create local development corporations to engage local stakeholders in developing a future vision, create a workable plan, market the area, and oversee it redevelopment.

C. Encourage a lower density of population in locations without existing urban services and where urban services are not likely to be provided within the next two decades.

- In flood plains, wetlands and riparian corridors no development should take place. In other areas with sensitive natural conditions, open space uses should be encouraged. If this is not possible, residential uses may be permitted at a density of five acres per housing unit.
- In all other areas without central services, the minimum lot area should be based on adequate handling of septic tank disposal, providing safe well water, and preserving rural character.

Smart Growth Principles
The goals and objectives above support the major principles of the Smart Growth Movement, which are listed below.

1. Mix Land Uses
2. Take Advantage of Compact Building Design
3. Create a Range of Housing Opportunities and Choices
4. Create Walkable Neighborhoods
5. Foster Distinctive, Attractive Communities with a Strong Sense of Place
6. Preserve Open Space, Farmland, Natural Beauty, and Critical Environmental Areas
7. Strengthen and Direct Development Towards Existing Communities
8. Provide a Variety of Transportation Choices
9. Make Development Decisions Predictable, Fair, and Cost Effective
10. Encourage Community and Stakeholder Collaboration in Development Decisions

Smart Growth Development Options

The majority of vacant land left in Summit County is zoned for residential uses. There is a real opportunity to use Smart Growth housing and development options to preserve many of the current existing natural resources and "special places" that define Summit County. Also utilizing these options will promote quality development. The following are the recommended Smart Growth Development Options:

1. Open space conservation development
2. Infill development
3. Compact development
4. Mixed-use development
5. Transit oriented development
6. Revitalization of older urbanized areas

6.7 Implementation Strategies

Discussion
Implementation of these goals, objectives and policies should be coordinated with elements described in other Chapters of this General Plan.

NEFCO, AMATS, Summit County, Cuyahoga Valley National Park and other regional agencies must work together to provide information and educate the public about the importance of coordinated planning at the regional level.

At the local level, communities should consider regional issues and consult the General Plan when deciding on local matters. In particular, many local planning and zoning commissions need to understand that they may take more than a passive role in determining their community's future. In addition to reviewing and acting upon requests for zoning changes by others, they are encouraged to become more pro-active in promoting good planning. For example, they may undertake planning studies or initiate zoning changes on their own initiative.

While the quality of local planning activity varies considerably among the county's communities, some communities react principally to proposals by individual owners and developers rather than focusing on the creation of a public vision that is in the interest of the entire community. Cities, villages and townships need to develop comprehensive plans if they have none. Once comprehensive plans are adopted the zoning ordinance or resolution should be amended in a timely fashion to implement the plan. Communities that do have plans need to update them at least once every ten years to reflect changing environmental, social, cultural, and economic conditions and changing community needs and desires. These plans should be used in formulating capital improvements plans and budgets, serve as a guide in making local development decisions, and are sympathetic to local, county, and regional issues.

Implementation Strategies

A. Natural resources should be protected and utilized as part of the County's "green infrastructure"

B. Regulatory tools such as zoning and subdivision regulations should be utilized to guide development

C. Encourage development in communities already served by infrastructure

D. Institute regional tax base sharing

E. Create economic incentives for businesses and home owners to locate in areas with existing infrastructure

F. Modify average cost pricing in utilities to better account for costs of expanding infrastructure in greenfield areas.

G. Direct a greater percentage of population growth to areas that are already served by centralized utilities, near existing transportation facilities, and in close proximity to employment centers

H. Encourage a lower density of population in locations without existing urban services and where urban services are not likely to be provided within the next two decades.

I. Mix land uses

J. Create walkable neighborhoods and communities

K. Preserve open space, farmland, natural resources and critical environmental areas

L. Encourage transit oriented development and coordinate land use and transportation planning

M. Encourage open space conservation development zoning to conserve natural resources and create livable neighborhoods

N. Utilize the State of Ohio farmland preservation program so farmland can be preserved by the purchase of development rights (PDR)

O. Provide incentives to encourage the extension of central and water utilities according to Smart Growth principles and discourage haphazard and unplanned growth

P. Encourage infill development and the revitalization of existing cities and villages

Q. Encourage low-impact development techniques to protect Summit County's natural resources where possible and practical