

**VOLUME TWO
BACKGROUND STUDIES**

**Section 2
Trends Analysis**

TABLE OF CONTENTS

SECTION 2 TRENDS ANALYSIS

TRENDS ANALYSIS	27
POPULATION	29
<i>Minneapolis-St. Paul Metropolitan Statistical Area</i>	29
<i>Population and Population Change</i>	32
<i>Population Distribution</i>	36
<i>Components of Population Change</i>	37
<i>Population Characteristics</i>	39
Age-Sex Characteristics	39
Minority Characteristics	40
<i>Population Projections</i>	41
Limitations of Population Projections	41
Assumptions Behind Population Projections	41
Population Projections	43
Comparisons to DOA Projections	45
POPULATION CONCLUSIONS	46
ECONOMY	47
<i>Income</i>	47
<i>Employment</i>	52
<i>Employment of St. Croix County Residents</i>	52
<i>Employment within St. Croix County</i>	59
Employment by Occupation of St. Croix County Residents	61
<i>Property Values</i>	63
<i>Taxation</i>	66

General Taxation	66
Local Property Taxes	68
Trade Areas	74
Employment Projections	75
ECONOMY CONCLUSIONS	76
HOUSING	77
Housing Units	77
Housing Types	82
Housing Value	84
Housing Affordability	88
Housing Occupancy	90
Housing Age	91
Housing Projections	91
HOUSING CONCLUSIONS	92
LAND USE	93
Land Use and Land Use Change	93
Land Use Distribution by Towns	96
LAND USE CONCLUSIONS	101
AGRICULTURE	103
Farms and Farm Size	103
Farm Type	104
Farm Production	105

<i>Farm Income</i> _____	106
<i>Farm Operator Characteristics</i> _____	107
<i>Agribusinesses</i> _____	107
AGRICULTURE CONCLUSIONS _____	108
TRANSPORTATION _____	109
<i>Air</i> _____	109
<i>Rail</i> _____	109
<i>Public Transit</i> _____	110
<i>Bikeway System</i> _____	110
<i>Highway System</i> _____	113
Traffic Volumes _____	113
Commuting Patterns _____	114
Highway Investments _____	117
Traffic Forecasts _____	117
TRANSPORTATION CONCLUSIONS _____	119
RECREATION _____	121
RECREATION CONCLUSIONS _____	122
AIR QUALITY _____	123
WATER QUALITY _____	125
<i>Groundwater</i> _____	125
<i>Surface Water</i> _____	125
<i>Conditions by Watershed</i> _____	126
Kinnickinnic River _____	126
Lower Willow River _____	126
Upper Willow River _____	126

Lower Apple River _____	127
Eau Galle River _____	127
Wilson Creek _____	127
South Fork Hay River _____	127
Lakes _____	128
Issues Affecting Water Quality _____	129
PUBLIC FACILITIES AND SERVICES _____	131
Public Water Service _____	131
Public Waste Water Service _____	133
Roads and Streets _____	134
Schools _____	136
Public Emergency Services _____	138
Police _____	138
Fire _____	139
Ambulance _____	140
SOLID WASTE _____	139
Sources and Composition of Waste _____	139
Residential Wastes _____	139
Commercial Wastes _____	140
Institutional Wastes _____	140
Industrial Wastes _____	140
Waste Characterization _____	141
Waste Facilities _____	142
Recycling _____	143
Projected Solid Waste Generation _____	144
SOLID WASTE CONCLUSIONS _____	144
CONCLUSION _____	145

TRENDS ANALYSIS

One of the goals of the St. Croix County Development Management Plan is to create a comprehensive set of informational resources to assist the county and local units of government in managing growth and development. The purpose of the Trends Analysis section is to provide a foundation of historical, current and projected socio-economic data and information to assist in accomplishing this goal.

The Trends Analysis reviews the county's past and present socio-economic condition in order to determine the amount, type and direction of the development that has occurred, and the impact that the

development has on the environment, land use, services, infrastructure and economy. The analysis then uses that information to project possible future growth and development. The trends information and projections are used to identify and address growth management and development issues and needs that currently exist and those that may arise in the future.

The Trends Analysis reviews and evaluates 11 socio-economic areas, including: *Population, Economy, Land Use, Housing, Agriculture, Transportation, Recreation, Water Quality, Public Services and Facilities, Solid Waste, and Air Quality.*

TRENDS ANALYSIS



POPULATION

POPULATION

The demographics of St. Croix County are key to establishing a sound basis for growth management decisions. Analyzing population size, growth, density, characteristics and distribution trends reveals important facts about the most important element of growth in St.

Croix County -- its residents. It is also important to display the population trends of the Minneapolis-St. Paul Metropolitan Statistical Area (MSA) due to the major influence the MSA has on St. Croix County.

MINNEAPOLIS-ST. PAUL METROPOLITAN STATISTICAL AREA

Historical Population - 1960 to 1990 Minneapolis-St. Paul MSA

Counties	1960	1970	1980	1990
Minneapolis-St. Paul MSA	1,525,297	1,965,159	2,137,133	2,538,564
<i>Counties:</i>				
Anoka	85,916	154,556	195,998	243,641
Carver	21,358	28,310	37,046	47,915
Chisago	*	17,492	25,717	30,251
Dakota	78,303	139,808	194,279	275,227
Isanti	*	*	23,600	25,921
Scott	21,909	32,423	43,784	57,921
Sherburne	*	*	*	41,945
Washington	52,432	82,948	113,571	145,896
Wright	*	38,933	58,681	68,710
Hennepin	842,854	960,080	941,411	1,032,431
Ramsey	422,525	476,255	459,784	485,765
Pierce	*	*	*	32,765
St. Croix	*	34,354	43,262	50,251

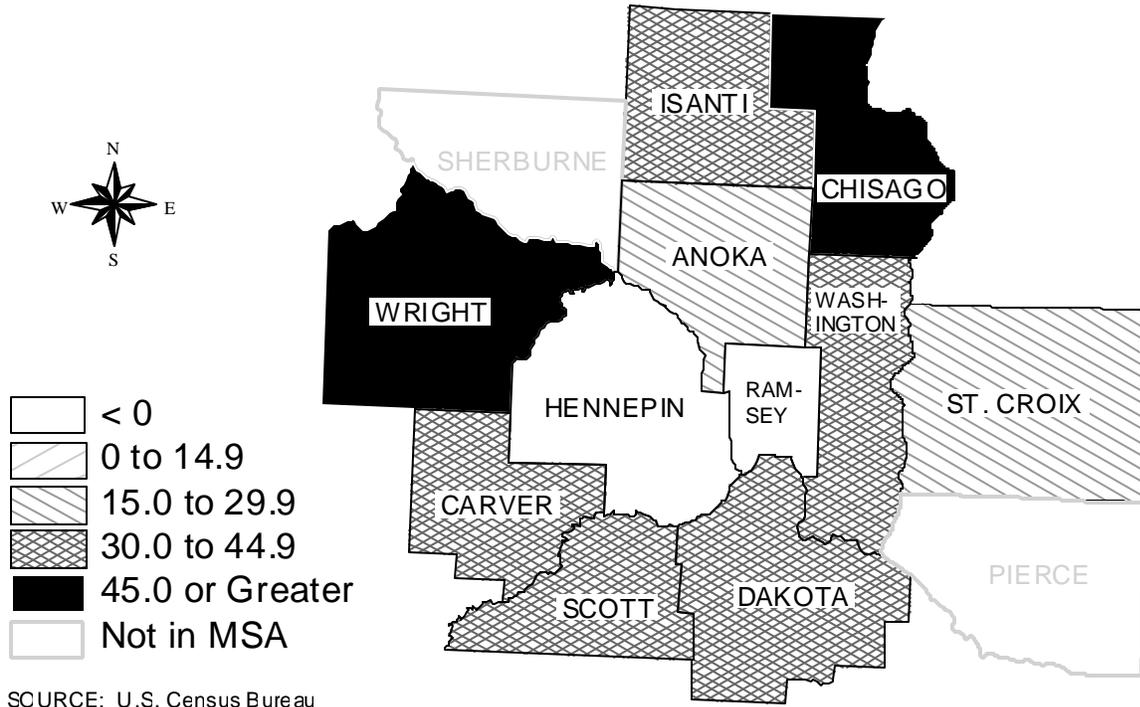
*Not included in the MSA at the end of the decade.

Source: Population Abstract of the United States, Androit Associates, 1980

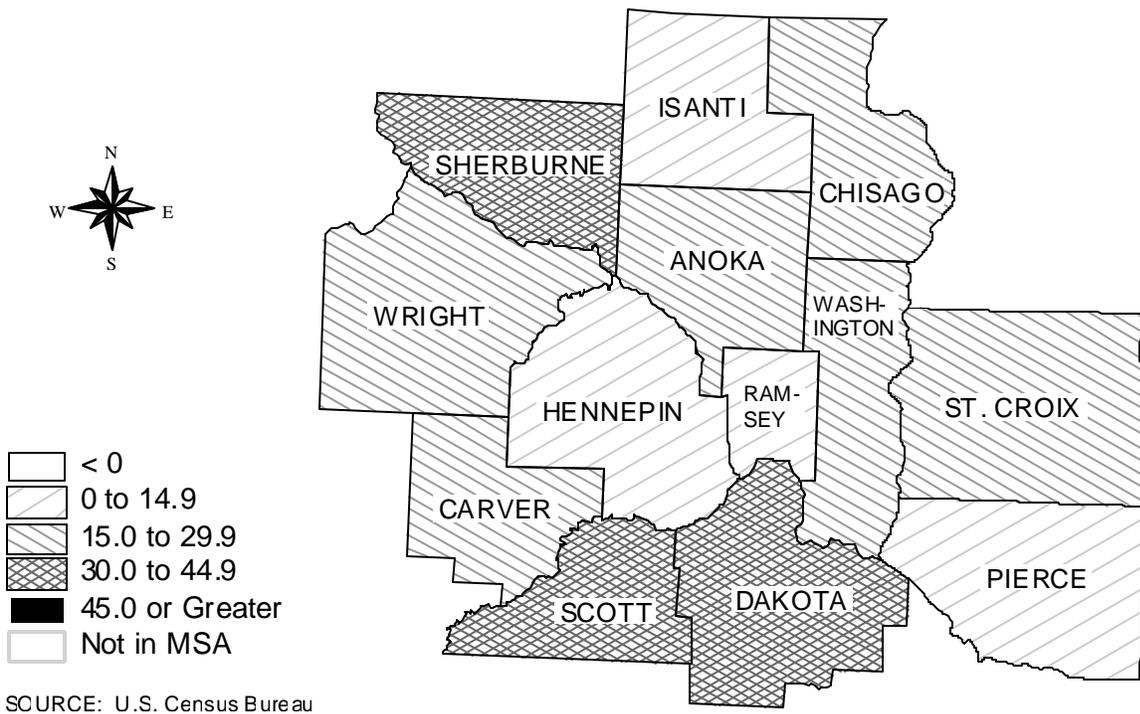
- ✚ St. Croix County is part of the Minneapolis-St. Paul MSA, which has 2,538,564 people.
- ✚ Population ranges in the MSA from 25,921 in Isanti County to 1,032,431 in Hennepin County.
- ✚ The MSA has expanded from seven counties in 1960 to 13 in 1990.

- ✚ St. Croix County ranks eighth in population among the 13 counties in the MSA.
- ✚ The original seven counties in the MSA account for 90 percent of the population in the MSA in 1990.

**Percent Population Change - 1970 to 1980
Minneapolis-St. Paul MSA**



**Percent Population Change - 1980 to 1990
Minneapolis-St. Paul MSA**



**Percent Population Change - 1960 to 1990
Minneapolis-St. Paul MSA**

	1960-1970	1970-1980	1980-1990
Minneapolis-St. Paul MSA	28.8	8.8	18.8
Counties:			
Anoka	79.9	26.8	24.3
Carver	32.5	30.9	29.3
Chisago	33.7	47.0	18.7
Dakota	78.5	39.0	41.2
Isanti	*	42.5	9.8
Scott	48.0	35.0	32.3
Sherburne	*	*	40.2
Washington	58.2	36.9	28.5
Wright	30.1	50.7	17.1
Hennepin	13.9	-1.9	9.7
Ramsey	12.7	-3.5	5.7
Pierce	*	*	5.2
St. Croix	17.8	25.9	16.2

*Not included in the MSA at the end of the decade.

Source: Population Abstract of the United States, Androit Associates, 1980

- ✚ In the decade of the 1960s, the Minneapolis-St. Paul MSA increased in population by almost 29 percent.
- ✚ Both Anoka and Dakota Counties had population increases of almost 80 percent, during the 1960s.
- ✚ In the 1970s, population growth subsided to under nine percent in

the MSA -- even with the addition of three counties (Chisago, Wright and St. Croix). Hennepin and Ramsey Counties had population losses during the decade.

- ✚ In the 1980s, population, again, grew significantly with a 19 percent increase in the MSA.

**Geographic Change - 1960 to 1990
Minneapolis-St. Paul MSA**

	1960	1970	1980	1990
Square Miles	2,832	4,636	5,076	6,090
Percent Change	NA	63.7	9.5	20.0
Persons/Square Mile	539	424	421	417

Source: 1993 County and City Extra-Annual Metro, City and County Data Book, George Hall & Courtenay N. Slater

- ✚ Since 1960, the Minneapolis-St. Paul MSA has more than doubled in land area from 2,832 to 6,090 square miles.
- ✚ The population density (people/square mile) of the MSA has

decreased from 539 to 417, since 1960.

- ✚ The population density of the core MSA counties was 807, while the population density of the six counties added to the MSA in 1990 was 78.

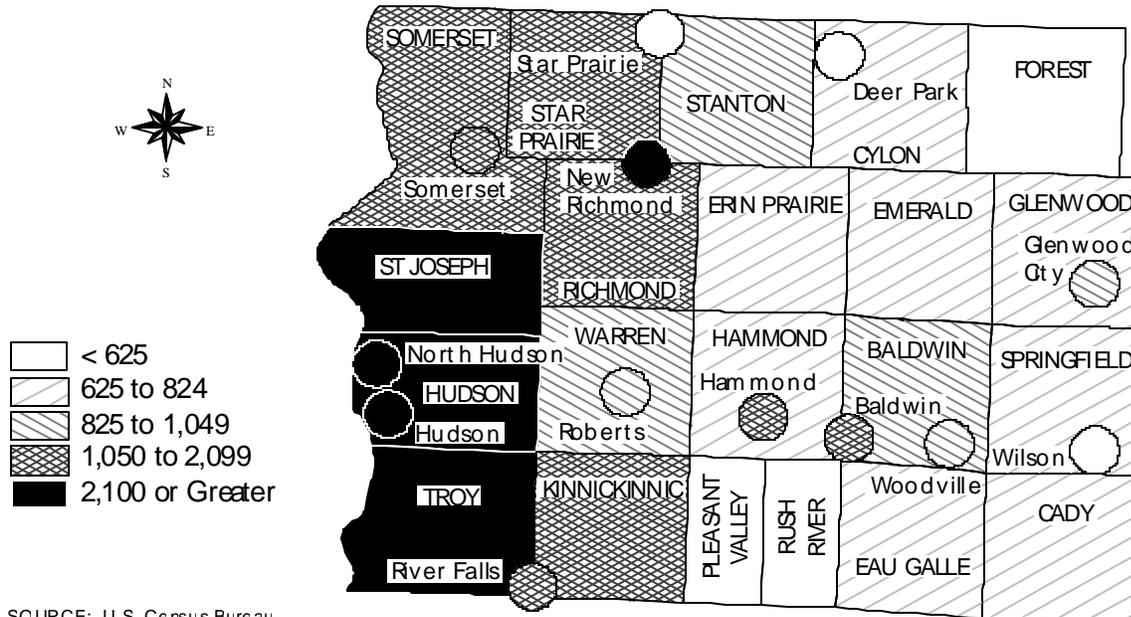
POPULATION AND POPULATION CHANGE

Historical Population - 1940 to 1990 St. Croix County

Year	Population	Numerical Change	Percent Change
1940	24,842	NA	NA
1950	25,905	1,063	4.3
1960	29,164	3,259	12.6
1970	34,354	5,190	17.8
1980	43,262	8,908	25.9
1990	50,251	6,989	16.2
		25,409	15.4 (average)

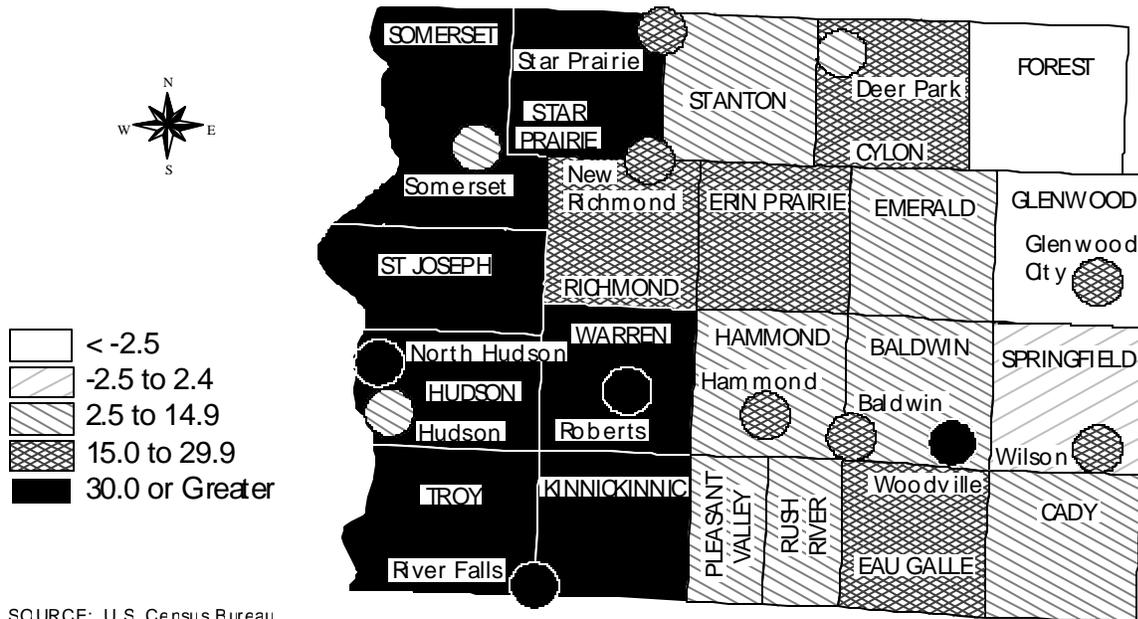
Source: U.S. Census Bureau, 1940-1990

St. Croix County Population - 1990



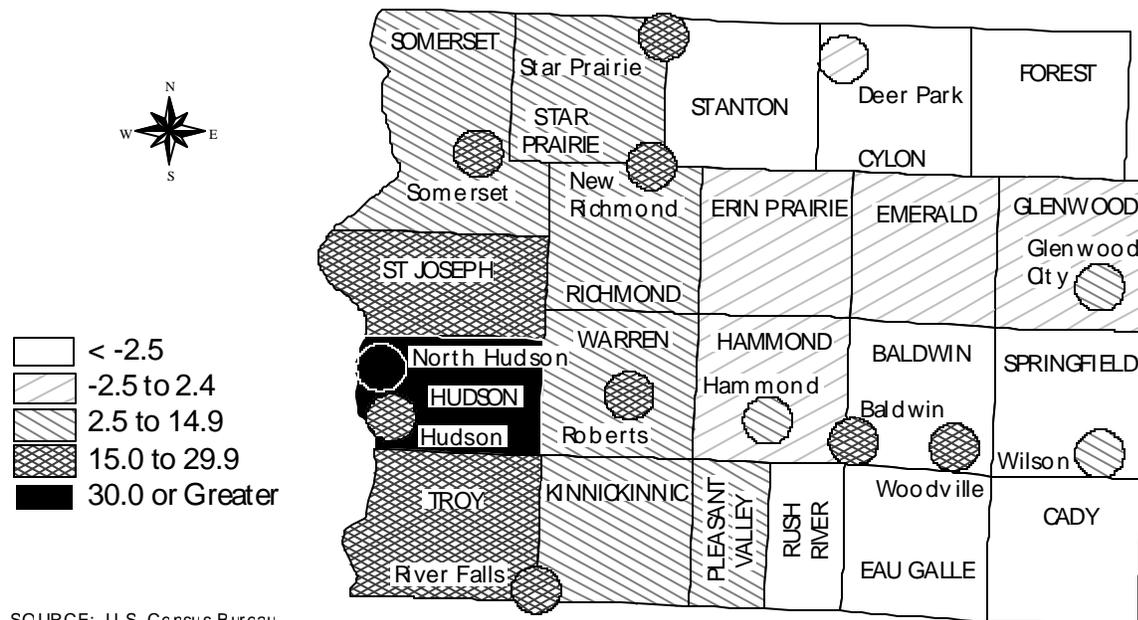
SOURCE: U.S. Census Bureau

**Percent Population Change - 1970 to 1980
St. Croix County**



SOURCE: U.S. Census Bureau

**Percent Population Change - 1980 to 1990
St. Croix County**

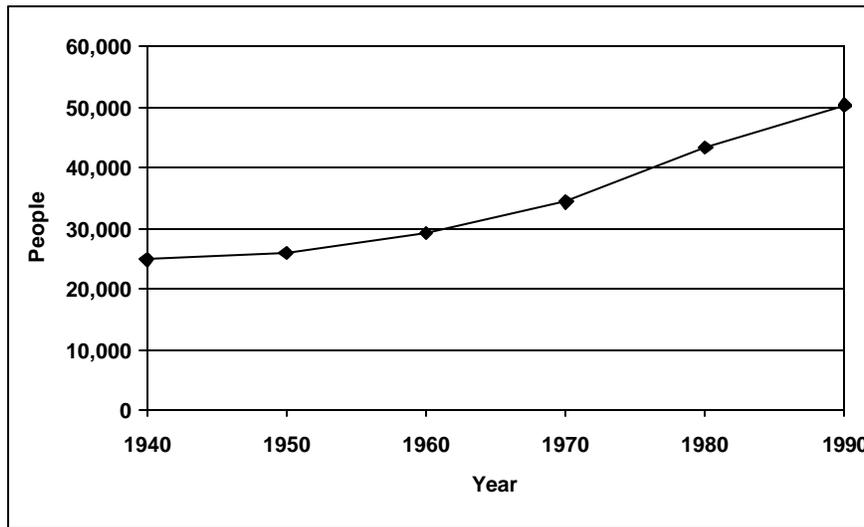


SOURCE: U.S. Census Bureau

- St. Croix County's population has doubled in the last 50 years.
- The majority of the growth occurred between 1970 and 1990.

- The decade of the 1970s had the greatest population increase -- almost 26 percent.
- The 1995 population estimate for the county is 56,002.

**Historical Population - 1940 to 1990
St. Croix County**



**Historical Population Trends - 1960 to 1990
St. Croix and Surrounding Counties**

County	1960-70	1970-80	1980-90
St. Croix	17.8	25.9	16.2
Polk	6.8	21.3	7.5
Pierce	18.4	16.9	5.2
Dunn	11.5	18.4	4.7

Source: U.S. Census, 1960-1990

- St. Croix County's population increased at a faster rate than the surrounding counties in Wisconsin.

- Between 1980-1990, St. Croix County's population increase was two to three times greater than the surrounding counties.

Population by Minor Civil Division - 1960-1990
St. Croix County

	1960	1970	1980	1990	1960-70	1970-80	1980-90
Towns:							
Baldwin	833	890	943	911	6.8	6.0	-3.4
Cady	762	670	724	643	-12.1	8.1	-11.2
Cylon	614	620	717	639	.9	15.7	-10.9
Eau Galle	717	720	897	756	.4	24.6	-15.7
Emerald	647	588	638	630	-9.1	8.5	-1.3
Erin Prairie	499	516	661	647	3.4	28.1	-2.1
Forest	674	649	631	614	-3.7	-2.8	-2.7
Glenwood	835	764	715	700	-8.5	-6.4	-2.1
Hammond	773	764	822	819	-1.2	7.6	-.4
Hudson	649	925	2,012	3,692	42.5	117.6	83.5
Kinnickinnic	667	755	1,051	1,139	13.2	39.2	8.4
Pleasant Valley	310	330	360	384	6.5	9.1	6.7
Richmond	701	1,091	1,338	1,400	55.6	22.6	4.6
Rush River	403	439	476	419	8.9	8.4	-12.0
St. Joseph	1,068	1,357	2,180	2,657	27.1	60.7	21.9
Somerset	976	1,185	1,833	1,975	21.4	54.7	7.8
Springfield	814	811	816	772	-.4	.6	-5.4
Stanton	640	975	1,083	1,042	52.3	11.1	-3.8
Star Prairie	1,015	1,390	1,900	2,098	37.0	36.7	10.4
Troy	845	1,517	2,326	2,850	79.5	53.3	22.5
Warren	614	622	897	1,008	1.3	44.2	12.4
Subtotal:	15,056	17,578	23,020	25,795	16.8	31.0	12.1
City/Village:							
Baldwin	1,184	1,399	1,620	2,022	18.2	15.8	24.8
Deer Park	221	217	232	237	-1.8	6.9	2.2
Glenwood City	835	822	950	1,026	-1.6	15.6	8.0
Hammond	645	768	991	1,097	19.1	29.0	10.7
Hudson	4,325	5,049	5,434	6,378	16.7	7.6	17.4
New Richmond	3,316	3,707	4,306	5,106	11.8	16.2	18.6
North Hudson	1,019	1,547	2,218	3,101	51.8	43.4	39.8
River Falls	625	991	1,498	1,769	58.6	51.1	15.3
Roberts	308	484	833	1,043	57.1	72.1	25.2
Somerset	729	778	860	1,065	6.7	10.5	23.8
Star Prairie	331	362	420	507	9.4	16.0	20.7
Wilson	140	130	155	163	-7.1	19.2	5.2
Woodville	430	522	725	942	21.4	38.9	30.0
Subtotal:	14,108	16,776	20,242	24,456	18.9	20.7	20.8
COUNTY TOTALS:	29,164	34,354	43,262	50,251	17.8	25.9	16.2

Source: U.S. Census, 1960-1990

- ✚ The population growth in the county, from 1960-1990, was almost evenly distributed between incorporated and unincorporated areas.
- ✚ The growth in the western towns of the county is apparent as early as the 1960s.

- ✚ The Towns of Hudson, St. Joseph, Troy and Somerset had very large population increases in the 1970s.
- ✚ The unincorporated population of the county grew 31 percent in the 1970s.
- ✚ In the 1970s, the unincorporated areas of the county accounted for

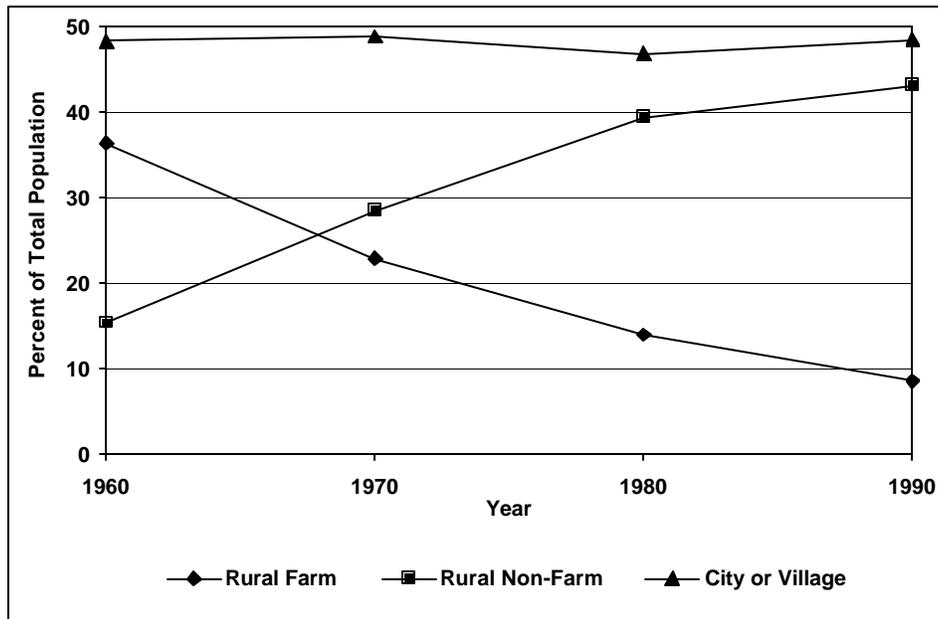
60 percent of the county's population growth.

of the county accounting for 60 percent of the growth.

- ✧ In the 1980s, the reverse occurred, with the incorporated communities

POPULATION DISTRIBUTION

**Urban and Rural Residents - 1960 to 1990
St. Croix County**



- ✧ In 1960, over 49 percent of the residents in St. Croix County lived in its cities and villages. Farm population accounted for about 36 percent of the county's population, with the rural non-farm population at about 15 percent.

decreased to about 23 percent of the total population.

- ✧ In 1970, the rural population again exceeded the urban population of the county. A major contributor was the rural non-farm population, which grew to about 28 percent of the total population, exceeding the rural farm population, which

- ✧ The decade of the 1970s brought about a major increase in the rural non-farm population and, at the same time, a continued decrease in the rural farm population.

- ✧ **In 1980, the incorporated population of the county accounted for 47 percent of the total population. Rural non-farm population accounted for about 39 percent and the rural farm residents less than 14 percent.**

✚ This trend continued in the 1980s with the 1990 rural non-farm population accounting for about 43 percent of the county's

population, and the rural farm population about nine percent.

✚ The county's incorporated population accounted for about 49 percent of the population in 1990.

COMPONENTS OF POPULATION CHANGE

**Components of Population Change - 1950 to 1990
St. Croix County**

	1950-1960	1960-1970	1970-1980	1980-1990
Births	7,016	6,872	6,544	7,859
Deaths	2,606	2,880	3,136	3,542
Total Natural Increase	4,410	3,992	3,408	4,317
Natural Increase Rate*	15.1%	11.6%	7.9%	8.5%
Net Migration	-1,151	1,198	5,500	2,671
Net Migration Rate*	-4.0%	3.5%	12.7%	5.3%
Total Population Change	3,259	5,190	8,908	6,989
Percent Population Change	12.6%	17.8%	25.9%	16.2%

*Calculated as a percent of the County's population.

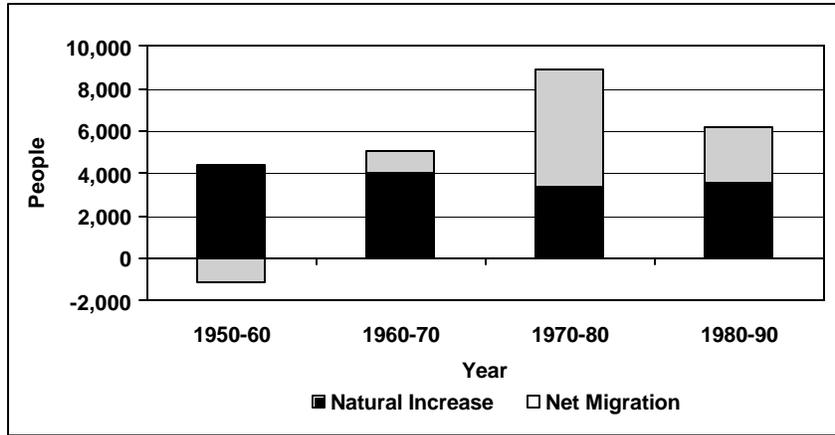
Source: U.S. Bureau of the Census, 1950-1980; and Wisconsin Department of Health and Social Services

✚ The decade of the 1950s was the last decade in which the county experienced a population out-migration. Yet, because of the birth of the baby boomers, the county experienced an overall population increase that decade.

✚ Since 1950, natural population increase (births - deaths) has accounted for the majority of population growth in the county in all but one decade -- the 1970s.

✚ In the 1970s, the in-migration rate exceeded the natural population rate increase.

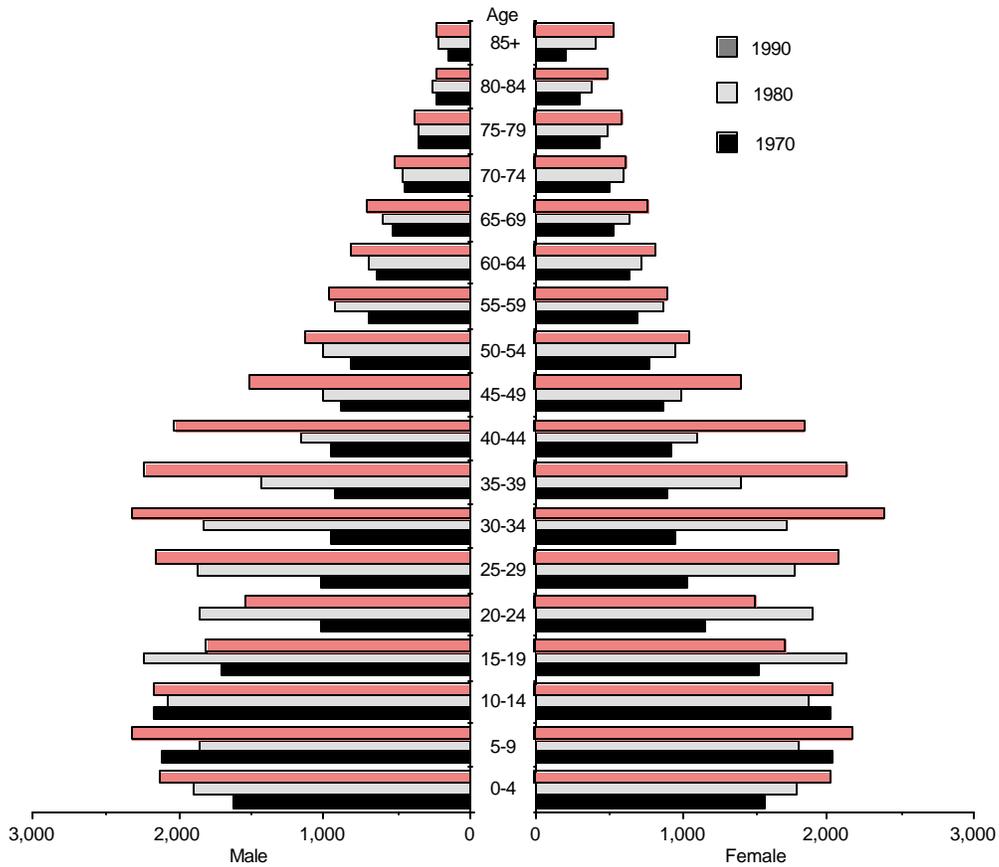
**Components of Population Change - 1950 to 1990
St. Croix County**



POPULATION CHARACTERISTICS

AGE-SEX CHARACTERISTICS

Age-Sex Structure - 1970, 1980 and 1990
St. Croix County



✧ From 1980 to 1990, the population of St. Croix County grew the greatest in the 25-49 age groups for both the males and females.

✧ The large increases in the 25-49 age groups represents the aging of the baby boomers, as well as in-migration of working age individuals from the Minneapolis-St. Paul metropolitan area.

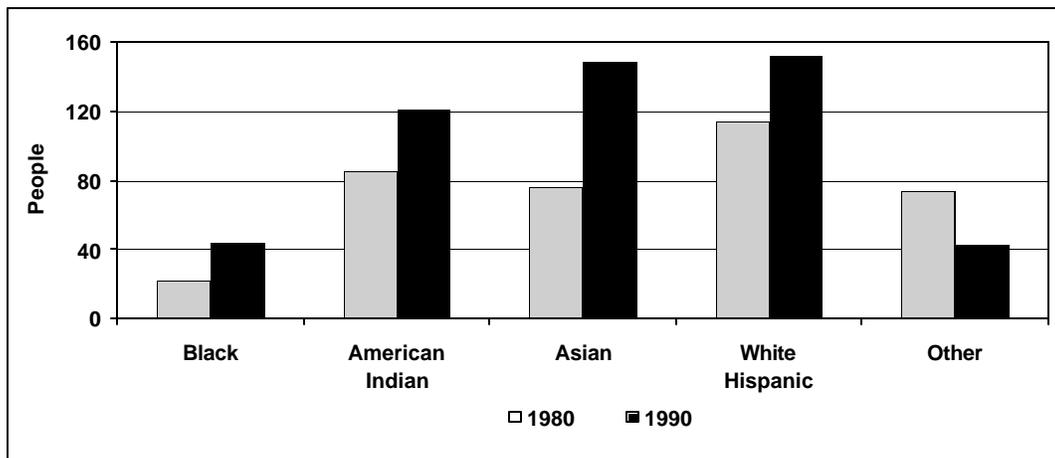
✧ Considerable growth occurred in the 0-9 age groups, as well. This

coincides with the increases in people aged 25-49 over this period, reflecting increased births and in-migration of working age people.

✧ The age groups over 60 increased between 1970-1990. This trend is reflective of state and national trends. As expected, females comprise a greater portion of the population over 70 years of age.

MINORITY CHARACTERISTICS

**Minority Population - 1980 and 1990
St. Croix County**



Source: U.S. Census Bureau

✧ White Hispanics made up the largest percentage of minorities in St. Croix County in 1980 and 1990. In 1990, the Asian population was the second largest minority population exceeding that of the Native Americans.

✧ The minority population in St. Croix County comprised one percent of the total population in 1990. This is considerably lower than the region, state and national averages.

POPULATION PROJECTIONS

Population projections have long been used in planning to assess development prospects created by population growth. Small area population forecasts can be used to evaluate potential residential

development and economic conditions, and the level of demand for facilities and services. Businesses, schools and government frequently use these forecasts to determine future needs, and to design services or facilities.

LIMITATIONS OF POPULATION PROJECTIONS

- ✧ Population projections are based on historical trends of population growth, which is extended into the future, and the assumption that those trends, and the factors behind them, will continue to some point in time.
- ✧ The closer the projection year is to the base year, the more likely the population for that projection will be close to the true population.
- ✧ Forecasts of large area populations, such as a state or county, are more

reliable. The smaller the area for which a projection is produced, like an individual community, the greater the possibility for error.

- ✧ Population projections are, at best, guides and must be used with consideration of their limitations. Intimate knowledge of local conditions can help build the assumptions into population projections to make them more valid.

ASSUMPTIONS BEHIND POPULATION PROJECTIONS

Generally, population growth trends do not remain constant from decade to decade. The factors that influence population change are dynamic and are often subject to the effect of larger trends from outside an area's control. The forecasting of population change requires that certain assumptions be

made regarding the conditions prevailing during the forecast period. Therefore, it is important to identify the assumptions inherent in the projection. The following factors and assumptions were incorporated into the population projections developed for the St. Croix County Development Management Plan.

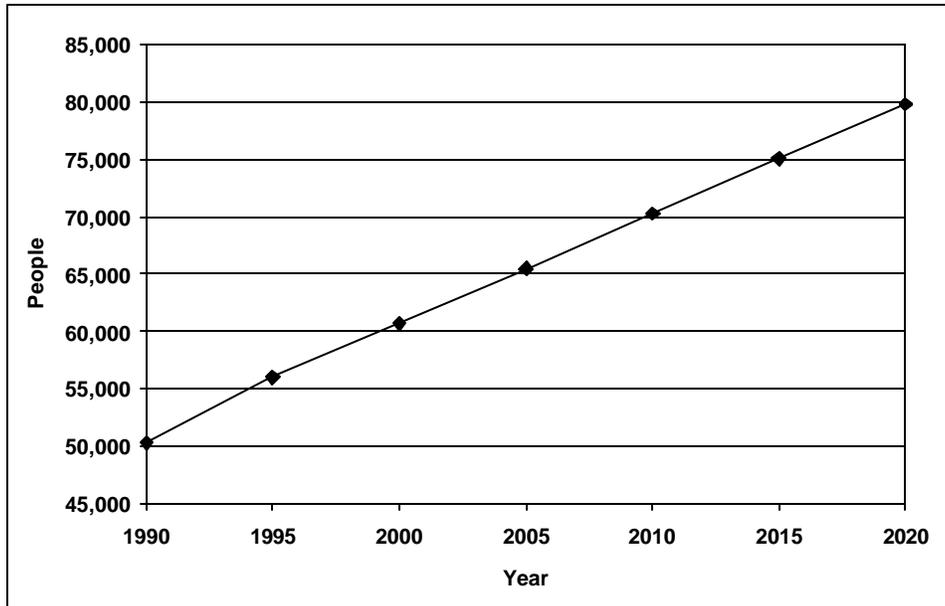
- ✧ Natural increases (births-deaths) will remain an important part of the population growth in St. Croix County.
- ✧ In-migration will continue to be a significant influence on population growth in St. Croix County, and will be driven by interrelated factors.
- ✧ One major factor of this in-migration is the proximity and easy access to the Minneapolis-St. Paul metropolitan area, with its employment opportunities and urban amenities.
- ✧ In St. Croix County, there is the aesthetic appeal of the natural environment and pastoral countryside, and the small town or rural character of the communities.
- ✧ The regional economy impacting St. Croix County is driven by the Minneapolis-St. Paul metro area, which is a commuter destination for 39 percent of the county's workers.
- ✧ St. Croix County's manufacturing employment has increased dramatically in the 1990's, and the growing population has spurred more commercial services and retail trade employment.
- ✧ St. Croix County is on the metropolitan fringe with low population density, low crime, rural residences and small communities. However, nearness to the metropolitan core gives county residents access to cultural, recreational and entertainment activities and events.
- ✧ The improvement of bridges and highways to meet existing and anticipated traffic demand will create more demand as development responds to the opportunities that improved access provides.
- ✧ Transportation improvements that will impact in-migration include the Stillwater Bridge, the I-94 Hudson Bridge, Highway 35 from I-94 to River Falls, and Highways 35 and 64 from Houlton to New Richmond.
- ✧ Future growth and development is expected to locate easterly along the Interstate 94 corridor.
- ✧ The planned expansion of public utilities capacity can provide opportunities for continued residential, commercial and industrial development.
- ✧ Although property taxes may be slightly higher in Wisconsin than in Minnesota, personal income taxes, sales taxes and taxes related to doing business (corporate income, commercial and manufacturing property and unemployment, and worker's compensation insurance) are definitely lower in Wisconsin.
- ✧ Stricter development controls in Minnesota communities are often perceived as onerous and unnecessary, even though they may address real impacts.
- ✧ The positive influences on many individual, group or organizational decisions to migrate to St. Croix County overwhelm the perceived, potential or real negative influences of high commuting, land, development and taxation costs.

POPULATION PROJECTIONS

The population projections prepared for the plan were based on the above assumptions and were derived from 1970, 1980 and 1990 Census population trends and West Central Wisconsin Regional Planning

Commission 1995 population estimates. A detailed description of the methodology for producing these projections is provided in Volume Three, Appendices.

**Population Projections - 1990 to 2020
St. Croix County**



Development Management Plan Population Projections - 1990 to 2020
St. Croix County

Community	1990 Census	1995 Estimate	2000 Projection	2005 Projection	2010 Projection	2015 Projection	2020 Projection
Baldwin Town	911	943	957	971	986	1,000	1,014
Cady Town	643	670	673	676	679	682	685
Cylon Town	639	662	666	671	675	679	684
Eau Galle Town	756	840	870	899	929	959	988
Emerald Town	630	670	692	715	737	759	782
Erin Prairie Town	647	697	730	762	795	828	861
Forest Town	614	623	623	624	624	625	625
Glenwood Town	700	738	751	765	778	792	805
Hammond Town	819	922	978	1,034	1,090	1,146	1,202
Hudson Town	3,692	4,487	5,157	5,945	6,731	7,516	8,299
Kinnickinnic Town	1,139	1,343	1,483	1,622	1,762	1,902	2,041
Pleasant Valley Town	384	408	427	445	464	482	501
Richmond Town	1,400	1,546	1,648	1,750	1,852	1,954	2,057
Rush River Town	419	452	461	470	480	489	498
St. Joseph Town	2,657	3,031	3,362	3,693	4,023	4,354	4,685
Somerset Town	1,968	2,275	2,497	2,719	2,940	3,162	3,384
Springfield Town	772	804	813	822	831	839	848
Stanton Town	1,042	1,090	1,114	1,139	1,163	1,188	1,212
Star Prairie Town	2,098	2,374	2,584	2,795	3,005	3,215	3,425
Troy Town	2,850	3,209	3,540	3,870	4,201	4,531	4,862
Warren Town	1,008	1,146	1,255	1,363	1,472	1,580	1,689
Baldwin Village	2,022	2,165	2,324	2,484	2,643	2,802	2,961
Deer Park Village	237	271	290	310	329	348	367
Hammond Village	1,037	1,189	1,270	1,350	1,431	1,512	1,593
North Hudson Village	3,101	3,423	3,789	4,156	4,522	4,888	5,254
Roberts Village	1,043	1,062	1,132	1,203	1,273	1,343	1,414
Somerset Village	1,072	1,360	1,553	1,745	1,938	2,131	2,323
Star Prairie Village	507	560	606	653	699	746	792
Wilson Village	163	169	175	181	187	194	200
Woodville Village	942	1,109	1,231	1,373	1,514	1,656	1,794
City of Glenwood City	1,026	1,071	1,116	1,161	1,206	1,251	1,296
City of Hudson	6,378	7,326	8,004	8,682	9,360	10,038	10,716
City of New Richmond	5,106	5,549	5,958	6,367	6,776	7,185	7,594
City of River Falls*	1,498	1,818	1,925	2,032	2,139	2,246	2,353
*portion in St. Croix County							
St. Croix County	50,251	56,002	60,655	65,446	70,235	75,022	79,805

Source: West Central Wisconsin Regional Planning Commission, 1995

COMPARISONS TO DOA PROJECTIONS

The population projections prepared for this plan differ significantly from the Department of Administration's (DOA) Demographic Services Center 1993 projections. The reason for this difference is the result of the locally

conceived assumptions about the future influential factors impacting population change in St. Croix County. DOA did not consider this information when they produced their projections.

**Department of Administration Population Projections - 1990 to 2015
St. Croix County**

1990 Census	1995	2000	2005	2010	2015
50,251	54,282	56,751	58,384	59,689	60,756

Source: Department of Administration, Demographic Services, 1993

- ✦ DOA projects a 1990-2000 growth rate for St. Croix County of 13 percent. In light of the 1995 estimate, the plan establishes the projected 1990-2000 rate of population change for St. Croix County at 20.7 percent.
- ✦ The DOA projections further diminish the potential for continued significant population growth in periods beyond the year 2000 with a projected growth rate for 2000-2010 is 5.2 percent. The county has not experienced a decennial

- rate of growth this low since the 1940's (4.3 percent).
- ✦ From 2005 to 2015, DOA expects the county to only grow by about 4 percent, while this plan anticipates a 14.6 percent population growth for the same period.
- ✦ For the period from 1995-2015, the DOA projected growth rate is 11.9 percent, as opposed to the plan projected 1995-2015 population growth rate of about 34 percent.

POPULATION CONCLUSIONS

The population projections produced for the plan are considered more realistic than the DOA projections only because they employed improved assumptions

generated by local knowledge of local conditions, the recent past, and plans for the future.

- ✦ The communities in western St. Croix County are expected to experience significant population growth into the next century.
- ✦ Other communities near or along major highway and bridge improvements will also have significant population gains.

- ✦ During the period from 1995 to 2020, the planning horizon of this plan, the county is expected to grow by over 40 percent of its existing population, or by 23,803 people.

TRENDS ANALYSIS



ECONOMY

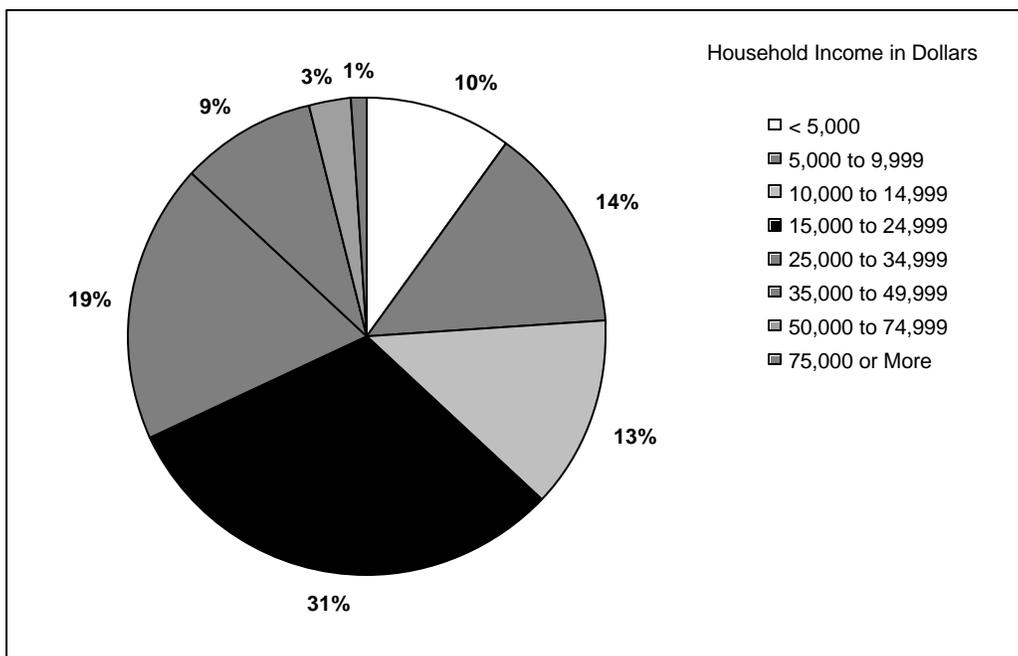
ECONOMY

The economy of a county is an important determining factor driving land use and development. The incomes of St. Croix County residents are directly related to employment and other economic opportunities, and

employment is dependent on the local, regional and national economies. Property values and taxation rates can reveal economic trends and relative differences between communities.

INCOME

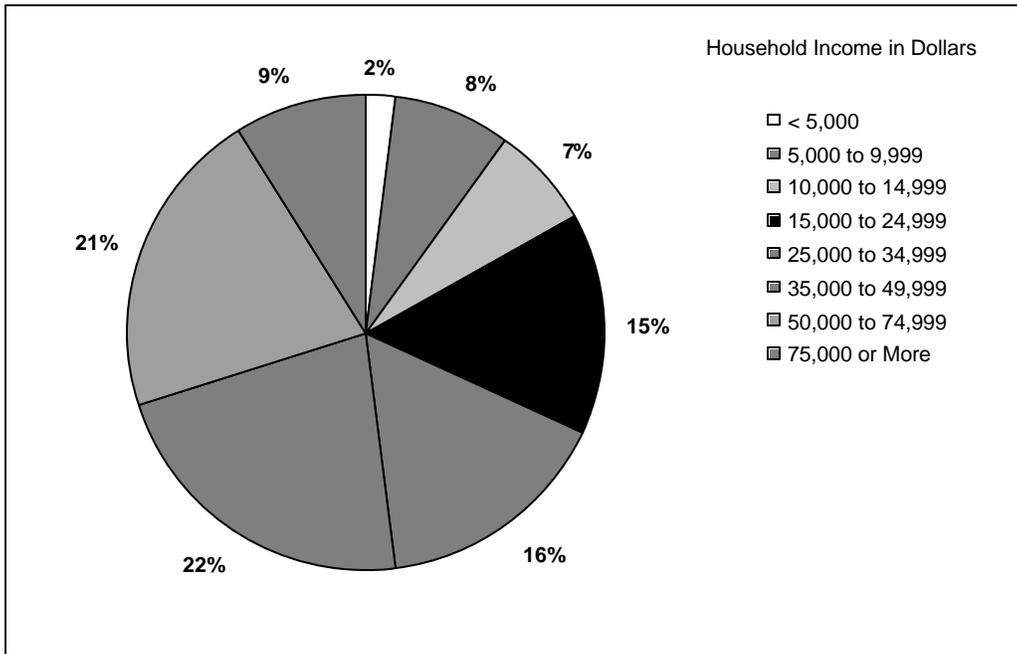
**Households by Household Income (as a Percent of Total Income) - 1980
St. Croix County**



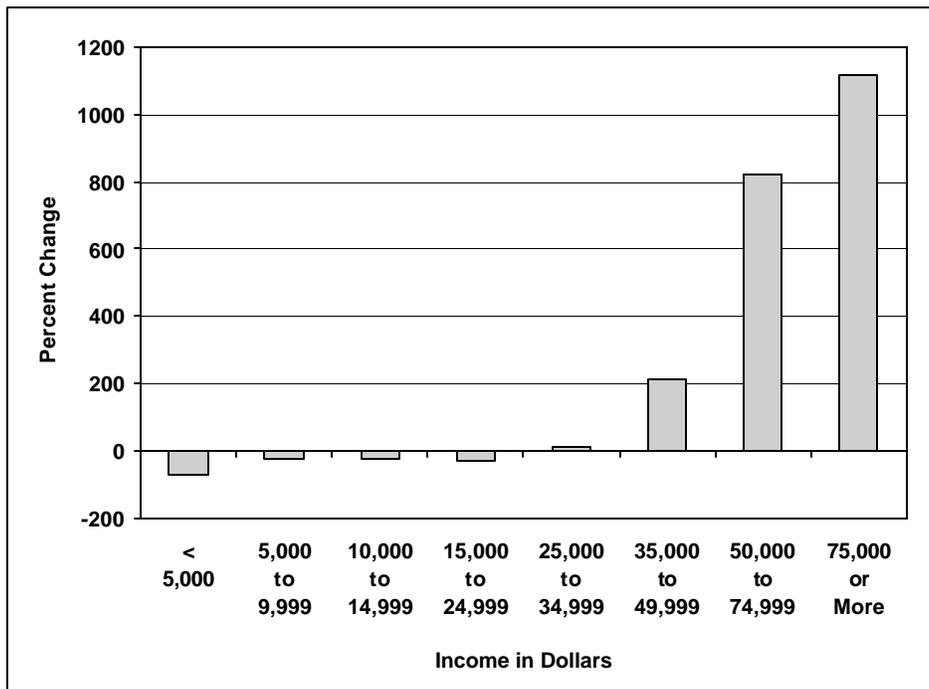
⌘ In 1980, half of St. Croix County households earned between \$15,000 and \$34,999 a year, 37 percent of households earned less than \$15,000, and 13 percent earned over \$35,000.

⌘ In 1990, over half of county households earned over \$35,000. The percentage of households which earned between \$15,000 and \$34,999 a year fell to 31 percent and those earning less than \$15,000 fell to 17 percent.

**Households by Household Income (as a Percent of Total Income) - 1990
St. Croix County**



**Percent Change in Household Incomes - 1980 to 1990
St. Croix County**

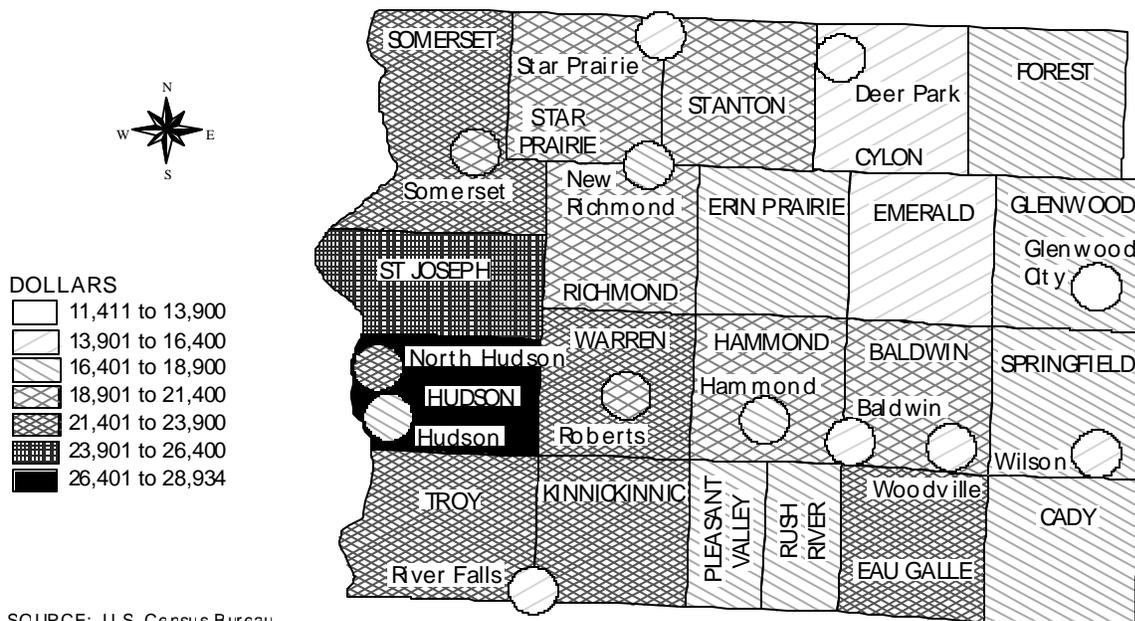


- ⌘ Between 1980 and 1990, the number households that made \$35,000 a year or more increased by 8,009.
- ⌘ Some of the increase in incomes between 1980 and 1990 can be attributed to cost of living wage increases that are an attempt to keep pace with inflation. However, there are other indicators of the increasing wealth of St. Croix County residents.
- ⌘ The median household income for St. Croix County was \$19,568 in 1980 and increased to \$ 36,716

in 1990, an increase of 87.6 percent.

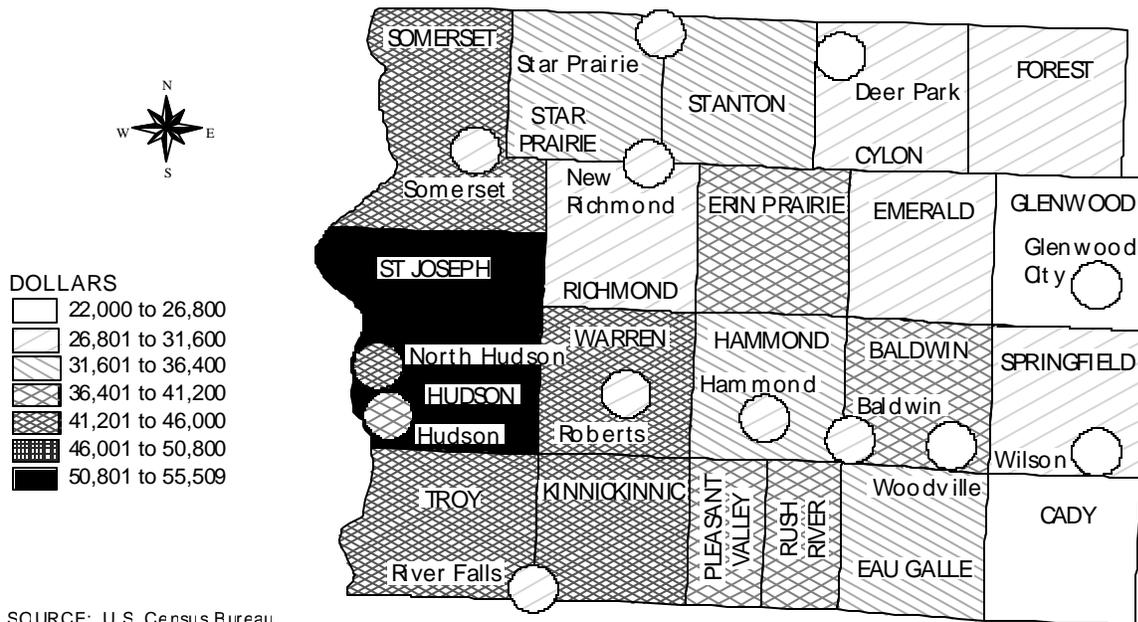
- ⌘ In St. Croix County, the cost of consumer goods, based on calculated inflation rates, increased by about 54 percent in the 1980's. At the same time the median household income for St. Croix County rose about 88 percent. This would indicate that, between 1980 and 1990, St. Croix County households, in general, saw their incomes outpace inflation.

**Median Household Income - 1980
St. Croix County**



SOURCE: U.S. Census Bureau

Median Household Income - 1990
St. Croix County

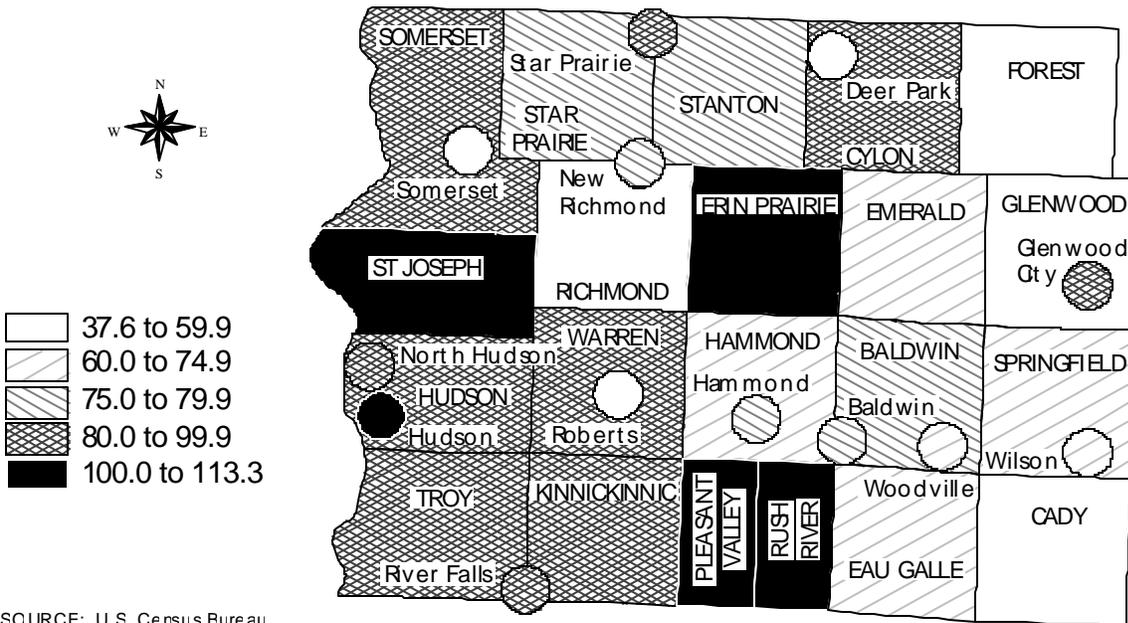


SOURCE: U.S. Census Bureau

⌘ In 1980, the median household incomes of communities in St. Croix County were more evenly distributed than in 1990. The range of median household incomes was smaller in 1980 (\$17,523) than in 1990 (\$33,509) and there was less variability in incomes across the county in 1980 than in 1990.

⌘ Communities with the highest median household incomes in both 1980 and 1990 were in the western one-third of the county. However, the disparity of median household incomes from west to east became larger by 1990.

**Percent Change in Median Household Income - 1980 to 1990
St. Croix County**



SOURCE: U.S. Census Bureau

- ⌘ The largest change in median household income between 1980 and 1990 were in the City of Hudson and the Towns of Erin Prairie, Pleasant Valley, Rush River and St. Joseph. The median household income virtually doubled in these communities during the 1980s.
- ⌘ Significant percentage increases in median household income between 1980 and 1990 were also seen in the Cities of Glenwood City and River Falls, the Villages of North Hudson and Star Prairie, and the Towns of Cylon, Hudson, Kinnickinnic, Somerset, Troy and Warren.

- ⌘ Communities with the least change in median household incomes between 1980 and 1990 were the Villages of Deer Park, Roberts and Somerset, and the Towns of Cady, Forest, Glenwood and Richmond.
- ⌘ The Towns of Hudson, Kinnickinnic, St. Joseph, Troy and Warren, which had the highest median household incomes in the County in 1980, also experienced some of the highest percentage increases in median household income in the 1980s. This contributed to the widening disparity of incomes between the western and eastern parts of the county.

EMPLOYMENT

The employment section addresses three main elements of employment information. These elements are:

- *Employment of St. Croix County Residents.* This information describes the employment characteristics of the people who live in St. Croix County, but does not reflect where they work.
- *Employment within St. Croix County.* This information describes the employment opportunities within St. Croix County, but gives no information about where the people working at these jobs live.
- *Employment by Occupation of St. Croix County Residents.* This section provides information about the occupations of St. Croix County residents within each employment sector. Again, this information does not reflect where these occupations are located.

EMPLOYMENT OF ST. CROIX COUNTY RESIDENTS

The following section contains information on the employment characteristics of St. Croix County

residents. This information categorizes the type of employment of the residents, but does not reflect where they work.

Employment of St. Croix County Residents - 1960 to 1990

Employment Categories	Year				Percent Change		
	1960	1970	1980	1990	60-70	70-80	80-90
Ag., Forestry & Mining	2,909	1,993	2,077	1,820	-31.5%	4.2%	-12.4%
Construction	637	786	1,029	1,438	23.4%	30.9%	39.7%
Manufacturing	2,013	3,277	5,669	7,274	62.8%	73.0%	28.3%
Trans., Utils. & Comm.	516	738	1,135	1,736	43.0%	53.8%	53.0%
Wholesale/Retail	1,776	2,425	3,676	5,019	36.5%	51.6%	36.5%
Finance, Ins. & Real E.	265	374	820	1,753	41.1%	119.3%	113.8%
Services	1,673	2,983	4,589	7,843	78.3%	53.8%	70.9%
Government	368	407	529	849	10.6%	30.0%	60.5%
Total	10,157	12,983	19,524	27,732	27.8%	50.4%	42.0%

Source: U.S. Census Bureau

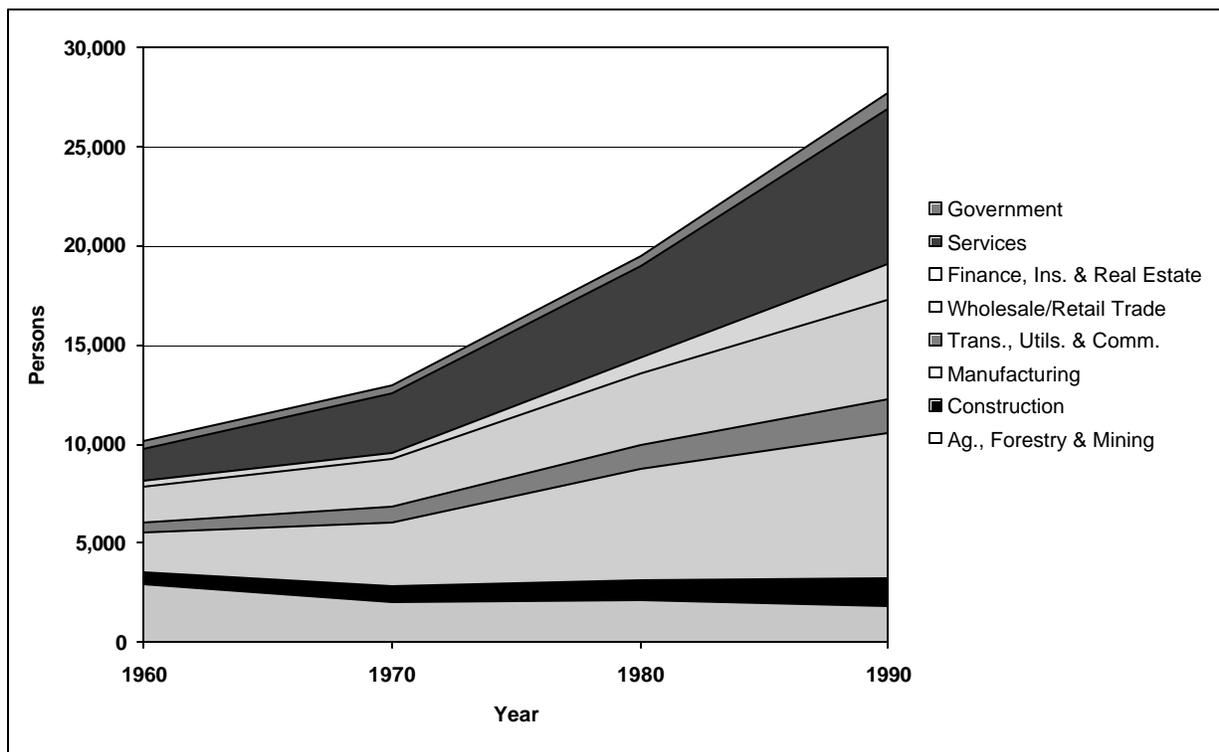
From 1960 to 1970 the largest numerical and percentage gains in the employment of St. Croix County residents were in Manufacturing (1,264 jobs and 62.8 percent) and Services (1,310 jobs and 78.3 percent). Large numerical gains in these categories, as well as Wholesale/Retail, occurred in the 1970's and 1980s.

Dramatic percentage increases in the Finance, Insurance and Real Estate employment category occurred between 1970 and 1990,

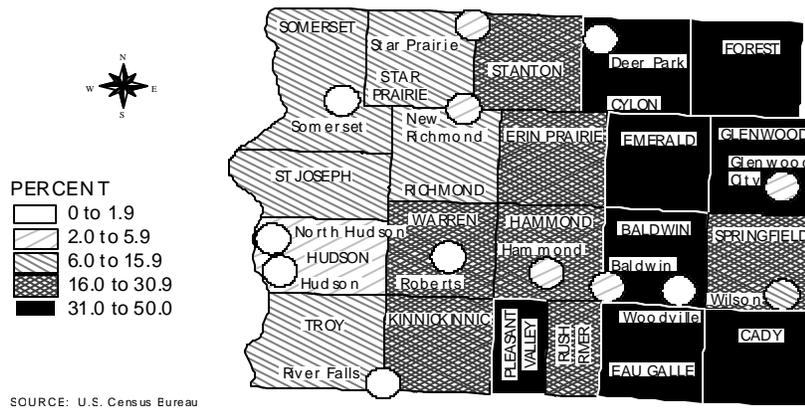
in Manufacturing between 1960 and 1980, and in Services during all three decades spanning 1960 to 1990.

At the same time there were large increases in employment in Manufacturing, and Professional and other services, and steady growth in Wholesale and Retail Trade employment, there was a significant general decline in St. Croix County residents employed in Agriculture, Forestry and Mining.

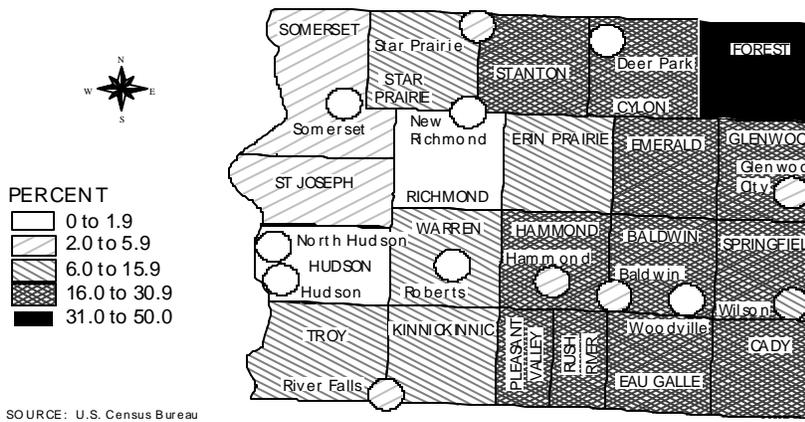
Employment of St. Croix County Residents - 1960 to 1990



**Agricultural Employment (by Percent of Total Employment) - 1980
St. Croix County**



**Agricultural Employment (by Percent of Total Employment) - 1990
St. Croix County**



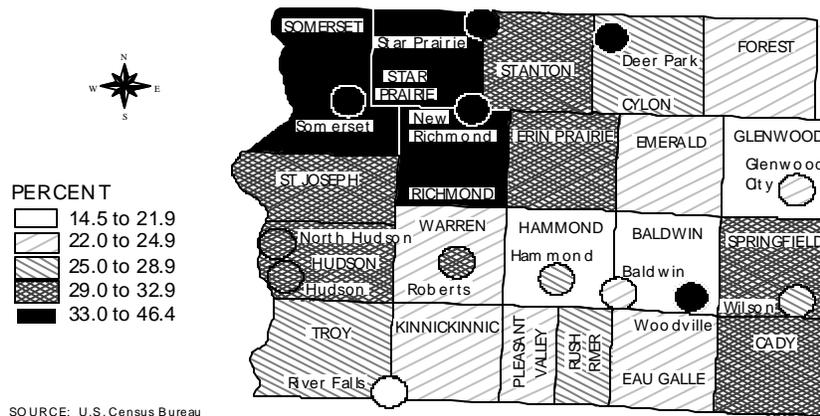
§ In 1980, the employment of St. Croix County residents related to Agriculture was a large percentage (31 percent or greater) of total employment in eight townships in St. Croix County. In 1990, only one township had not fallen to a lower percentage (less than 31 percent) of total employment in Agriculture.

§ Of the seven townships that had a significant percentage (from 16

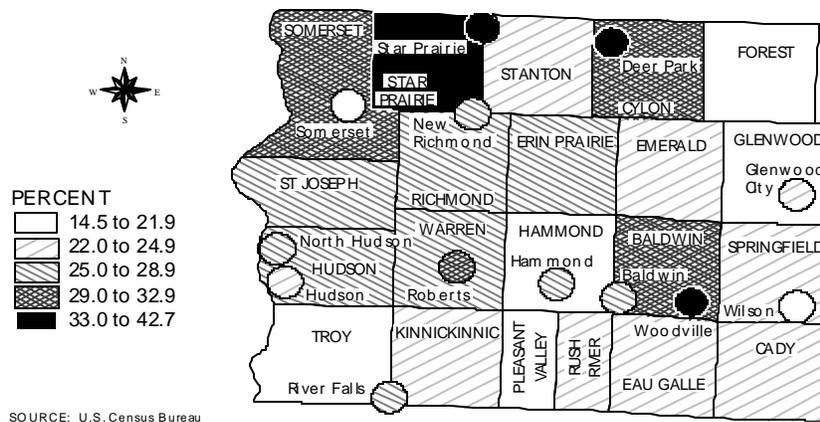
percent to 30.9 percent) of total employment related to Agriculture in 1980, four had not fallen to a lower percentage (less than 16 percent) in 1990.

§ In 1980, Hudson was the only town having less than six percent of the total employment related to Agriculture. By 1990, the Towns of Richmond, St. Joseph and Somerset also fell below six percent.

**Manufacturing Employment (by Percent of Total Employment) - 1980
St. Croix County**



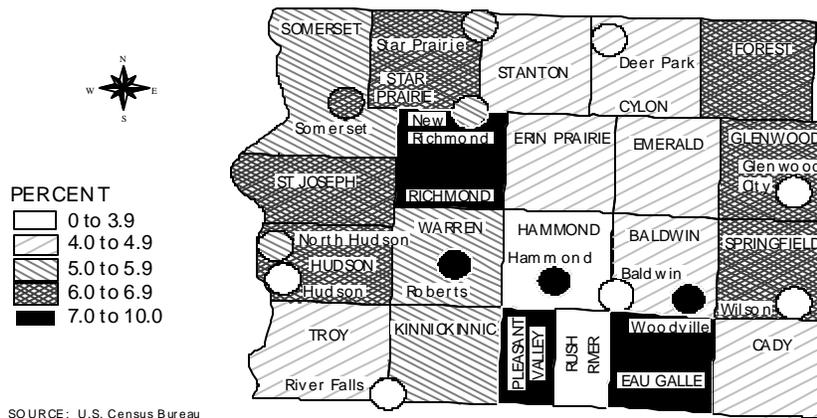
**Manufacturing Employment (by Percent of Total Employment) - 1990
St. Croix County**



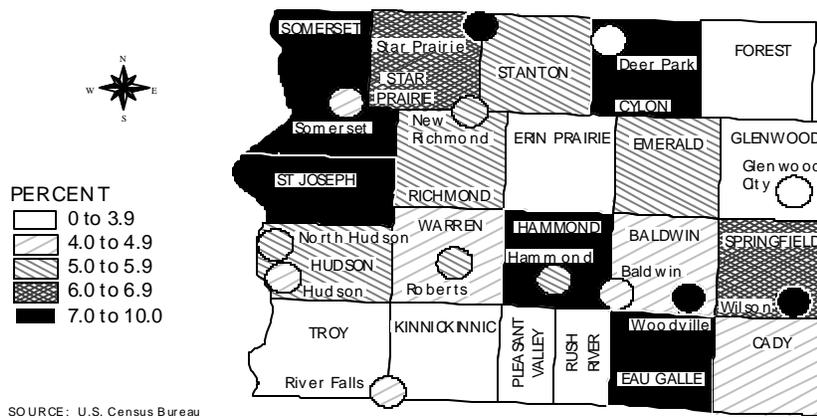
- ⌘ In 1980, there were eight communities where about one-third or more of their working residents were employed in Manufacturing. By 1990, there were four.
- ⌘ In 1980 and 1990, fourteen communities had between one-fourth and one-third of their working residents employed in Manufacturing.

⌘ While more than half of St. Croix County communities have one-fourth or more of their working residents employed in Manufacturing, communities with over one-third of their workers in Manufacturing decreased by 50 percent from 1980 to 1990. Generally, manufacturing jobs are quite sensitive to national economic recessions.

**Construction Employment (by Percent of Total Employment) - 1980
St. Croix County**



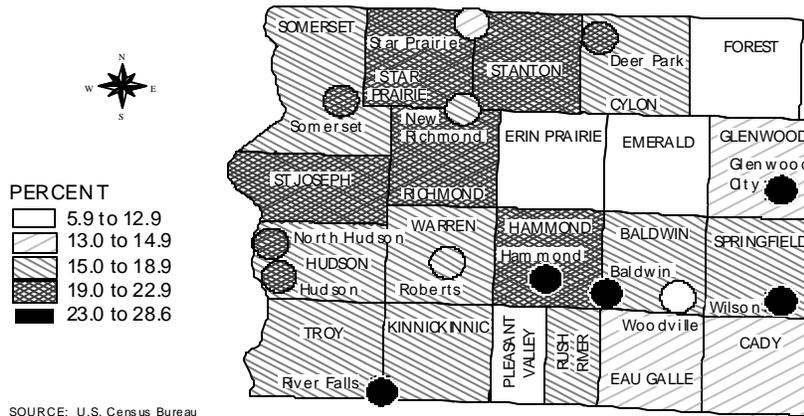
**Construction Employment (by Percent of Total Employment) - 1990
St. Croix County**



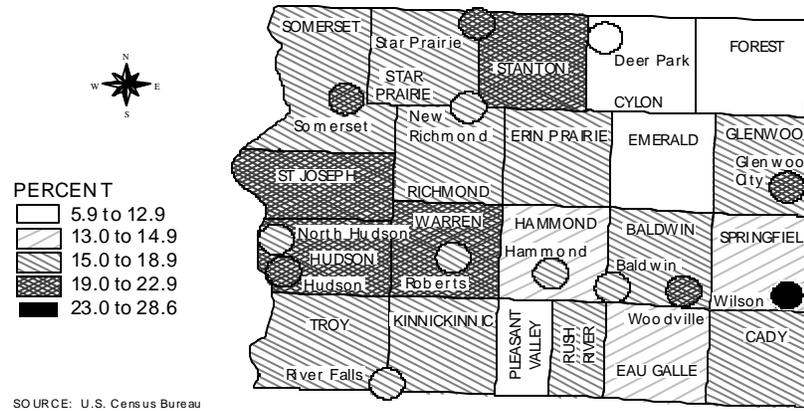
- ⌘ In 1980, there were six communities with seven percent or more of their working residents employed in Construction. In 1990, there were eight communities.
- ⌘ In 1980, there were 13 communities with between five percent and 6.9 percent of their working residents employed in Construction. In 1990, there were 10 communities.

- ⌘ In 1980, there were 15 communities with less than five percent of their working residents employed in Construction. In 1990, there were 16 communities.
- ⌘ In 1990, the percentage of St. Croix County residents employed in Construction was the highest in the Towns of Cylon, Eau Galle, Hammond, St. Joseph and Somerset, and the Villages of Star Prairie, Wilson and Woodville.

**Wholesale/Retail Trade Employment (by Percent of Total Employment) - 1980
St. Croix County**



**Wholesale/Retail Trade Employment (by Percent of Total Employment) - 1990
St. Croix County**



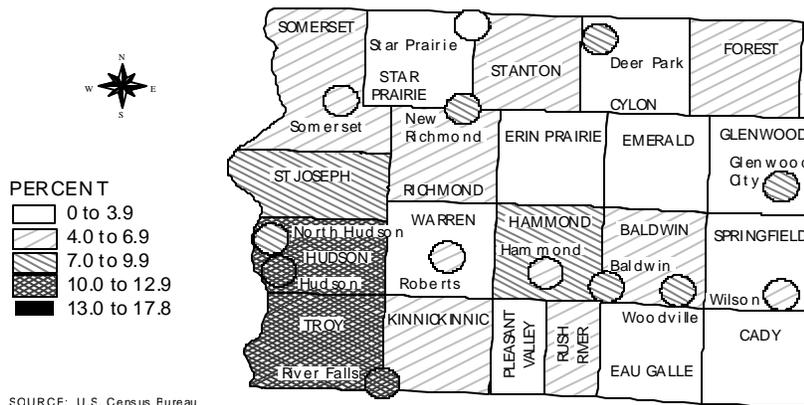
⌘ In 1980, there were five communities with between 23 percent and 28.6 percent of their working residents employed in Wholesale and Retail Trade. In 1990, there was only one community.

⌘ In 1980, there were 20 communities with between 15 percent and 22.9 percent of their working residents employed in

Wholesale and Retail Trade. In 1990, there were 25 communities.

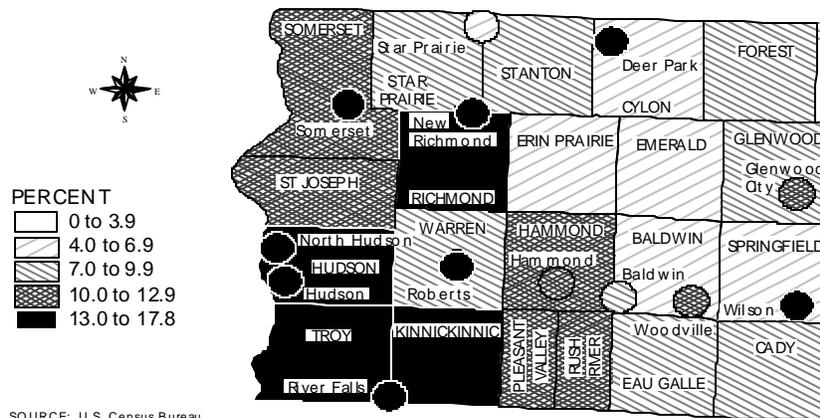
⌘ As a percentage of total employment, only seven communities saw a Wholesale and Retail Trade employment increase, while in 27 communities Wholesale and Retail Trade employment stayed the same or declined between 1980 and 1990.

**Service Sector Employment (by Percent of Total Employment) - 1980
St. Croix County**



SOURCE: U.S. Census Bureau

**Service Sector Employment (by Percent of Total Employment) - 1990
St. Croix County**



SOURCE: U.S. Census Bureau

§ In 1980, there were four communities with about ten percent or more of their working residents employed in the Service Sector. In 1990, this had increased to 20 communities.

§ In 1980, there were no communities with residents in Service Sector employment accounting for more than 11

percent of total employment. By 1990, 12 communities had Service Sector employment account for over 13 percent of total employment.

§ Service Sector employment of St. Croix County residents increased as a percentage of total employment in 33 of 34 communities between 1980 and 1990.

EMPLOYMENT WITHIN ST. CROIX COUNTY

This section addresses employment within St. Croix County. These are the job opportunities available within the

county and do not reflect the place of residence of the employees.

Employment Within St. Croix County - 1980 to 1994

Employment Categories	Sic Code	1980	1990	1994	Percent Change	
					1980 to 1990	1990 to 1994
Agricultural, Forestry and Mining	0-1499	2,075	1,830	1,830	-11.81%	0.00%
Construction	1500-1999	400	540	660	35.00%	22.22%
Manufacturing	2000-3999	3,130	4,200	5,500	34.19%	30.95%
Transportation, Utilities, and Comm.	4000-4999	790	990	950	25.32%	-4.04%
Wholesale/Retail Trade	5000-5999	2,900	4,600	5,000	58.62%	8.70%
Finance, Insurance, and Real Estate	6000-6999	340	560	540	64.71%	-3.57%
Services	7000-8999	2,500	3,400	3,900	36.00%	14.71%
Government	9000+	2,100	2,700	3,000	28.57%	11.11%
Total		14,235	18,820	21,380	32.21%	13.60%

Source: DILHR 1980, 1990 and 1994; U.S. Census Bureau 1980 and 1990 Agricultural Services

§ The greatest growth in employment within St. Croix County, between 1980 and 1994, was in Manufacturing and Wholesale and Retail Trade. While the employment increase in Wholesale and Retail Trade is representative of a national trend in employment change, the increase in Manufacturing employment is contrary to what the majority of other areas around the country are experiencing.

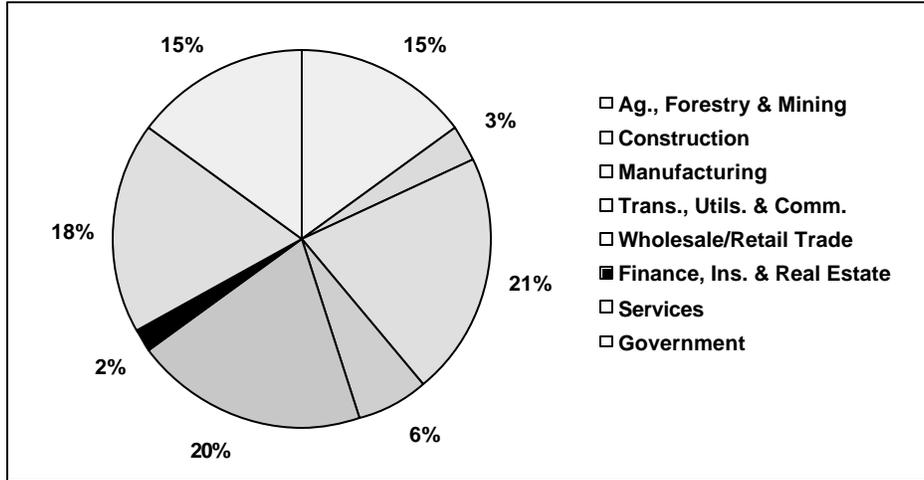
§ In St. Croix County, between 1980 and 1994, about 54 percent more jobs were created in Manufacturing

and Wholesale and Retail Trade than in all of the other employment categories combined.

§ Employment related to Agriculture, Forestry and Mining in St. Croix County declined by almost 12 percent between 1980 and 1994.

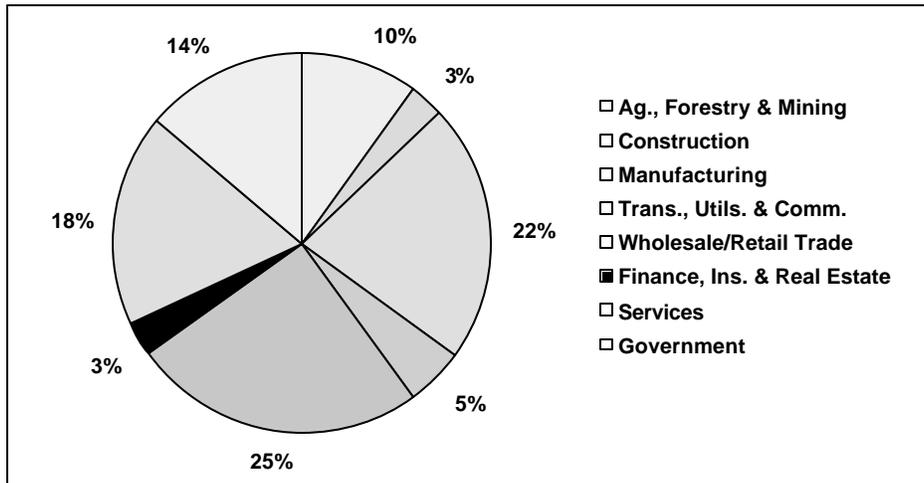
§ Nationally, retail and service sector employment has been growing the fastest, while manufacturing employment has declined. In St. Croix County between 1990 and 1994, 44 percent more jobs were created in Manufacturing than in Wholesale/Retail Trade and Services combined.

**Employment by Percent of Total Employment - 1980
St. Croix County**



Source: Wisconsin Department of Industry, Labor and Human Relations

**Employment by Percent of Total Employment - 1990
St. Croix County**



Source: Wisconsin Department of Industry, Labor and Human Relations

Between 1980 and 1990, Agriculture, Forestry and Mining employment in St. Croix County fell from 15 percent to 10 percent of total employment.

Employment in Wholesale and Retail Trade increased from 20

percent to 25 percent of total employment between 1980 and 1990.

All other employment categories remained virtually constant as a percentage of total employment between 1980 and 1990.

EMPLOYMENT BY OCCUPATION OF ST. CROIX COUNTY RESIDENTS

The previous information described St. Croix County related employment by the type of business or industry, or sector of commerce. What people do, or

what their occupation is within those sectors can also reveal factors that influence incomes and employment.

Employment of St. Croix County Residents by Occupation - 1980 to 1990

Occupation	1980	1990	Percent of Total		Percent Change	Numerical Change
			1980	1990	1980-1990	1980-1990
Executive, Administrative, and Managerial	1568	2727	8.02	10.61	73.92	1159
Specialty Professional	2015	3283	10.30	12.77	62.93	1268
Technicians and Related Support	547	918	2.80	3.57	67.82	371
Sales	1480	2624	7.57	10.21	77.30	1144
Administrative Support, including Clerical	2713	3815	13.87	14.84	40.62	1102
Private Household Services	71	82	0.36	0.32	15.49	11
Protective Services	138	254	0.71	0.99	84.06	116
Other Services	2226	2814	11.38	10.95	26.42	588
Farming, Forestry, and Fishing	2013	1646	10.29	6.40	-18.23	-367
Precision Production, Craft and Repair	2430	3066	12.43	11.93	26.17	636
Machine Operators, Assemblers, and Inspectors	2429	2411	12.42	9.38	-0.74	-18
Transportation and Material Moving	1003	1037	5.13	4.03	3.39	34
Handlers, Equipment Cleaners, Helpers, and Laborers	922	1028	4.71	4.00	11.50	106

Source: U.S. Census Bureau

Occupations of county residents that experienced the greatest numerical gains between 1980 and 1990 were specialized professionals and executives, administrators and managers.

St. Croix County residents in sales occupations increased by 77.3 percent between 1980 and 1990, the largest percentage gain of any occupation employing more than 500 workers.

More St. Croix County residents were employed in administrative support occupations than any other occupation in 1980 and 1990.

St. Croix County residents in farming, forestry and fishing

occupations decreased by 367 people or 18.2 percent between 1980 and 1990.

St. Croix County residents employed in white-collar occupations increased by 60.6 percent between 1980 and 1990 while those employed in blue-collar occupations increased by only 4.4 percent.

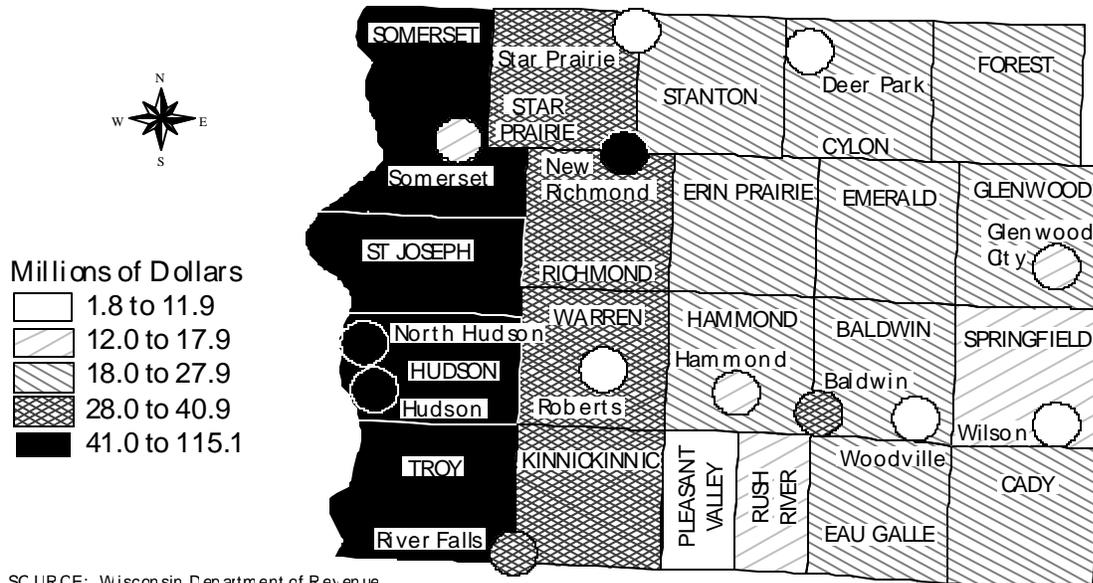
In 1980, there were 5.7 percent more blue-collar workers living in St. Croix County than white-collar workers. But, by 1990, there were 45.4 percent more white-collar workers residing in the county than blue-collar workers.

PROPERTY VALUES

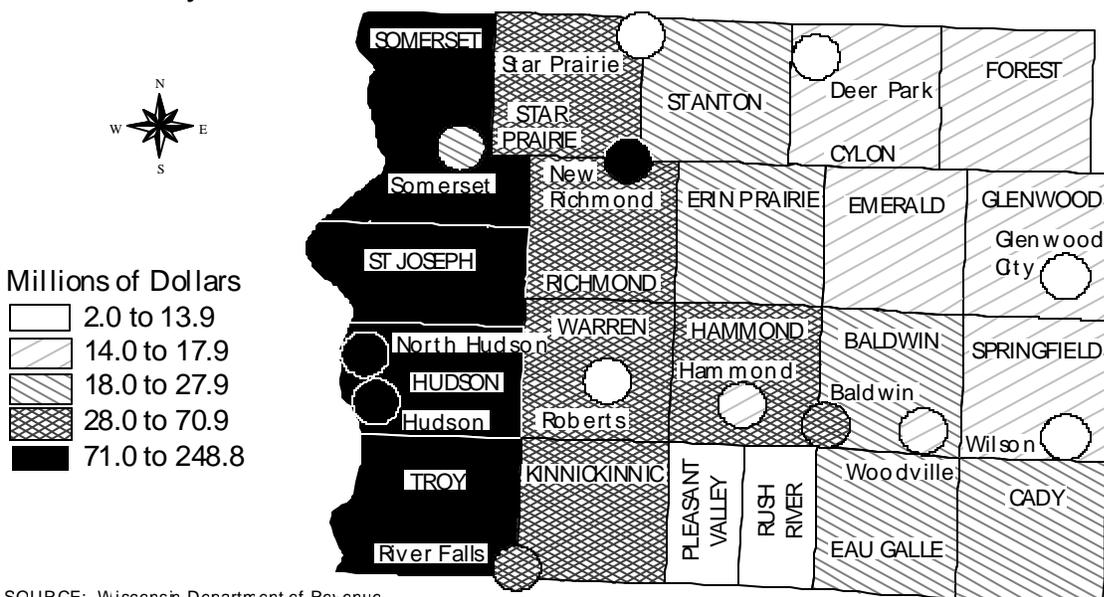
The maps on the following pages present the total value of property in St. Croix County communities in 1980,

1990 and 1994, and the change of that value between those years.

Total Value of Property - 1980 St. Croix County



Total Value of Property - 1990 St. Croix County



⌘ The communities in the western part of the county are more built up and therefore exhibit the highest total property values in both 1980 and 1990.

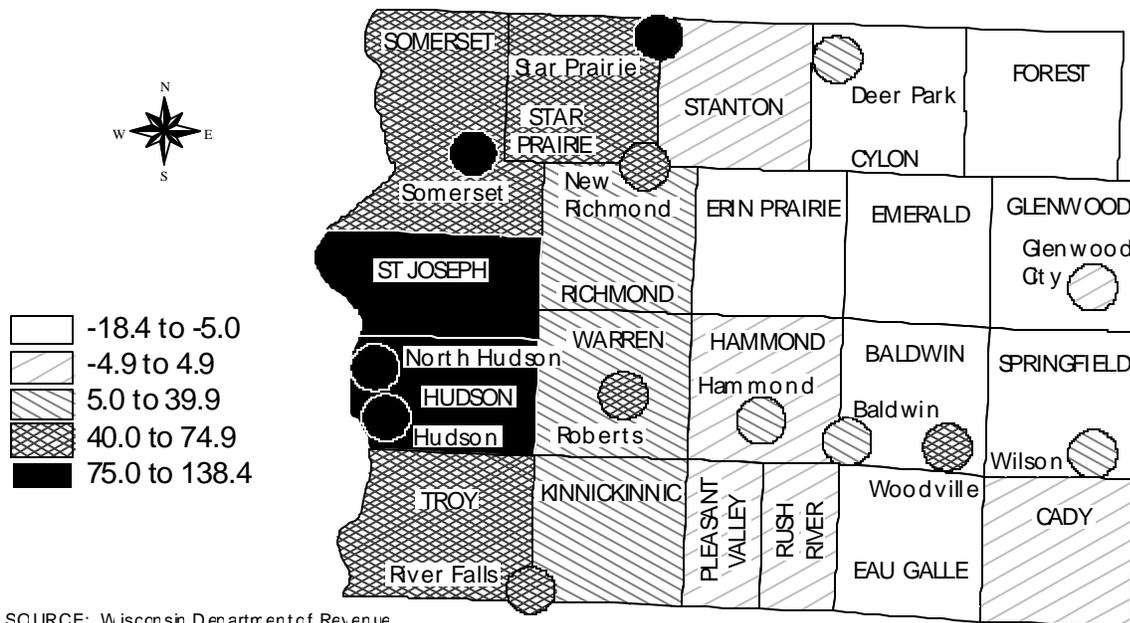
⌘ The Cities of Hudson and New Richmond; the Village of North Hudson; and the Towns of Hudson, St. Joseph, Somerset and Troy were the highest total property value communities in 1980.

⌘ Those same communities also had the highest total property values in 1990.

⌘ The communities in western St. Croix County also experienced the greatest change in property value between 1980 and 1990.

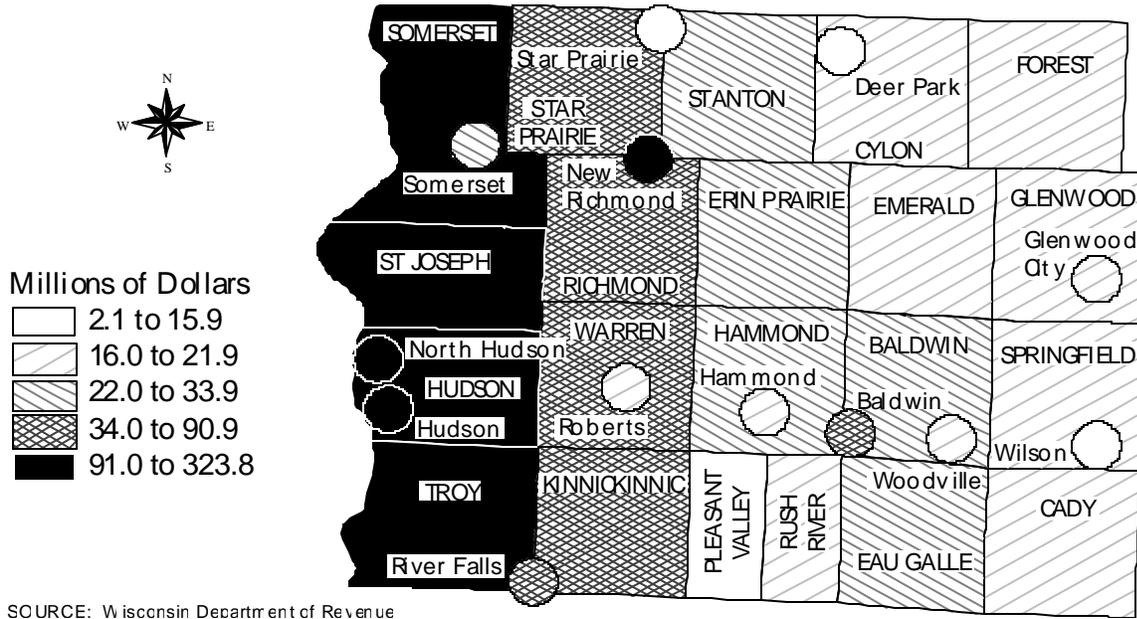
⌘ Generally, towns in the eastern part of the county experienced slow growth or decreases in total property values between 1980 and 1990.

**Percent Change in Total Value of Property - 1980 to 1990
St. Croix County**



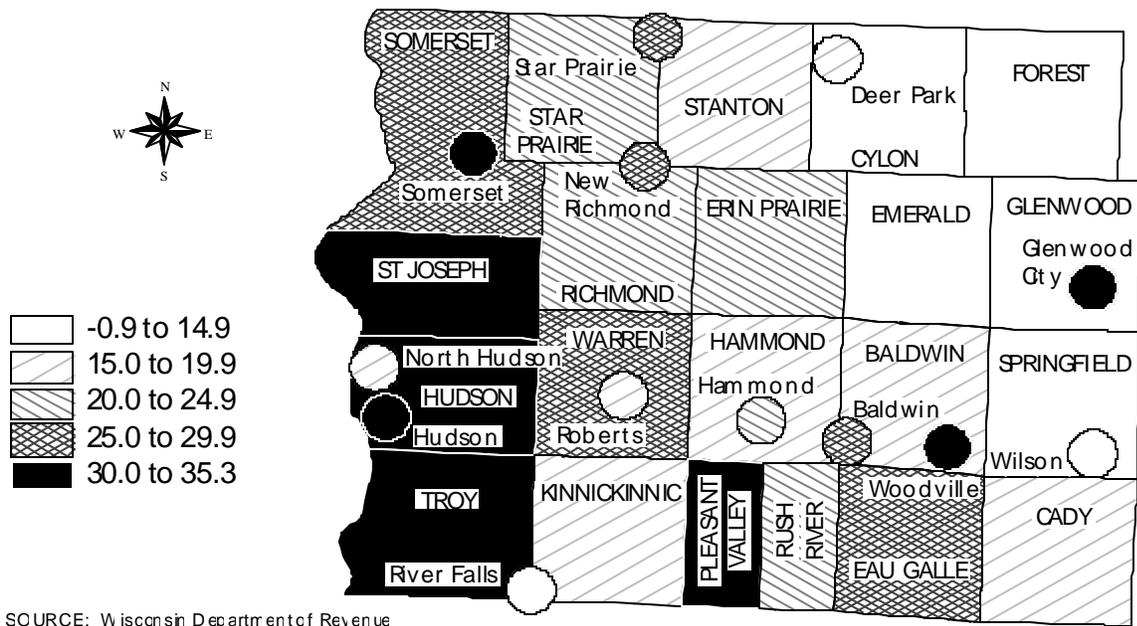
SOURCE: Wisconsin Department of Revenue

**Total Value of Property - 1994
St. Croix County**



SOURCE: Wisconsin Department of Revenue

**Percent Change in Total Value of Property - 1990 to 1994
St. Croix County**



SOURCE: Wisconsin Department of Revenue

- ⌘ The trend in total property values appears to be continuing into the 1990's with the Cities of Hudson and New Richmond, the Village of North Hudson and the Towns of Hudson, St. Joseph, Somerset and Troy having the highest total property values in 1994.
- ⌘ The highest growth, 30 percent to 35.3 percent, in total property values occurred between 1990 and 1994 in the Cities of Glenwood City and Hudson, the Villages of Somerset and Woodville, and the Towns of Hudson, Pleasant Valley, St. Joseph and Troy.

- ⌘ Significant growth, 25 percent to 29.9 percent, in total property values also occurred between 1990 and 1994 in the City of New Richmond, the Villages of Baldwin and Star Prairie, and the Towns of Eau Galle, Somerset and Warren.
- ⌘ The Towns of Baldwin, Erin Prairie and Eau Galle saw substantial increases in total property value between 1990 and 1994 after experiencing significant losses between 1980 and 1990.

TAXATION

Taxation can have an important influence on the decisions made by businesses and individuals to locate or develop in a particular area. The geographic location of St. Croix County makes it susceptible to the taxing influences of both Minnesota and Wisconsin.

Although property taxes are slightly higher in Wisconsin than in Minnesota, personal income tax, sales tax, workers compensation, and taxes related to

commerce are lower in Wisconsin. These factors, along with the continued property tax relief efforts in Wisconsin, have created a favorable climate in which businesses and people prefer to live and work.

The taxation review looks at the various general taxes that exist in Wisconsin and reviews and compares the local property taxes that exist in St. Croix County.

GENERAL TAXATION

⌘ **SALES/USE**
 State of Wisconsin: five percent; St. Croix County: 0.5 percent; manufacturing machinery, pollution controls, and materials consumed

are exempt; manufacturing energy gets 100 percent tax credit.

⌘ **CORPORATE INCOME**
 Flat rate, base: net income 7.9 percent; recycling surcharge: 5.5

percent of tax due before credits,
limited to \$9,800 (ends after
1999).

⌘ **PERSONAL INCOME**

Married filing jointly \$0-\$10,000: 4.90 percent; \$10,001-\$20,000: 6.55 percent; \$20,001+: 6.93 percent; recycling surcharge on individual business income: 5.5 percent of tax due before credits, limited to \$9,800.

⌘ **UNEMPLOYMENT COMPENSATION**

Base: \$10,500; Rates: 0.02 percent-9.75 percent; New employers: 3.05 percent-3.25 percent.

⌘ **WORKER'S COMPENSATION**

Average in manufacturing: \$4.85 per \$100 of payroll.

⌘ **STATE CAPITAL GAINS**

60 percent exemption for assets held 12 months.

⌘ **PROPERTY**

State average mill rate: 0.02839; manufacturing machinery & equipment, manufacturing and merchant's inventories and pollution controls are exempt.

LOCAL PROPERTY TAXES

Evaluating property taxes requires the review of many factors. The value of property, the type and level of public services, schools districts, federal and state aids, and local taxing policy all

influence the local property tax levy. The following information is intended to show a 1994 "snapshot" of property taxes for St. Croix County communities.

⌘ In 1994, mill rates in St. Croix County ranged from 0.0237 to 0.0379.

⌘ In 1994, the tax bill on a median value home in each St. Croix County community ranged from \$1,030 to \$3,395.

⌘ When comparing the property taxes in St. Croix County communities, in general, housing value has a much greater impact on a property tax bill than the mill rate.

⌘ Generally, a higher proportion of the total tax levy goes to local government in incorporated communities than does in unincorporated communities.

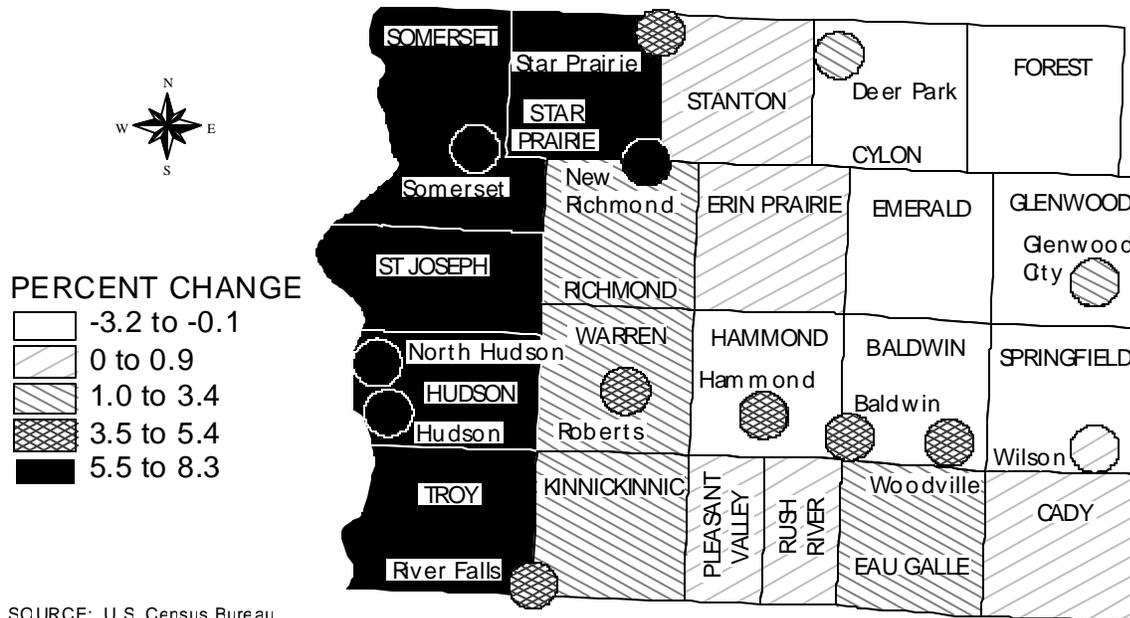
⌘ Property value per capita is one measure of the worth of property in a community. This measure, however, does not indicate the mix of different types of property (i.e. residential, commercial, industrial) or the difference in value of comparable properties between communities.

Insert Property Tax Information

§ The amount of local government taxes levied per person in each community is depicted under *Local Taxes Per Capita*. This figure

cannot represent the level of government spending or the type or level of services delivered.

Average Annual Percent Change in Full Property Value - 1984 to 1994
St. Croix County



SOURCE: U.S. Census Bureau

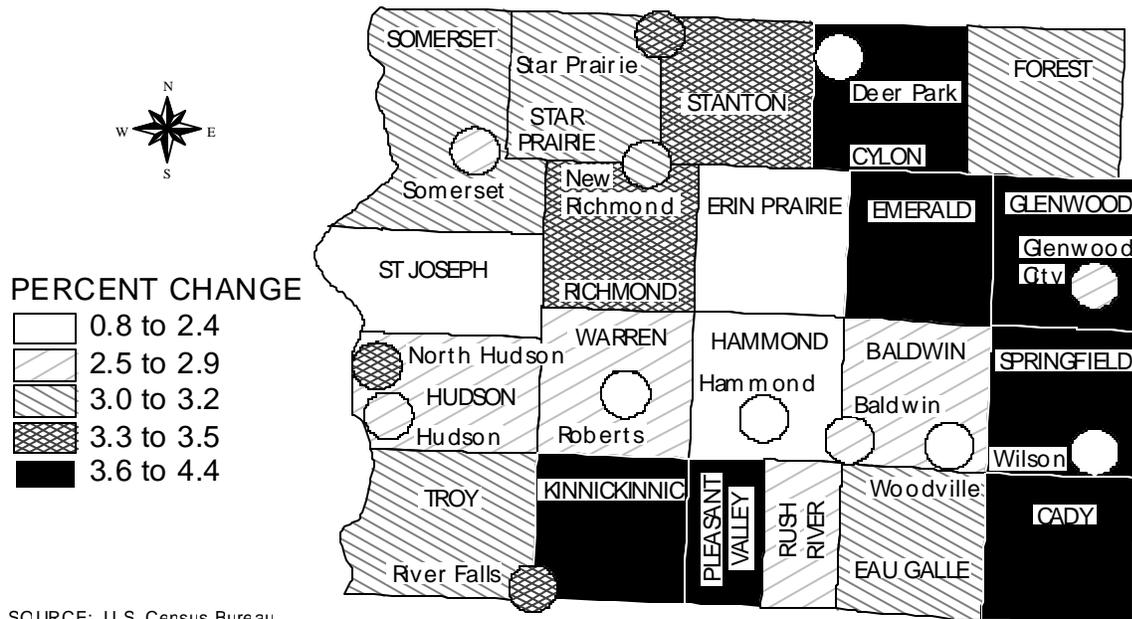
§ Communities with the smallest increases in Full Property Value generally had the largest increases in Mill Rates between 1984 and 1994.

§ Conversely, communities with the largest increases in Full Property Value generally had the smallest

increases in Mill Rates between 1984 to 1994.

§ However, faster growth in Full Property Value and slower growth in Mill Rates in a community does not necessarily mean a lower tax bill on an average house.

**Average Annual Percent Change in Mill Rates - 1984 to 1994
St. Croix County**

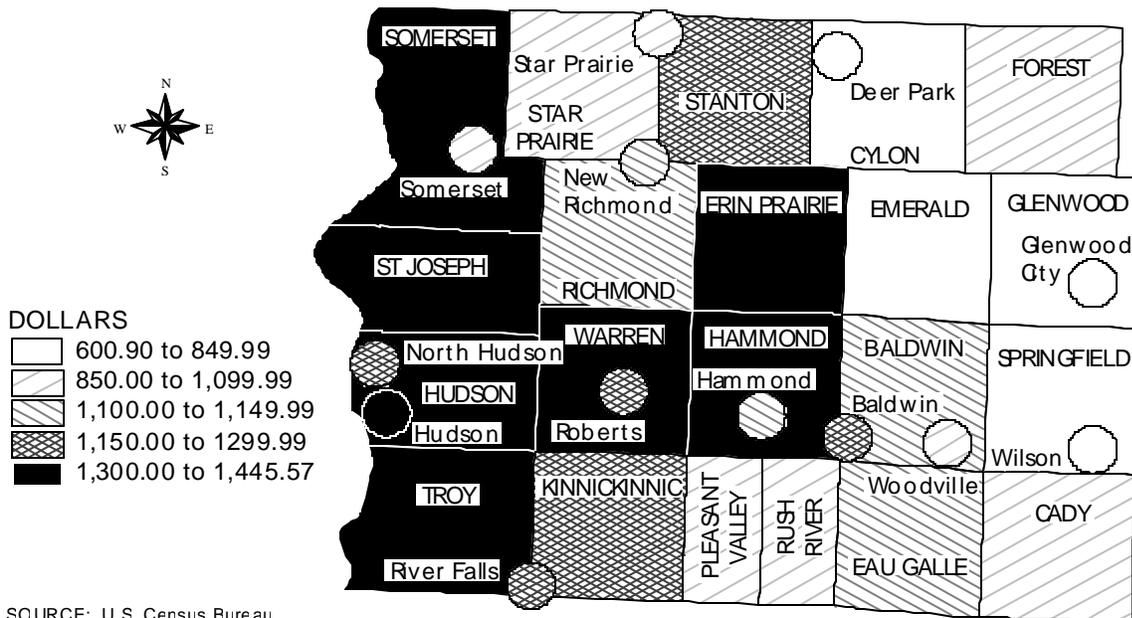


SOURCE: U.S. Census Bureau

§ The range between the highest and lowest tax bill on a median value home increased by \$1,370 between 1984 and 1994. This is another indicator of the widening disparity of property values between the eastern and western parts of the county.

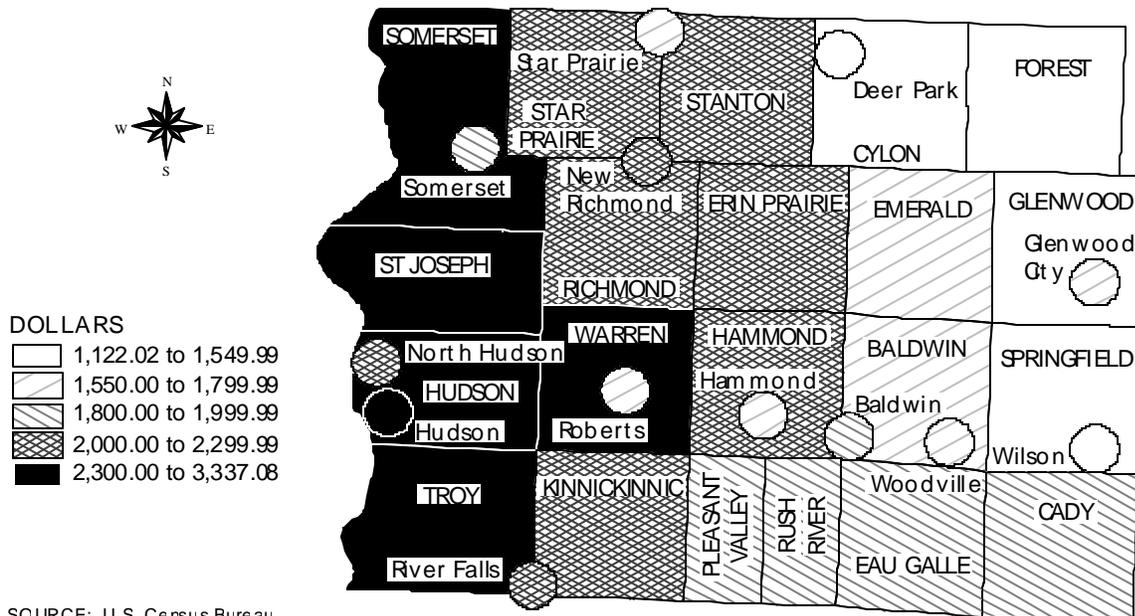
§ The higher tax bills on a median value home were generally concentrated in the western half of the county in 1984 and 1994. This corresponds to the higher property values in the western part of the county.

**Tax Bill on a Median Value Home - 1984
St. Croix County**



SOURCE: U.S. Census Bureau

**Tax Bill on a Median Value Home - 1994
St. Croix County**



SOURCE: U.S. Census Bureau

TRADE AREAS

The delineation of trade areas defines a hierarchy of places by type of trade

- Hamlets - the smallest order trade center consisting of taverns, grocery stores and service stations.
- Minimum Convenience Shopping Trade Center - all goods and services of Hamlets, and bank, drug store, hardware store, post office, variety/general store, automotive parts and laundromat.
- Full Convenience Shopping Trade Center - all goods and services of Minimum Convenience, and jewelry store, clothing and/or shoe store, appliances and furniture, lumber/building supplies, hotel/motel and funeral home.
- Partial Shopping Trade Center - all goods and services of Full

⌘ The Primary Wholesale/Retail Center with a trade area covering most of St. Croix County is the Minneapolis-St. Paul metropolitan trade area.

⌘ In a 1991 study, the City of Hudson was considered a Partial Shopping Trade Center. With the establishment of new enterprises, this community, by 1995, became a Complete Shopping Trade Center.

⌘ New Richmond and River Falls are Partial Shopping Trade Centers.

opportunities or goods and services available.

Convenience, and hospital and nursing home and any five of these specialties: antique store; camera shop; florist; music store; photo studio; paint, glass and wallpaper store; plumbing and heating supply; sporting goods and bike shop; radio and TV store; book store; specialty clothing; and gift and novelty shop.

- Complete Shopping Trade Center - all goods and services of every lower level, including all goods and services of Partial Shopping.
- Primary Wholesale/Retail Center - the highest trade order, providing Complete Shopping and a substantial volume of wholesale trade.

⌘ The Village of Baldwin is the county's only Full Convenience Shopping Trade Center.

⌘ While there are no Minimum Convenience Shopping Trade Centers in St. Croix County, these goods and services are available in Amery and Osceola in Polk County, Stillwater in Minnesota, River Falls in Pierce County, Menomonie in Dunn County and the higher order trade centers in St. Croix County of Baldwin, Hudson and New Richmond.

§ The remaining incorporated areas are considered Hamlets, although Glenwood City and some of the Villages are only one type of

establishment away from becoming Minimum Convenience Shopping Trade Centers.

EMPLOYMENT PROJECTIONS

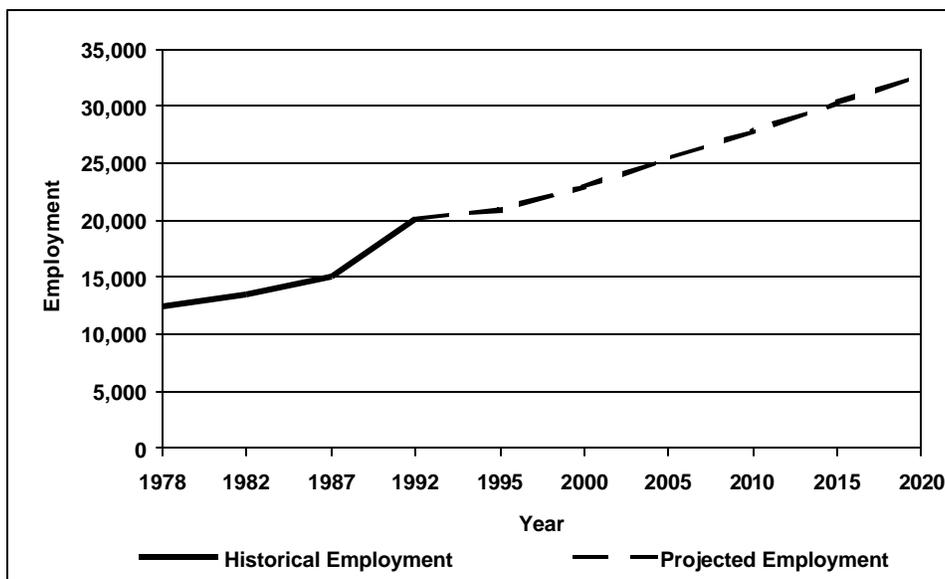
The following section addresses employment projections for St. Croix County. Projections focus on the jobs available within the county, not the number of employed St. Croix County residents.

Projections are based on two sources of employment data. The first source of data was non-farm wage employment data provided by the Wisconsin Job Service. The second source of data was

farm operator data collected from the Census of Agriculture.

The historical non-farm wage and farm operator employment numbers were combined to estimate total employment for the years of 1978, 1982, 1987 and 1992. The total employment was then used to project future employment to the year 2020. The following is a summary of projected employment for St. Croix County.

**Historical and Projected Employment - 1978 to 2020
St. Croix County**



Sources: Job Service; U.S. Census of Agriculture 1978-1992; and West Central Wisconsin Regional Planning Commission

Employment Projections - 1992 to 2020
St. Croix County

	<i>Estimate</i>			<i>Projection</i>			
	1992	1995	2000	2005	2010	2015	2020
Employment	20,181	20,946	22,930	25,387	27,844	30,301	32,758
Population	N/A	56,002	60,655	65,446	70,235	75,022	79,805

Sources: Job Service; U.S. Census of Agriculture 1978-1992; and West Central Wisconsin Regional Planning Commission

⌘ Employment is projected to grow by 11,812, or 56.4 percent, during the 25-year period between 1995 and 2020.

⌘ From 1995 to 2020, a greater proportion of St. Croix County residents is expected to find work within the county.

ECONOMY CONCLUSIONS

The economic impacts from the influence of the Minneapolis-St. Paul metropolitan area have been substantial, directly changing the economy of St. Croix County. This economic influence on St. Croix County will continue into the 21st century.

Incomes in St. Croix County have increased due to the in-migration of white-collar workers. Incomes can be expected to continue to grow, as more of these residents migrate from the metropolitan area. These residents can be expected to continue locating in the western part of the county and in those areas with good access to the transportation routes into the metropolitan core.

It is more difficult to determine how internal economic forces will effect the economy of the county. Employment opportunities within St. Croix County have been characterized by significant increases in Manufacturing, Wholesale and Retail Trade, and in the Service

sectors. It is difficult to predict if manufacturing growth will continue, but the conditions, which made previous growth possible, are likely to continue well into the next century. Indeed, some factors, such as taxation, state economic development policy, and transportation improvements, will continue to have a positive influence on industrial growth and development. Also, a principal threat to such continued growth would be a major national recession that can be anticipated but hardly predicted. The national trend has been growth in retail and service sector employment at the expense of manufacturing sector jobs. St. Croix County has seen growth in all of these sectors and with the expected increase in county residents, growth in retail and service jobs within the county should continue.

Over 70 percent of workers residing in some St. Croix County communities, and about 40 percent of all working county residents, commute into

Minnesota, primarily to the Twin Cities area. This has changed the type of workers that live in St. Croix County and is responsible for their increasing

incomes. In 1980, there were slightly more blue-collar workers living in the county than white-collar workers. Presently, there are about one and a half times more white-collar workers than blue-collar workers living in St. Croix County.

Property values increased faster in the western part of St. Croix County than in the eastern part. This can be expected to continue as development continues to occur more rapidly in western St. Croix County. However, communities in the middle of the county already experienced unprecedented growth in property values in the 1990s. This is an indicator that development pressure is expanding eastward from the western-most tier of St. Croix County communities.

Taxation is one factor responsible for economic change in St. Croix County. While individual property taxes are higher in Wisconsin than they are in Minnesota, commercial/industrial property taxes, corporate and personal income taxes, sales taxes, unemployment compensation, and worker's compensation are all less in Wisconsin than in Minnesota.

In addition, there are continuing efforts by the Wisconsin State Legislature to reduce the individual property tax burden for Wisconsin homeowners. The

tax climate in St. Croix County probably has been an influence in the dramatic increases in manufacturing employment being created and is probably a consideration of people moving into the county from Minnesota. Taxation will continue to be a factor in the growth of St. Croix County.

As population growth continues in the county, commercial establishments will be started to accommodate and serve those new residents. This growth of consumer opportunities will probably alter the hierarchy of places by the type of trade possibilities, or goods and services available. The City of Hudson has become a Complete Shopping Trade Center and many smaller communities are likely to increase in the trade area hierarchy.

Overall, employment in the county is projected to increase during the period between 1995 and 2020. However, unlike other areas that are experiencing a decline in manufacturing employment, St. Croix County is expected to grow in all sectors but agriculture.

Indications are that the economic factors that drove development and population growth in St. Croix County in the past will remain and continue to influence growth well into the 21st century.

TRENDS ANALYSIS



HOUSING

HOUSING

Review of the housing characteristics of St. Croix County will help to provide a basis for understanding the changes that have occurred over the past 20 to 25 years, and the changes that may occur over the next 20 years. The housing information, such as the number, type, value, occupancy, and age

of the existing housing units, and projections of future housing units, used in conjunction with the other socio-economic characteristics, will provide the foundation from which decisions regarding future housing development can be based.

HOUSING UNITS

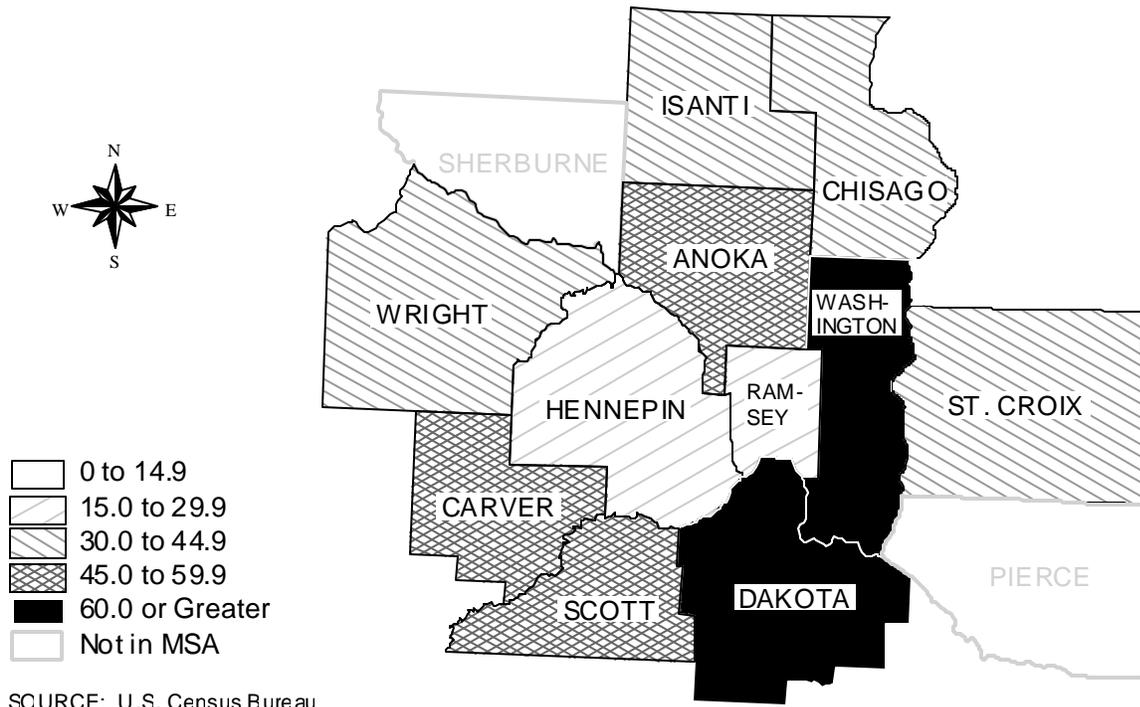
Total Housing Units and Housing Unit Percent Change · 1970 to 1990 Minneapolis-St. Paul Metropolitan Statistical Area

County	Housing Units			Percent Change	
	1970	1980	1990	1970-80	1980-90
Pierce, WI	*	*	11,536	*	12.6
St. Croix, WI	10,376	14,710	18,519	41.8	25.9
Anoka, MN	40,796	62,502	85,519	53.2	36.8
Carver, MN	8,264	12,535	17,499	51.7	39.6
Chisago, MN	6,430	8,766	11,946	36.3	36.3
Dakota, MN	39,208	66,792	102,707	70.4	53.8
Hennepin, MN	320,441	379,089	443,583	18.3	17.0
Isanti, MN	*	7,822	9,693	40.3	23.9
Ramsey, MN	153,600	176,905	201,016	15.2	13.6
Scott, MN	8,776	14,014	20,302	59.7	44.9
Sherburne, MN	*	*	14,964	*	56.1
Washington, MN	22,743	36,547	51,648	60.7	41.3
Wright, MN	14,238	19,402	26,353	36.3	35.8

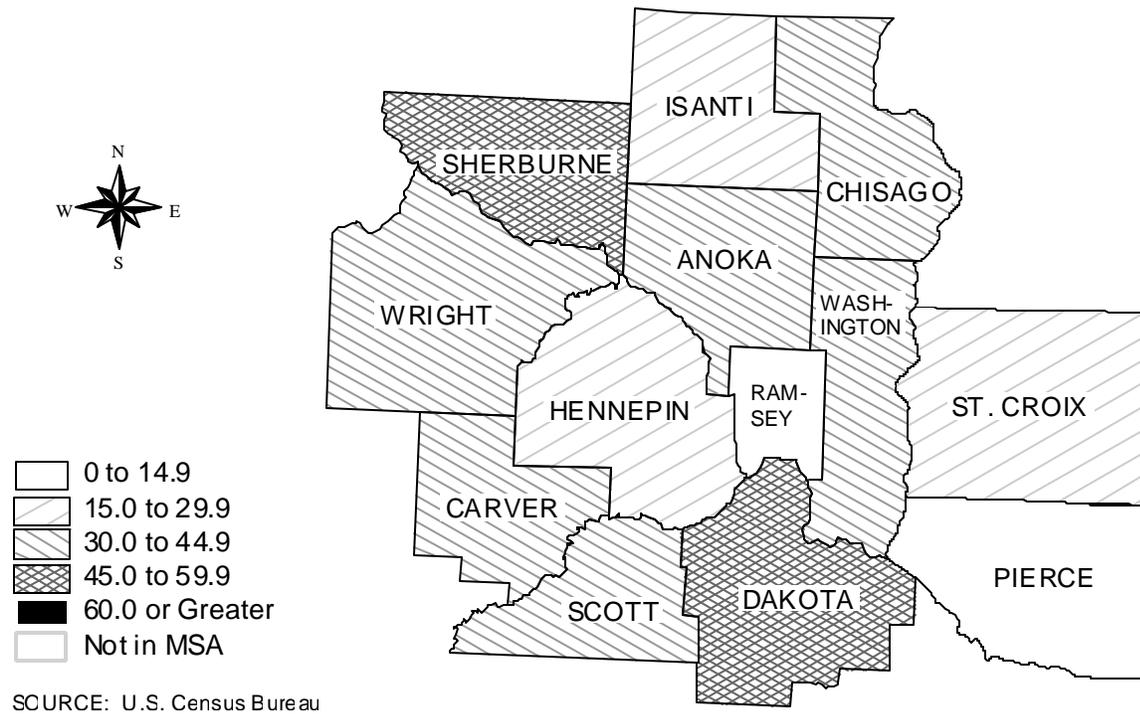
*Not included in the MSA at the end of the decade.

Source: U.S. Census Bureau, 1970-1990

**Percent Change in Total Housing Units - 1970 to 1980
Minneapolis-St. Paul MSA**



**Percent Change in Total Housing Units - 1980 to 1990
Minneapolis-St. Paul MSA**

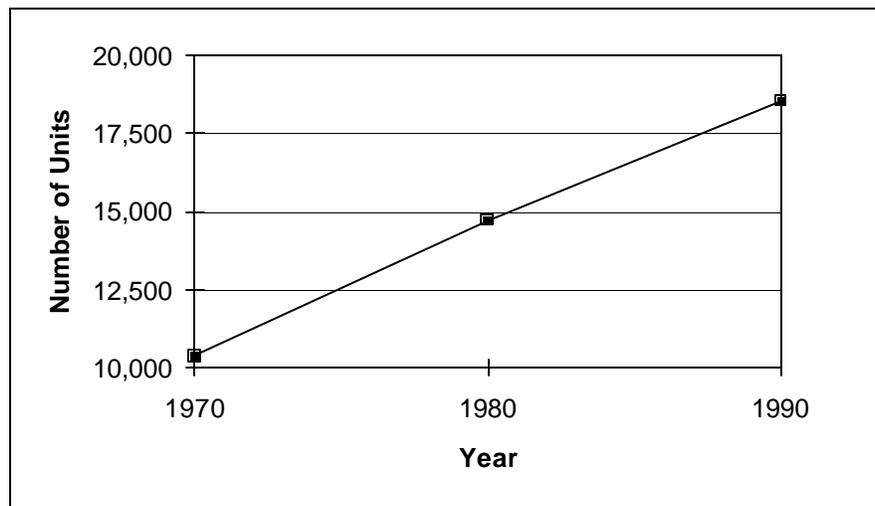


Total Housing Units - 1970 to 1990

County	1970	1980	1990	PCT CHANGE 1970-80	PCT CHANGE 1980-90
Dunn	8,972	11,693	13,252	30.3	13.3
Pierce	7,826	10,249	11,536	31.0	12.6
Polk	11,799	12,980	18,562	10.0	43.0
St. Croix	10,376	14,710	18,519	41.8	25.9
Washington, MN	22,743	36,547	51,648	60.7	41.3

Source: U.S. Census Bureau

**Total Housing Units - 1970 to 1990
St. Croix County**

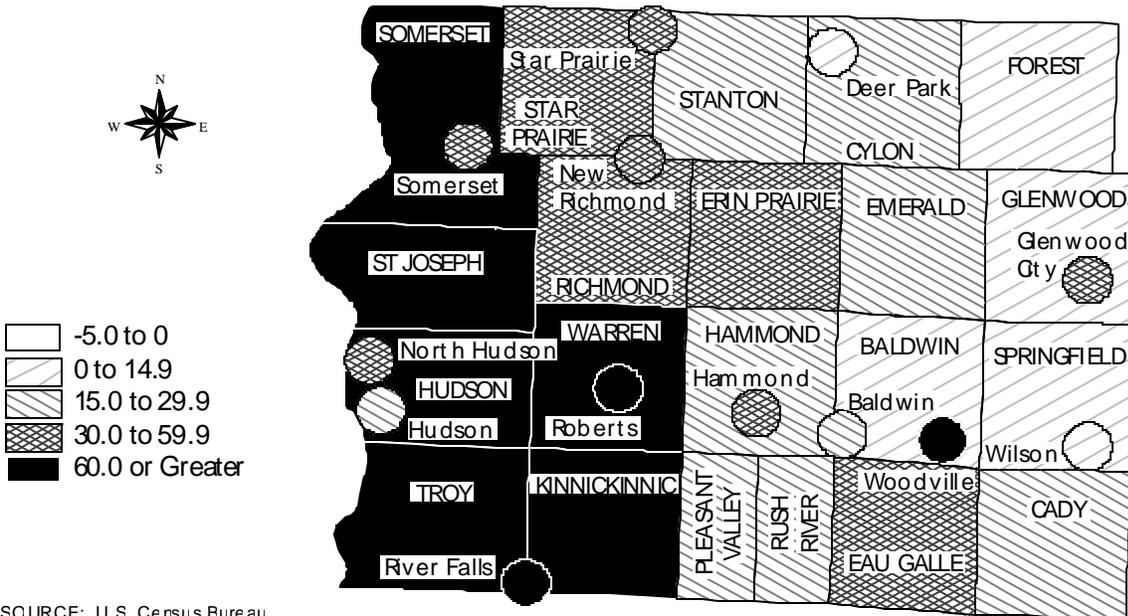


🏠 In St. Croix County, the number of housing units increased by 8,143, or 78.5 percent, from 1970 to 1990. This was an average of 407 units per year.

🏠 The decade from 1970 to 1980 experienced the greatest change, increasing by 4,334 housing units, nearly 42 percent.

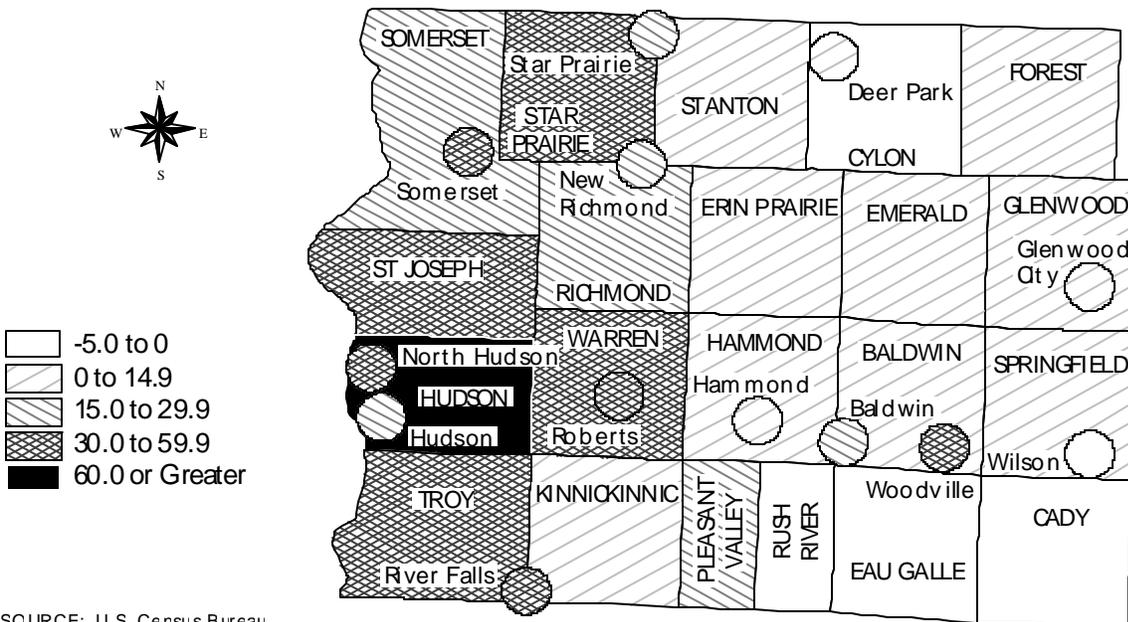
🏠 From 1970 to 1980, the county experienced an average annual change of 4.2 percent, averaging 433 housing units per year, while the period from 1980 to 1990 had an average annual change of 2.6 percent, with 381 housing units per year.

**Percent Change in Total Housing Units - 1970 to 1980
St. Croix County**



SOURCE: U.S. Census Bureau

**Percent Change in Total Housing Units - 1980 to 1990
St. Croix County**



SOURCE: U.S. Census Bureau

 Housing unit growth in the 1970s was the greatest in the towns and municipalities located in the western part of the county.

 The proportion of housing units in the municipalities has remained constant at about 52 percent, while the number of housing units located in the towns has remained at about 48 percent.

 During the period from 1970 to 1980, towns experienced a higher

rate of housing growth than did the municipalities. From 1980 to 1990, municipalities had a higher rate of growth.

 The western most towns, Somerset, St. Joseph, Hudson, and Troy, and the municipalities within the towns, Somerset, North Hudson, Hudson, and part of River Falls, accounted for 58.5 percent of the residential building permits issued from 1990 to 1994.

***Housing Units - 1990 to 1994
St. Croix County***

YEAR	UNITS ADDED	TOTAL UNITS	PERCENT CHANGE
1990	299	18,818	1.6
1991	374	19,192	2.0
1992	411	19,603	2.1
1993	438	20,041	2.2
1994	603	20,644	3.0

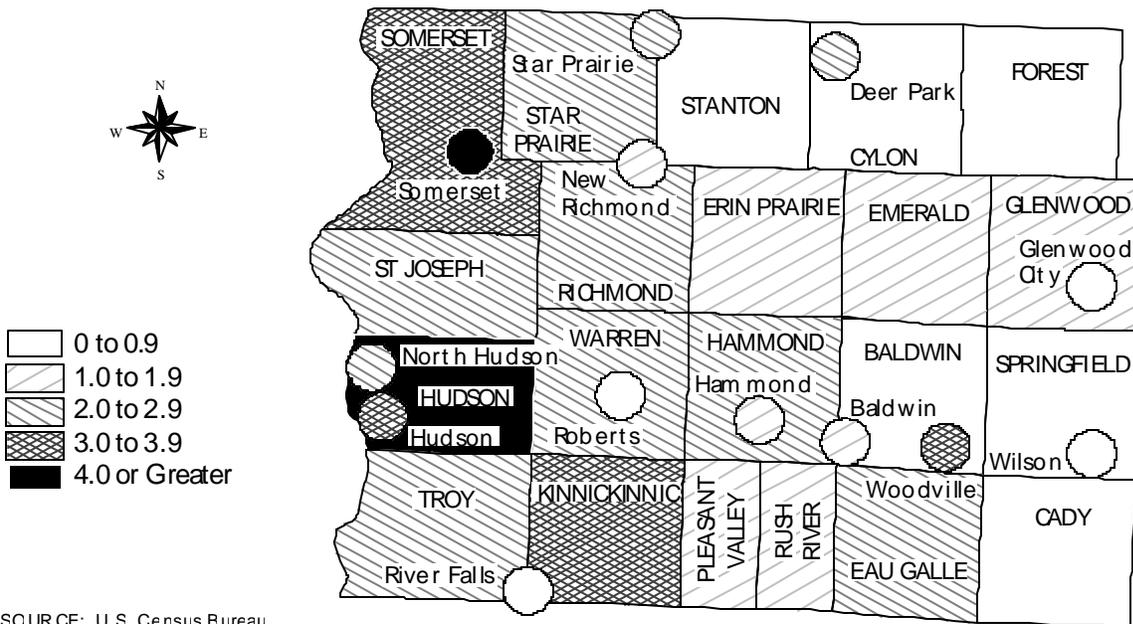
Source: U.S. Census Bureau, Building Permits

 Based on building permit information, a total of 2,125 housing units were built from 1990 to 1994, a change of 11.5 percent.

 During this period, the county has averaged 425 housing units, 2.3 percent, per year.

 However, much of this activity, nearly 28 percent, occurred during 1994.

**Average Annual Percent Change in Housing Units - 1990 to 1994
St. Croix County**



SOURCE: U.S. Census Bureau

HOUSING TYPES

**Housing Unit Types · 1970 to 1990
St. Croix County**

YEAR	SINGLE FAMILY		MULTI-FAMILY		MOBILE HOME	
	NO. OF UNITS	PERCENT CHANGE	NO. OF UNITS	PERCENT CHANGE	NO. OF UNITS	PERCENT CHANGE
1970	8,247		1,464		537	
1980	11,580	40.4	2,307	57.6	820	52.7
1990	13,907	20.1	3,310	43.5	1,302	58.8

Source: U.S. Census Bureau

 The average annual change in the number of housing units, from 1970 to 1990, averaged 283, 3.4 percent, for single family housing

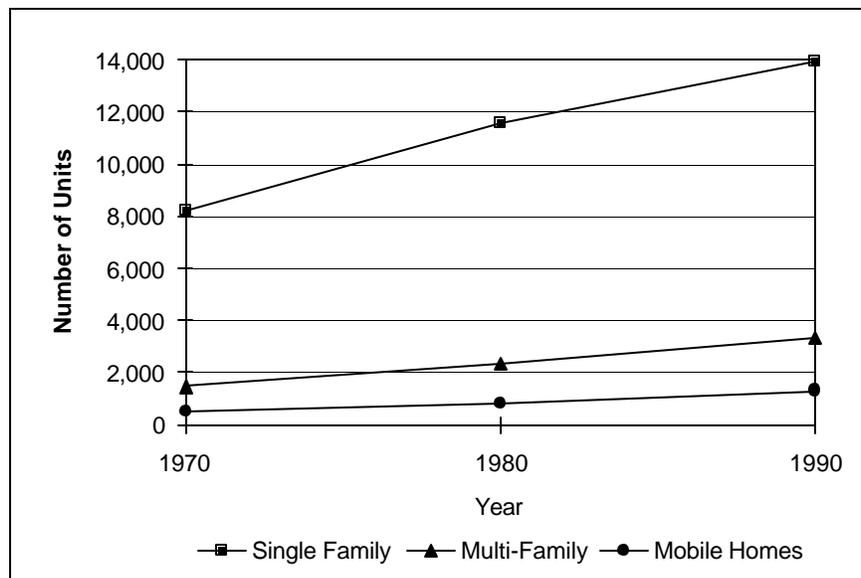
units, 92, 6.3 percent, for multi-family housing units, and 38, 7.1 percent, for mobile home housing units.

Housing Unit Types as a Percent of Total Units - 1970 to 1990
St. Croix County

YEAR	SINGLE FAMILY		MULTI-FAMILY		MOBILE HOME	
	NO. OF UNITS	PCT. OF TOTAL	NO. OF UNITS	PCT. OF TOTAL	NO. OF UNITS	PCT. OF TOTAL
1970	8,247	80.5	1,464	14.3	537	5.2
1980	11,580	78.7	2,307	15.7	820	5.6
1990	13,907	75.1	3,310	17.9	1,302	7.0

Source: U.S. Census Bureau

Total Housing Units by Housing Type - 1970 to 1990
St. Croix County

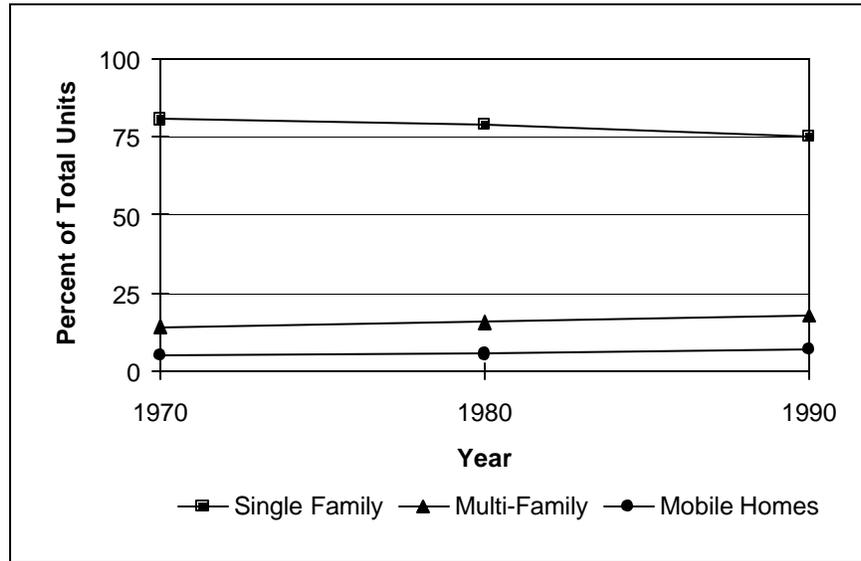


From 1970 to 1990, single family housing units increased by 5,660, multi-family housing units by 1,846 and mobile home units by 765.

Single family housing units, as a percent of the total housing units,

decreased by over five percent from 1970 to 1990, while multi-family and mobile home housing units have increased during the same period.

**Percent of Total Housing Units by Housing Type - 1970 to 1990
St. Croix County**

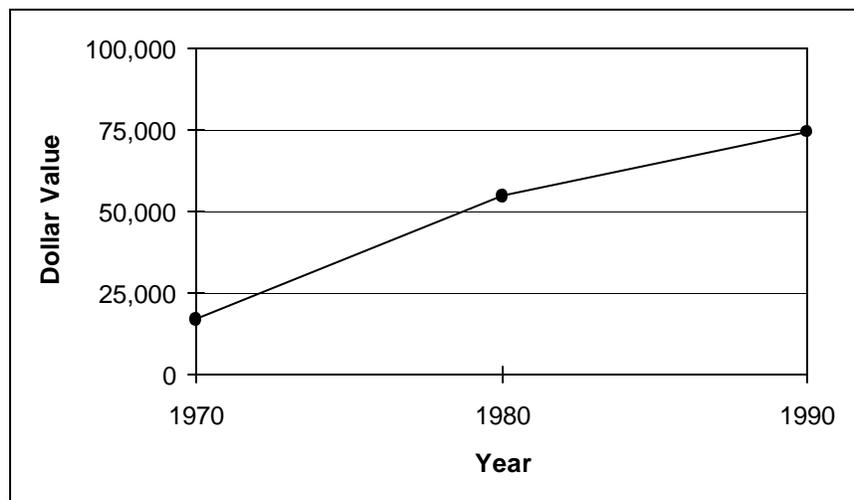


🏠 The percent of single family housing units located in towns, versus the villages and cities, has increased from 51.4 percent, in 1970, to 56 percent, in 1990,

while the percent of multi-family and mobile home housing units located in towns has decreased during the same period.

HOUSING VALUE

**Median Housing Unit Value - 1970 to 1990
St. Croix County**



**Median Housing Unit Value - 1970 to 1990
St. Croix County**

YEAR	DOLLAR VALUE	PERCENT CHANGE
1970	17,000	NA
1980	54,800	222.4
1990	74,400	35.8

Source: U.S. Census Bureau

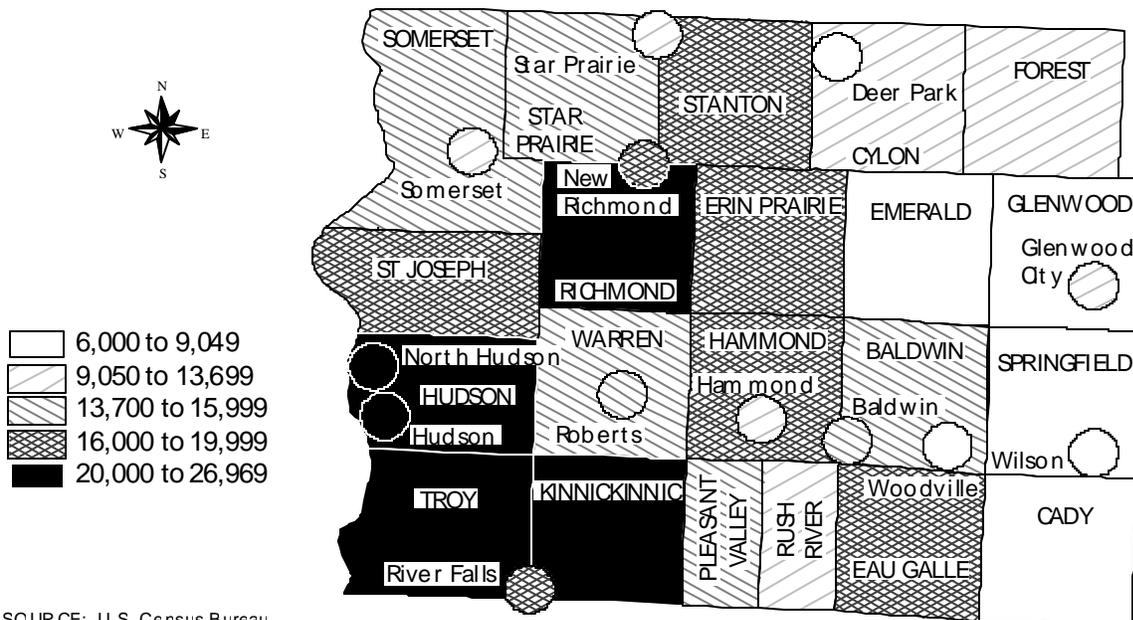
- 🏠 Median housing unit values increased from \$17,000, in 1970, to \$54,800, in 1980, and \$74,400, in 1990.
- 🏠 The highest median housing values are found in the western part of St. Croix County, while the lowest are in the east. For example, the 1990 median housing value in the Town of Hudson was \$107,200, four

times as high as the median housing value in the Village of Wilson, \$36,300.

- 🏠 Generally, municipalities' median housing values are lower than in the surrounding town(s).

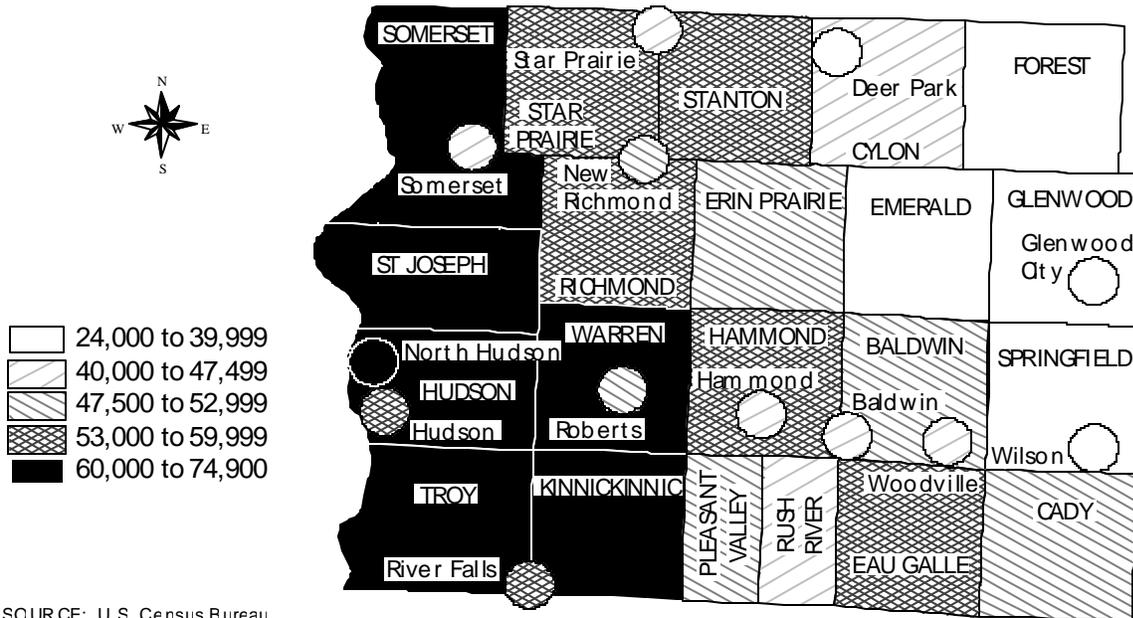
- 🏠 1990 median housing unit contract rents are higher in the western part of the county.

**Median Housing Unit Value - 1970
St. Croix County**



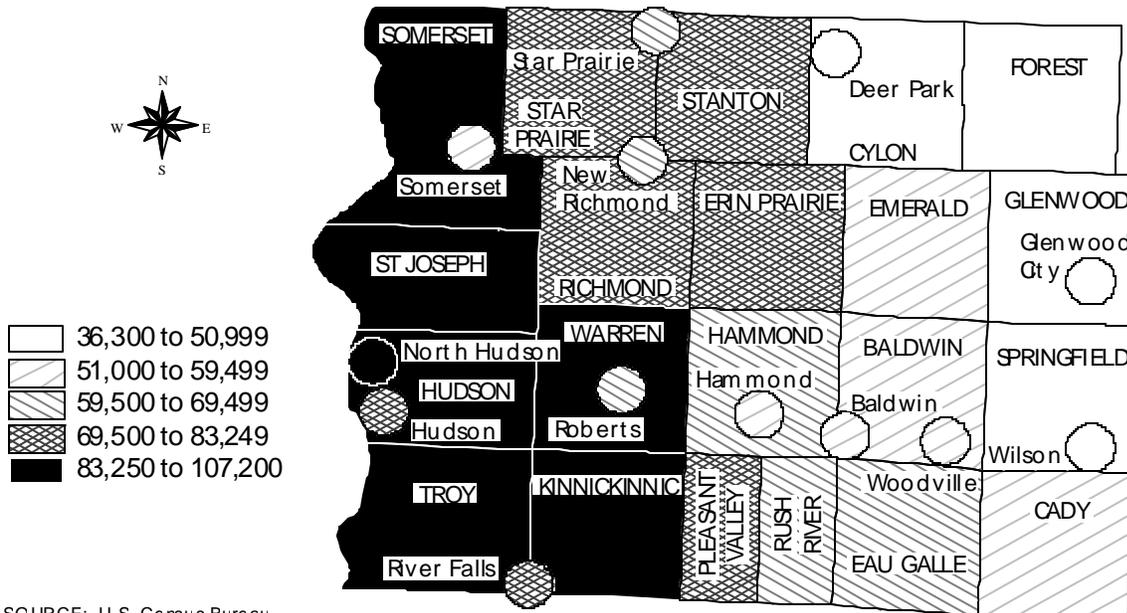
SOURCE: U.S. Census Bureau

**Median Housing Unit Value - 1980
St. Croix County**



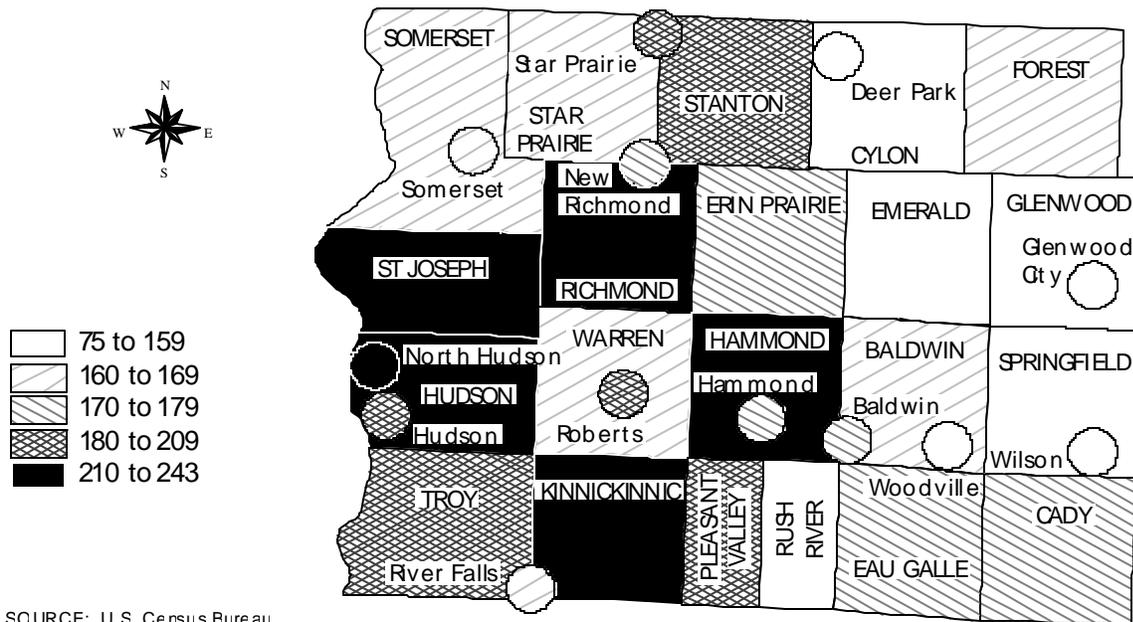
SOURCE: U.S. Census Bureau

**Median Housing Unit Value - 1990
St. Croix County**



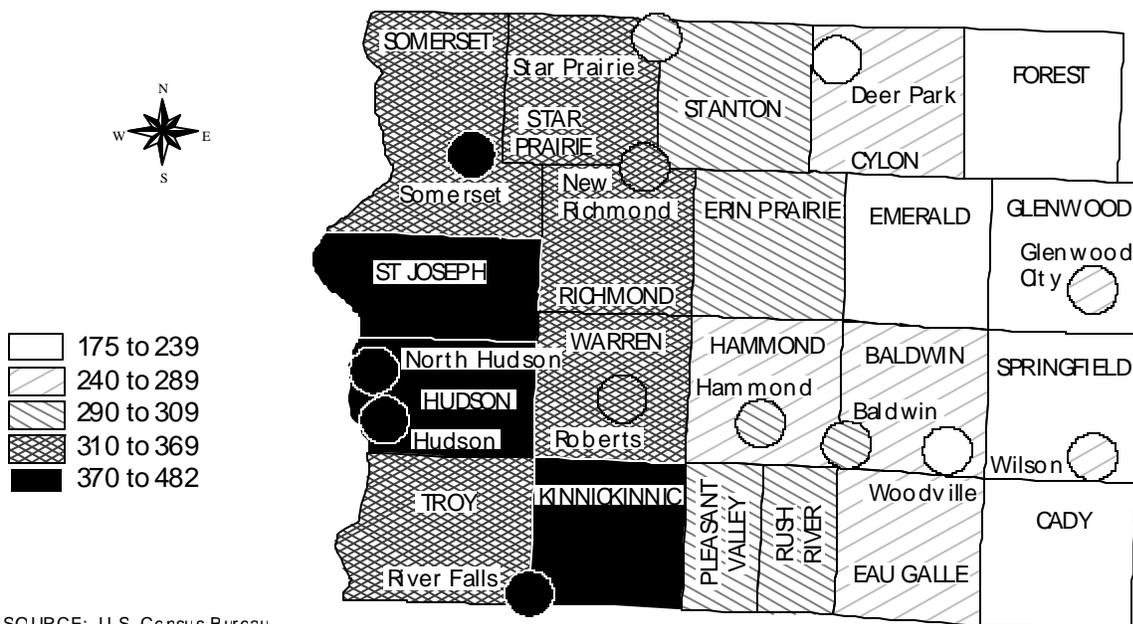
SOURCE: U.S. Census Bureau

**Median Housing Unit Rent - 1980
St. Croix County**



SOURCE: U.S. Census Bureau

**Median Housing Unit Rent - 1990
St. Croix County**



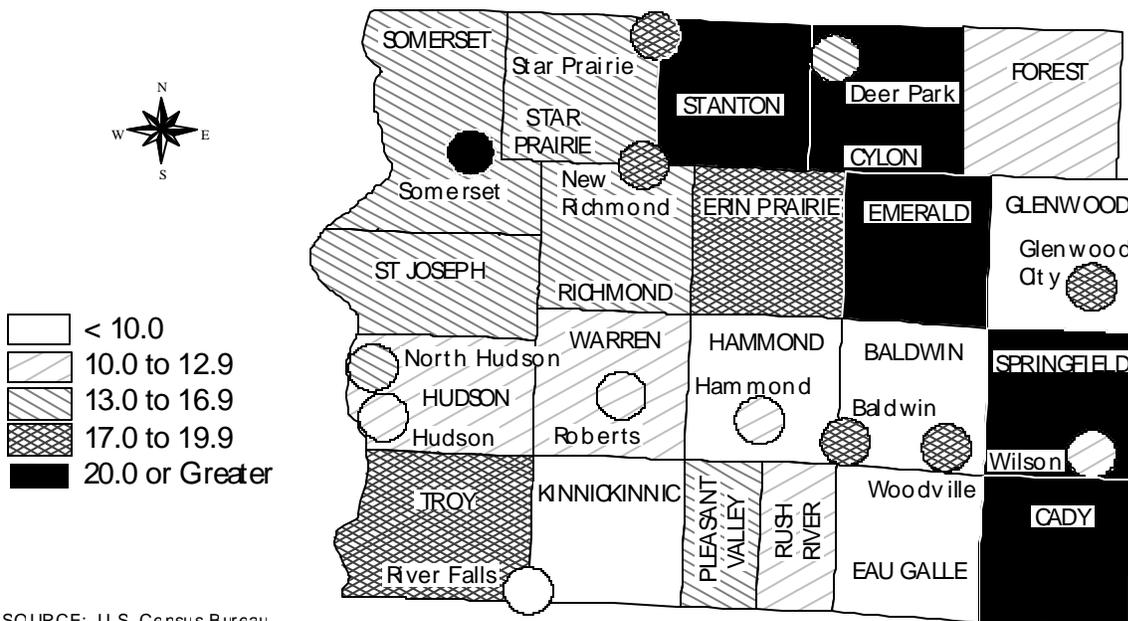
SOURCE: U.S. Census Bureau

HOUSING AFFORDABILITY

- 🏠 Affordable housing is usually considered those households that spend less than 30 percent of their income on housing costs.
- 🏠 In 1990, 15 percent of owner-occupied households, and 38 percent of renter-occupied

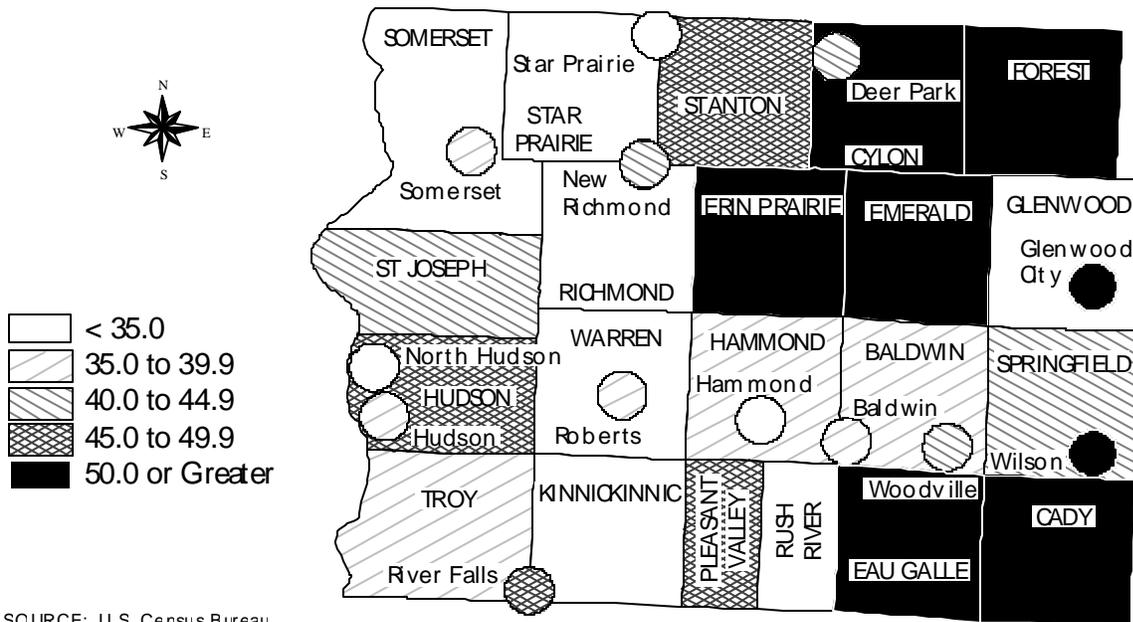
- households, spent 30 percent or more of their income on housing costs.
- 🏠 Of all households in St. Croix County, 22 percent spent nearly one-third or more of their income on housing costs.

**Percent of Owner-Occupied Households Spending 30 Percent or More Income on Housing Costs - 1990
St. Croix County**



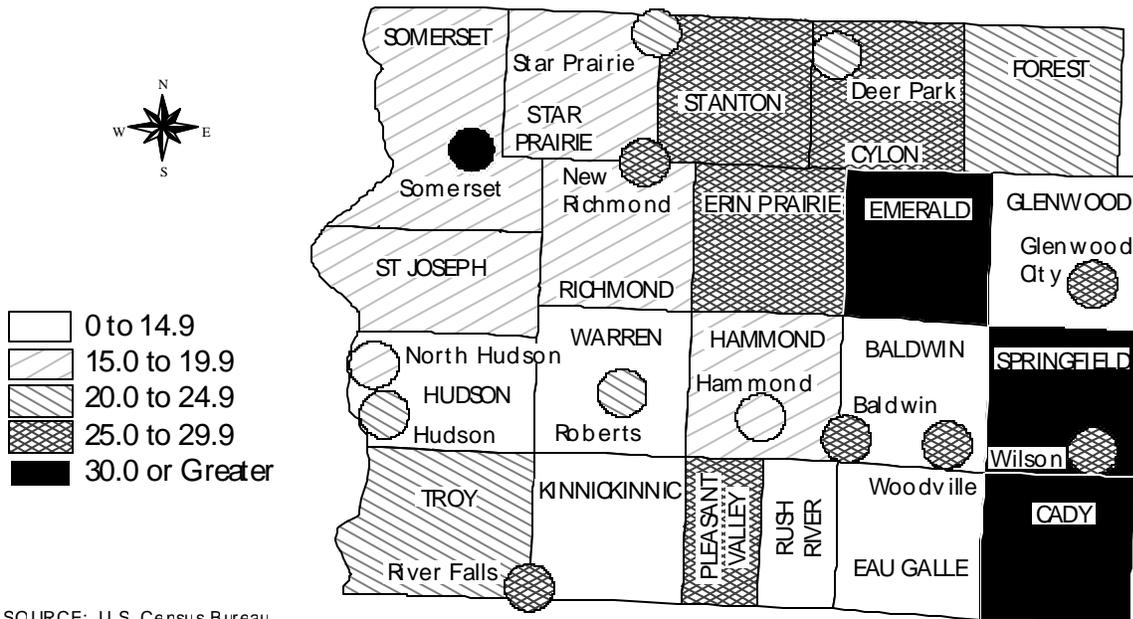
SOURCE: U.S. Census Bureau

**Percent of Renter-Occupied Households Spending 30 Percent or More Income on Housing Costs - 1990
St. Croix County**



SOURCE: U.S. Census Bureau

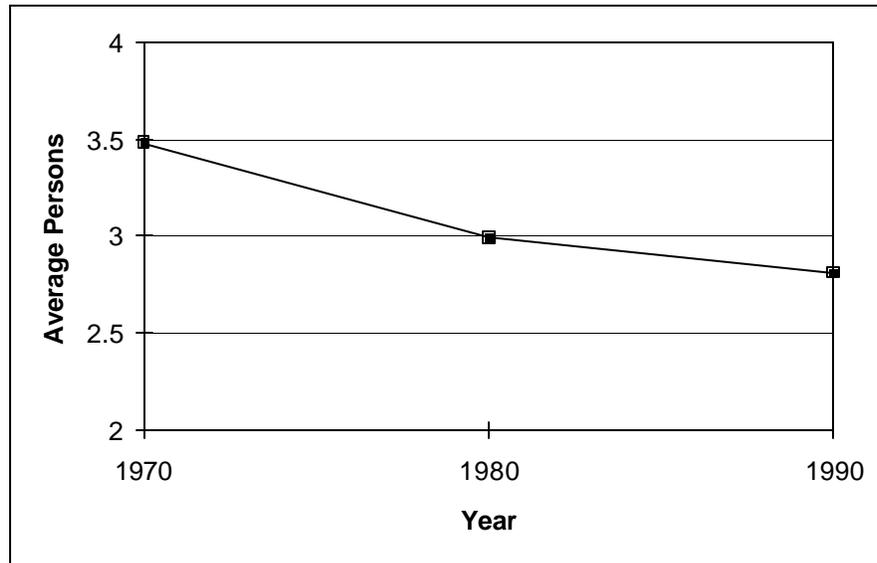
**Percent of Total Occupied Households Spending 30 Percent or More Income on Housing Costs - 1990
St. Croix County**



SOURCE: U.S. Census Bureau

HOUSING OCCUPANCY

Persons Per Housing Unit - 1970 to 1990
St. Croix County



Persons Per Housing Unit - 1970 to 1990
St. Croix County

Year	Average Persons Per Unit	Percent Change
1970	3.48	
1980	2.99	-14.1
1990	2.81	-6.0

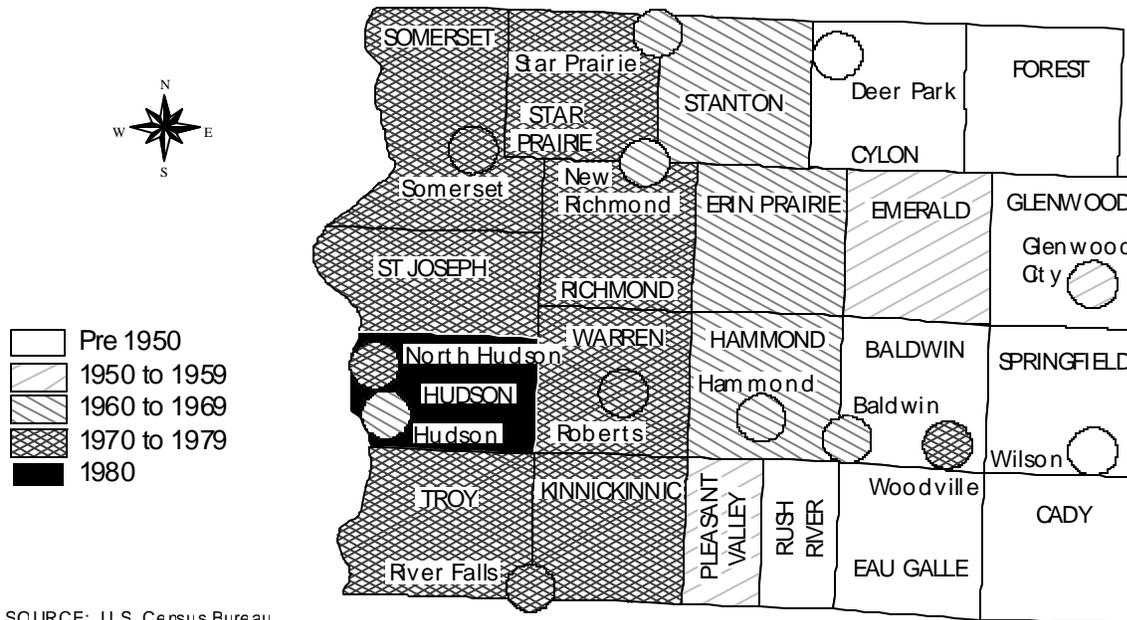
Source: U.S. Census Bureau

🏠 Persons per housing unit decreased from 3.48, in 1970, to 2.99, in 1980, and 2.81, in 1990. This is

similar to the trends nationally and in the Minneapolis-St. Paul metropolitan area.

HOUSING AGE

Median Year Housing Units Built - 1990 St. Croix County



 In 1990, based on the median year housing units were built, the oldest housing units are located in the

eastern towns, while the newest housing units are located in the western part of the county.

HOUSING PROJECTIONS

Housing Unit Projections - 1990 to 2020 St. Croix County

	Census 1990	Estimate 1995	Projection				
			2000	2005	2010	2015	2020
Population	50,251	56,002	60,655	65,446	70,235	75,022	79,805
Persons/Housing Unit	*2.81	2.71	2.67	2.63	2.58	2.54	2.50
Housing Units	18,519	20,644	22,717	24,884	27,223	29,536	31,922

*Based on total persons living in occupied housing units

Source: West Central Wisconsin Regional Planning Commission

- 🏠 Based on the population projections, the county is projected to have 31,922 housing units by the year 2020, an increase of 11,257 housing units from the 1995 estimate.
- 🏠 The average number of persons per housing unit is expected to

decrease to 2.5 persons per housing units by the year 2020.

- 🏠 It is projected that housing units will average an annual increase of approximately 450 housing units per year during the period between the years 1995 to 2020.

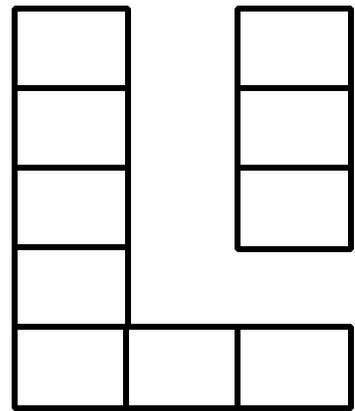
HOUSING CONCLUSIONS

Review of the changes that have occurred in the number and type of housing units over the past 20 years indicated that the towns and municipalities that are located in the western part of the county have experienced the greatest amount of development. Although, St. Croix County experienced its highest rate of growth during the 1970s, the county continued to experience significant housing development during the 1980s and into the early 1990s.

While housing growth and development during the 1970s was more intense within the towns versus the municipalities, this trend was reversed during the 1980s.

Future growth, from 1995 to 2020, in housing units is expected to average 2.2 percent annually. This growth rate is significant and will have a major impact on areas experiencing this growth and development.

TRENDS ANALYSIS



LAND USE

LAND USE

The use of land is a critical factor in managing the future growth of the county. Land use trends indicate what changes are occurring regarding type, location, and intensity of uses over time.

It's these land use changes which have to be managed in a manner which is beneficial to the residents and environment of the county.

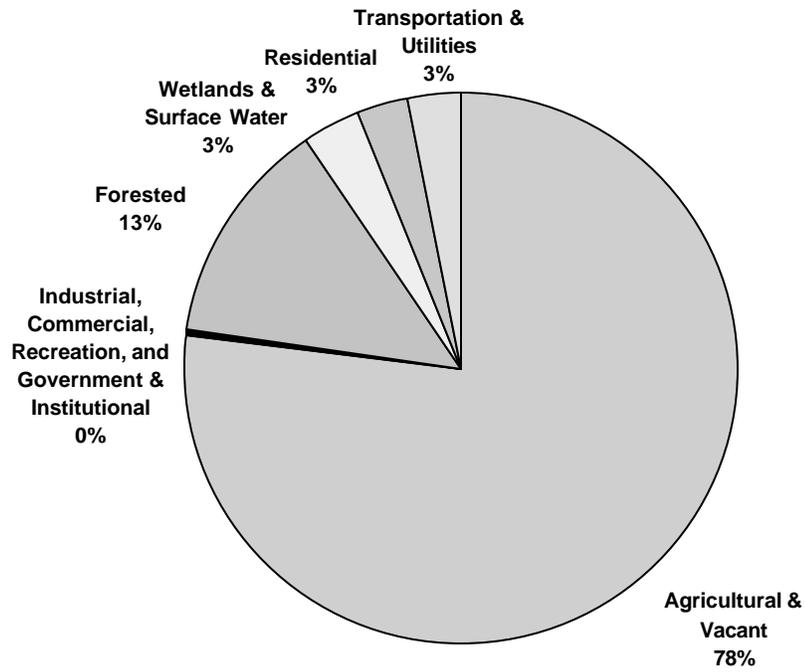
LAND USE AND LAND USE CHANGE

- In 1993, 96.5 percent of the land area in the county was unincorporated, while about four percent was incorporated.
- Agriculture is the predominant land use in St. Croix County, comprising almost 70 percent of the land acres in the unincorporated area.
- Forested land is the second largest land use at 15 percent of the land acres.
- Residential is the third largest land use, with approximately six percent of the total acreage.
- The rest of the uses comprise around nine percent of the acreage.
- Significant changes have occurred in land use in the twenty years between 1973 to 1993.
- Agriculture acreage has decreased by almost 30,000 acres, (eight percent), in the unincorporated area.

- Residential development has increased by 12,500 acres (91 percent).
- Forested acres have increased by 6,975 (11 percent).
- Transportation and utilities have increase by 3,160 acres (21.5 percent).
- Commercial acres have increased by 1,139 (532 percent).
- Recreational acres have increased by 2,841 (281 percent).
- Government and Institutional acres have increased by 259 (132 percent).
- Industrial acres have increased by 259 (64 percent).
- Wetlands and surface water acreage decreased by 4,740 acres (31.9 percent).

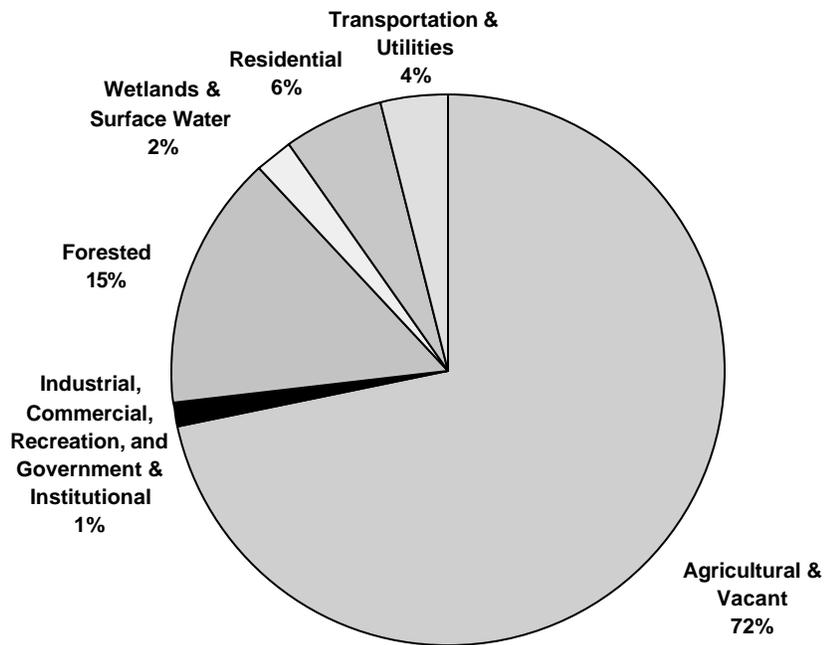
Percent of Total Land Use - 1973

St. Croix County



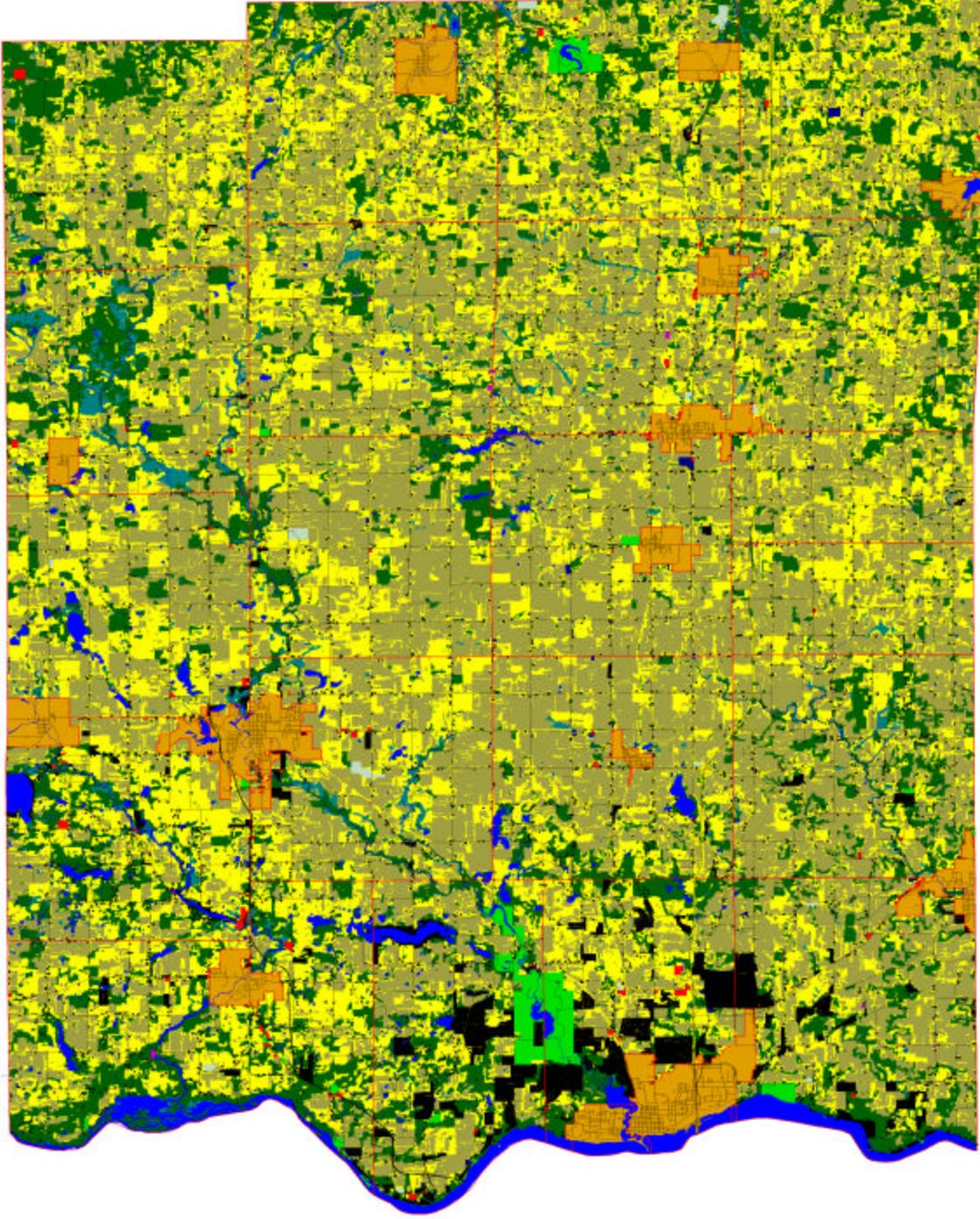
Percent of Total Land Use - 1993

St. Croix County



St. Croix County

Land Use / Land Cover - 1993



- Water Features
- 1998 Incorporated Areas
- Residential
- Commercial
- Industrial
- Government/Institutional
- Parks and Recreation
- Transportation, Utilities & Communication
- Agriculture
- Grasslands and Vacant
- Wooded Lands
- Wetlands
- 1998 Municipal Boundaries
- Highways and Roads



Between 1973 and 1993, unincorporated acres decreased 1.2 percent while incorporated acres increased 41.7 percent.

These major land use changes have occurred on the western edge of the county.

**Land Use Trends - 1973 to 1993
St. Croix County**

Land Use	Acres		Change	
	1973	1993	Number	Percent
Agriculture & Vacant	353,309	327,691	-25,618	-7.3
Forested	61,391	68,366	6,975	11.4
Residential	13,664	26,112	12,488	91.1
Transportation & Utilities	14,665	17,825	3,160	21.5
Recreation	1,010	3,851	2,841	281.3
Commercial	214	1,353	1,139	532.3
Industrial	404	663	259	64.1
Government & Institutional	195	454	259	132.8
Wetlands & Surface Water	14,871	10,131	-4,740	-31.9
Unincorporated Acres	459,723	454,905	-5,538	-1.2
Incorporated Acres	11,549	16,367	4,818	41.7

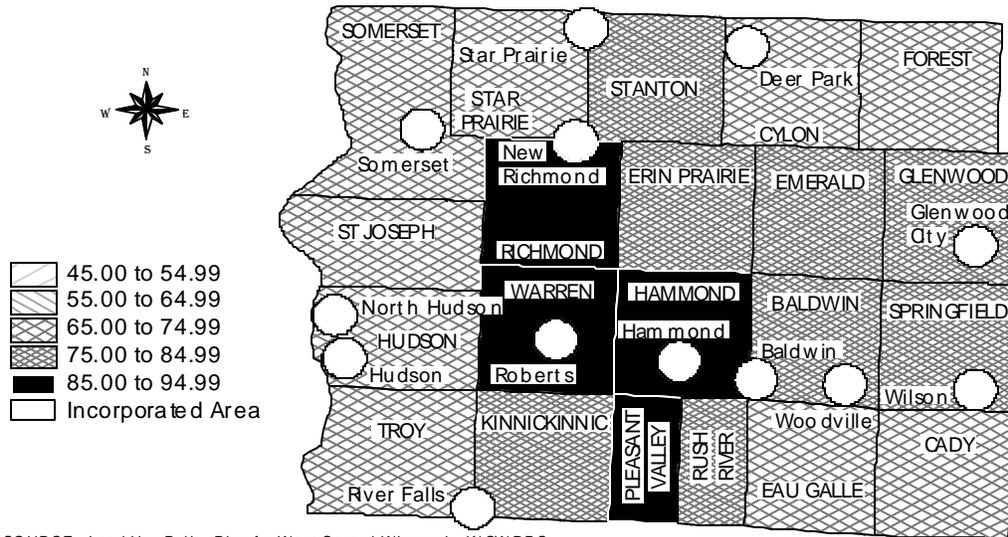
Source: *Land Use Policy Plan of West Central Wisconsin, WCWRPC*
1993 Land Use Inventory, WCWRPC

LAND USE DISTRIBUTION BY TOWNS

The distribution and intensity of land uses are characterized in the following section. Agriculture, residential, commercial, and industrial land uses, as a percent of total land use, are shown for

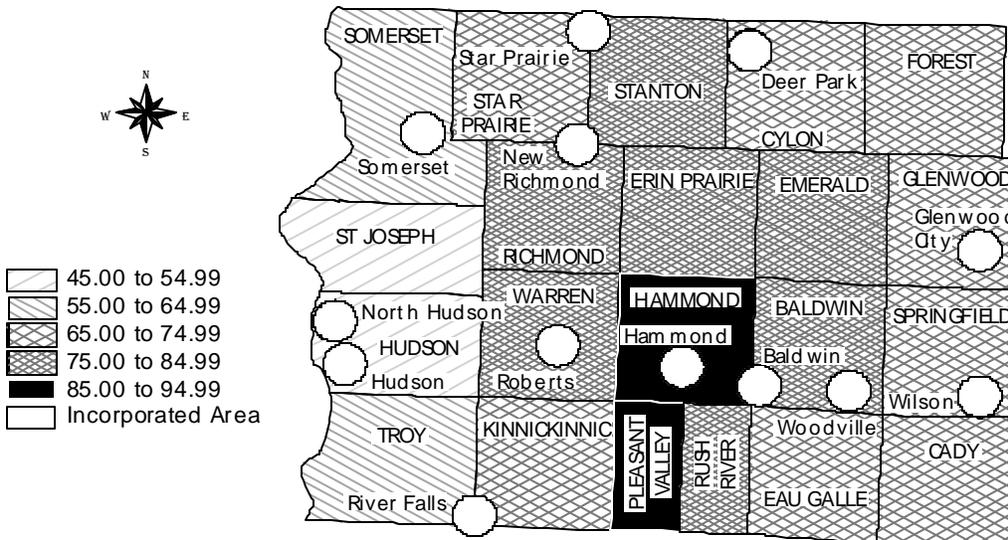
St. Croix County towns for the years 1973 and 1993. Land use data, by town, that was used in the development of this section is available for review in Volume Three, Appendices.

**Agriculture Land Use as a Percent of Total Land Use - 1973
St. Croix County**



SCURCE: Land Use Policy Plan for West Central Wisconsin. WCVRPC

**Agriculture Land Use as a Percent of Total Land Use - 1993
St. Croix County**

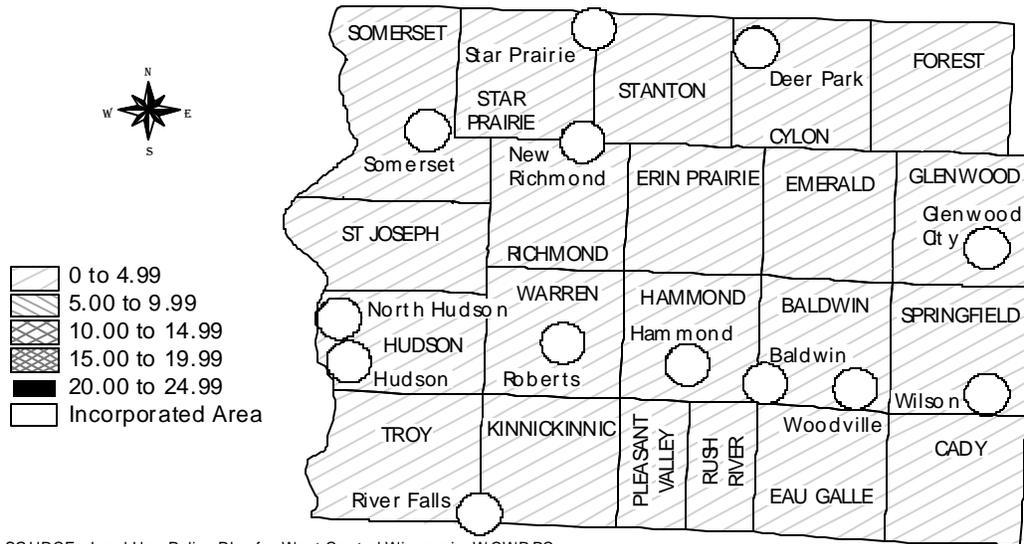


SCURCE: 1993 Land Use Inventory. WCVRPC

 The Towns of Hudson, St. Joseph, Somerset, and Troy had the greatest loss of agricultural acreage.

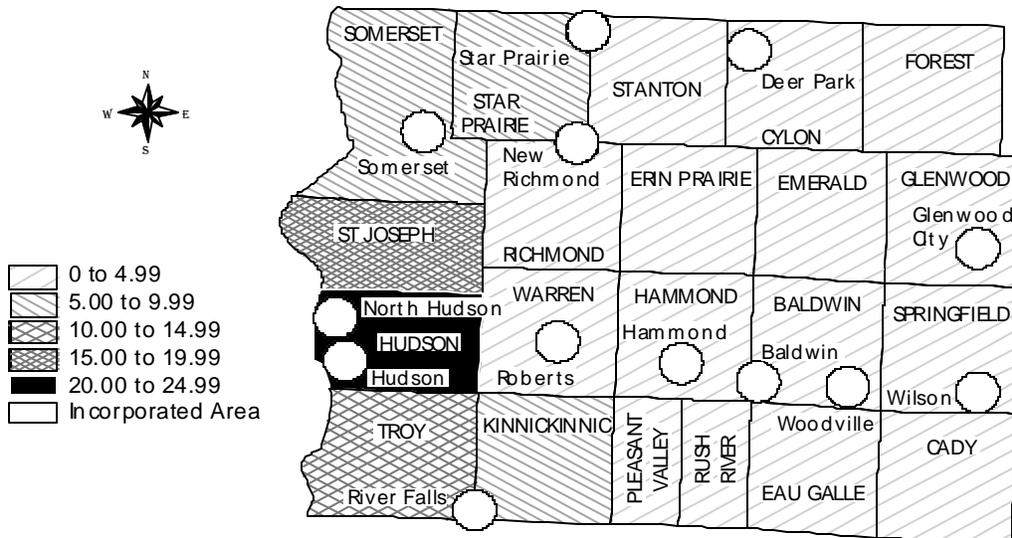
 These towns accounted for 62 percent of the loss of agricultural land from 1973 to 1993.

**Residential Land Use as a Percent of Total Land Use - 1973
St. Croix County**



SCURCE: Land Use Policy Plan for West Central Wisconsin. WCWRPC

**Residential Land Use as a Percent of Total Land Use - 1993
St. Croix County**

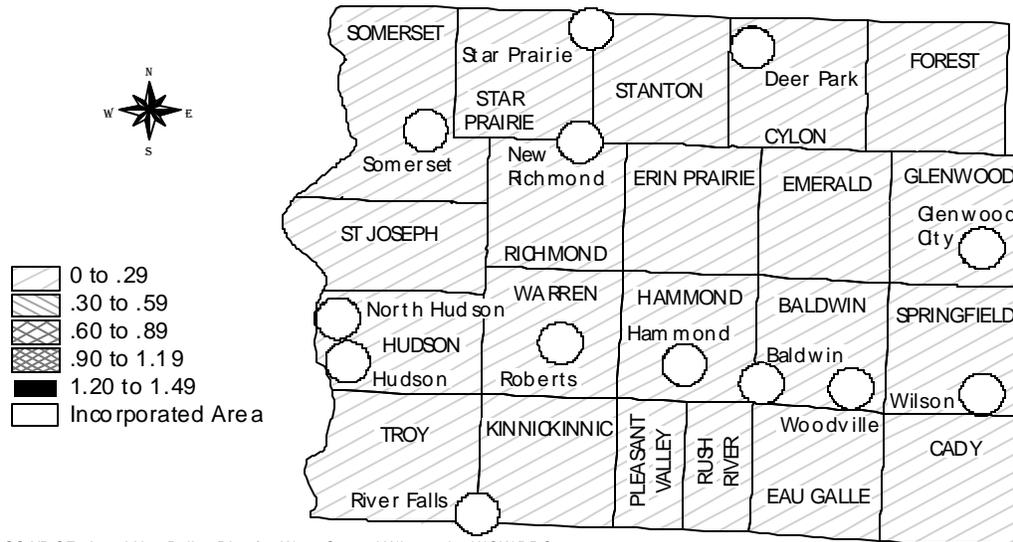


SCURCE: 1993 Land Use Inventory. WCWRPC

 The Towns of Hudson, St. Joseph, Somerset, and Troy experienced the largest increases in residential acreage from 1973 to 1993.

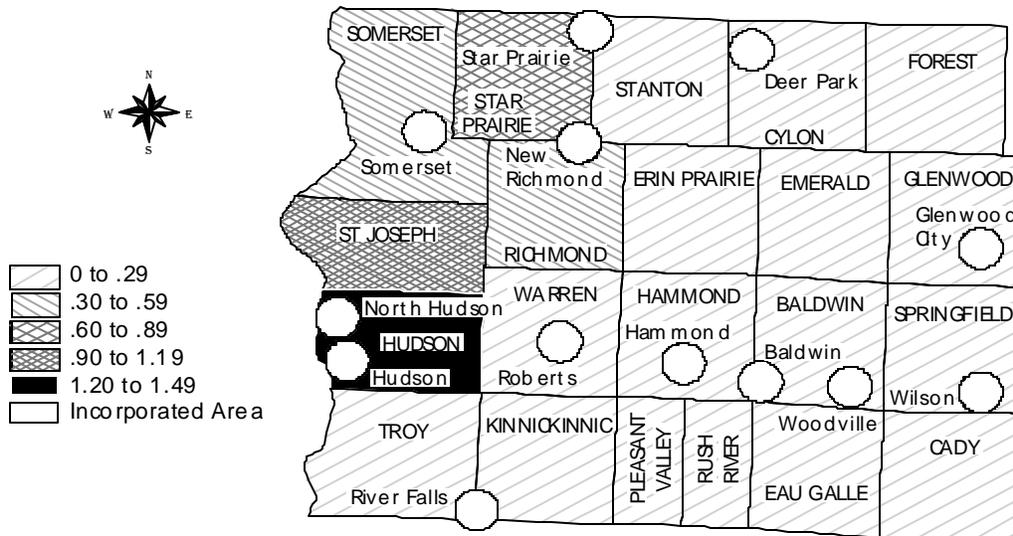
 Together, they accounted for about 72 percent of the residential growth in the unincorporated areas of the county.

**Commercial Land Use as a Percent of Total Land Use - 1973
St. Croix County**



SC URCE: Land Use Policy Plan for West Central Wisconsin. WCVRPC

**Commercial Land Use as a Percent of Total Land Use - 1993
St. Croix County**

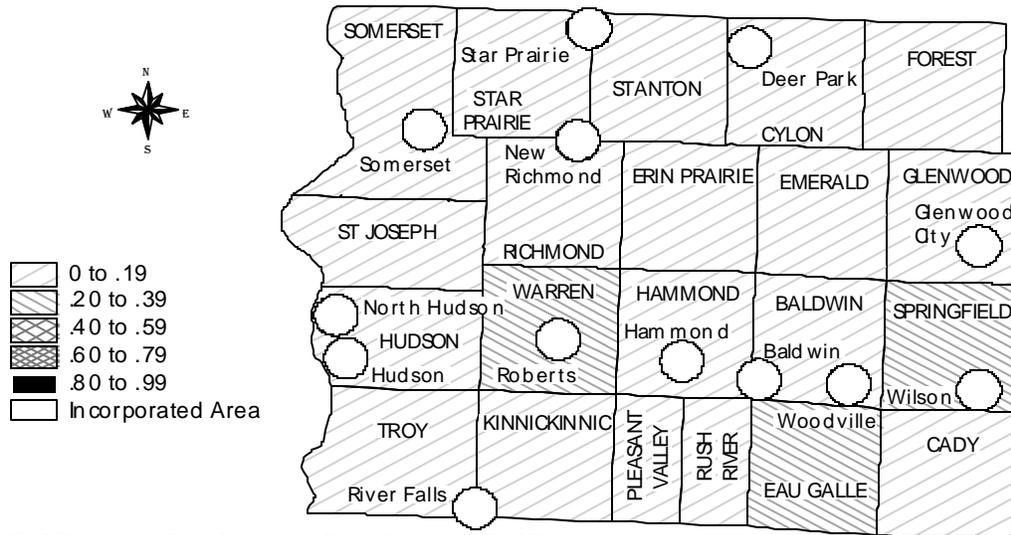


SC URCE: 1993 Land Use Inventory. WCVRPC

 The Towns of Hudson, St. Joseph, Somerset, and Star Prairie had the greatest increases in commercial acreage.

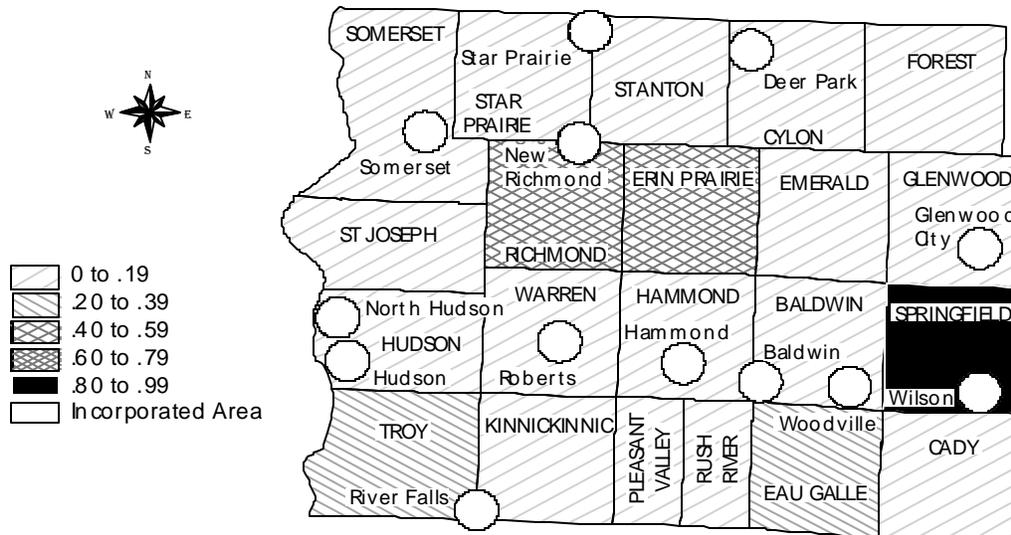
 Together, they accounted for 58 percent of the commercial acreage growth between 1973 and 1993.

**Industrial Land Use as a Percent of Total Land Use - 1973
St. Croix County**



SC URCE: Land Use Policy Plan for West Central Wisconsin, W CWRPC

**Industrial Land Use as a Percent of Total Land Use - 1993
St. Croix County**



SC URCE: 1993 Land Use Inventory, W CWRPC

The Towns of Erin Prairie, Richmond, and Springfield had the

largest increase in industrial acreage between 1973 and 1993.

LAND USE CONCLUSIONS

Changes in the growth of various land uses have had a significant impact on St. Croix County's landscape over the past twenty years. The most noticeable change in land use has occurred in the western part of the county, where agricultural land has been converted to residential use.

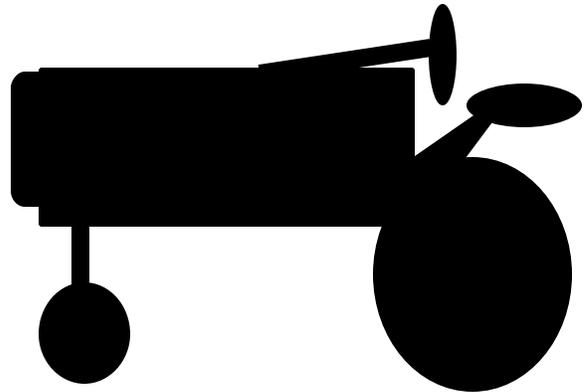
The factors that have driven this residential growth are largely

- Agriculture is the predominant land use in St. Croix County, comprising almost 70 percent of the land acres in the unincorporated area.
- Between 1973 and 1993, the acreage of residential development increased by 91 percent, while the county's population increased by 46 percent. This indicates a significant trend of land consumption.
- Much of the growth in residential land use has occurred in the western areas of the county.
- Communities in western St. Croix County are expected to experience

documented in the sections of this Trends Analysis. Given the assumptions used to generate the population projections for the plan, continued dramatic growth in residential land use is inevitable if there are no changes made to land use policies and the development framework of the county.

- continued residential development pressure, which will consume mostly agricultural lands.
- As transportation improvements are completed, additional residential and commercial development opportunities will be created.
- In western St. Croix County, agricultural land uses will continue to decline, as development pressure on these valuable lands will probably increase.

TRENDS ANALYSIS



AGRICULTURE

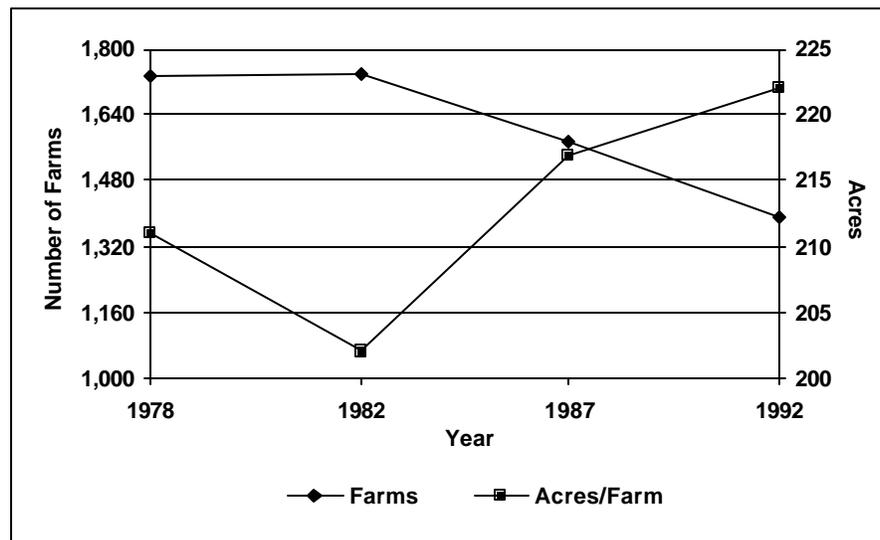
AGRICULTURE

Agriculture is an important element of the social and economic characteristics of St. Croix County. Changes in agriculture due to socio-economic conditions and the development

pressures to convert agricultural land to other uses, has caused profound impacts in St. Croix County and its communities. Several indicators point to these changes.

FARMS AND FARM SIZE

Number and Size of Farms - 1978 to 1992
St. Croix County



Source: U.S. Census of Agriculture, 1978 - 1992

Acres in Farmland - 1978 to 1992
St. Croix County

	1978	1982	1987	1992
Acres	365,832	352,472	334,028	308,460
% of County Land Area	77.9	76.2	70.9	65.5

Source: Wisconsin Agricultural Statistics, 1979-1993

-  There are 343 fewer farms in St. Croix County in 1992 as compared to 1978; a reduction of 20 percent.
-  Conversely, the average farm size has increased by ten acres.

-  Farmland acreage declined by over 57,000 acres between 1978 and 1992; a 16 percent reduction.
-  Farm acres accounted for 78 percent of the land in the county in

1978, but only 66 percent in

1992.

FARM TYPE

**Farms by Type - 1978 to 1992
St. Croix County**

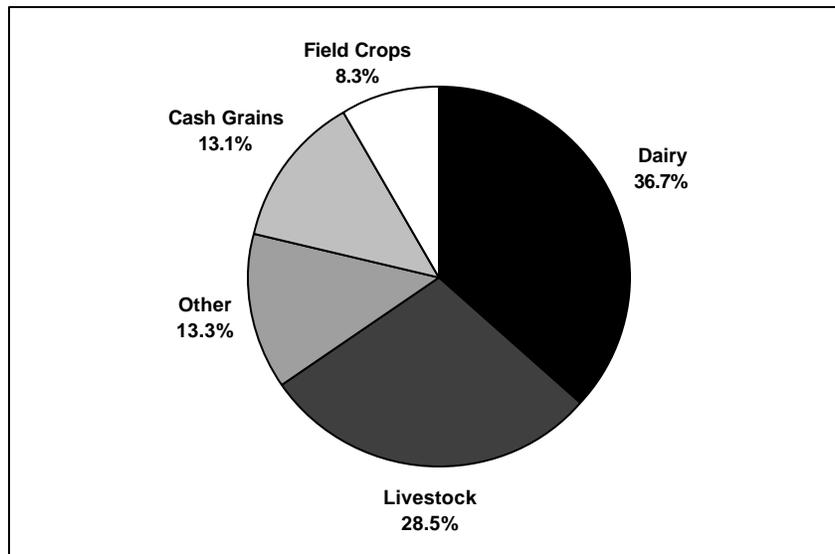
<i>Farm Type</i>	1978	1982	1987	1992	Change 1978-92
Cash Grains	264	231	226	182	- 82
Field Crops (other than cash grains)	96	83	125	115	19
Livestock	454	498	422	397	- 57
Dairy	734	762	630	511	- 223
Other	186	167	173	186	0
TOTAL	1,734	1,741	1,576	1,391	- 343

Source: U.S. Census of Agriculture, 1978 - 1992

-  Dairy farming is the predominant farm type in the county, comprising 37 percent of the farms in 1992.
-  Livestock operations accounted for 28.5 percent of the farms in the county.
-  Since 1978, cash grains, livestock and dairy farms have been reduced in numbers.

-  Dairy farms were reduced by 223, livestock operations by 63 and cash grain farms (soybeans, wheat, corn, and beans) by 82.
-  Field crop (hay, alfalfa, and potatoes) farms increased by 19.
-  Dairy farms accounted for 65 percent of the reduction in farms between 1978-1992.

**Farm Types by Percent - 1992
St. Croix County**



FARM PRODUCTION

Farm Production - 1978 to 1992 St. Croix County

	1978	1982	1987	1992
Crops (000's)				
Soybeans (bushels)	127	221	370	361
Corn for Grain/Seed (bushels)	7,015	5,019	7,269	5,876
Corn for Silage (tons)	204	283	162	211
Oats (bushels)	1,568	1,401	896	727
Hay (tons)	268	196	237	183
Milk (pounds)	415	488	527	469
Livestock (000's)				
Milk Cows	33	37	37	27
Beef Cows	6	7	5	6
Hogs and Pigs	21	20	20	12

Source: U.S. Census of Agriculture, 1978 - 1992

 Soybean production has increased significantly since 1978.

 Oats production has decreased significantly.

 Even though there are less milk cows in 1992 than 1978, milk production is up.

State Rank Comparison of Farm Products - 1995

Category	Dunn Co.	Pierce Co.	Polk Co.	St. Croix Co.
Land in Farms	7	23	22	19
Corn for Grain	14	18	25	13
Corn for Silage	22	26	23	25
Oats	16	9	31	13
Barley	27	7	10	9
Wheat	35	37	29	41
Soybeans	19	16	26	13
All Hay	19	39	30	17
Milk Production	17	30	27	25

Source: Wisconsin Agricultural Statistics - 1995

 St. Croix County consistently ranks in the top 25 counties, in

Wisconsin, in the production of many agricultural commodities.

Commodity Values (in Millions) - 1978 to 1992
St. Croix County

	1978	1982	1987	1992
Total Sales	67.0	93.7	89.2	93.6
Dairy Products	37.6	59.4	53.5	55.5
Cattle and Calves	10.4	13.9	14.0	17.8
Corn for Grain	6.8	6.8	8.6	8.6
Soybeans	NA	1.1	1.6	1.9
Oats	NA	.5	.37	.27
Hay	2.2	1.2	2.0	2.0

Source: U.S. Census of Agriculture, 1978 - 1992

 The county had total agricultural sales of almost \$94 million in 1992.

 Dairy products account for almost 60 percent of the sales.

FARM INCOME

Farm Income - 1978 to 1992
St. Croix County

	1978	1982	1987	1992
Average Sales/Farm	\$38,638	\$53,799	\$56,625	\$67,295
Average Expense/Farm	NA	NA	\$44,105	\$56,786
Net Cash Return on Ag Sales/Farm	NA	NA	\$12,230	\$12,877

Source: U.S. Census of Agriculture, 1978 - 1992

 Average agricultural sales per farm increased by about 19 percent between 1987 and 1992.

 Average expenses increased by 29 percent.

 Average net cash return increased by only five percent.

 In 1992, 41 percent of the farm operators listed another occupation other than farming as their principal occupation.

 In addition, 36 percent of the farm operators worked more than 200 days off the farm in 1992.

FARM OPERATOR CHARACTERISTICS

Farm Operator Characteristics - 1978 to 1992 St. Croix County

	1978	1982	1987	1992
Total Farms	1,734	1,741	1,576	1,391
Ownership				
Individual/Family Farms	1,537	1,505	1,346	1,193
Partnerships	167	178	175	127
Corporation-Family	23	50	51	59
Corporation-Other	1	1	2	5
Other (Coop, trust, etc.)	6	7	2	7
Male Operators	1,689	1,682	1,528	1,317
Female Operators	45	59	48	74
Average Age	48	47	49	50

Source: Wisconsin Agricultural Statistics, 1979 - 1993

-  Over 85 percent of the farms in St. Croix County are individual or family farms.
-  Less than 0.3 percent of the farms are non-family corporate farms.
-  About 95 percent of the farms are male operated.
-  The average age of farm operators was 50 in 1992.
-  According to the U.S. Census, farm population dropped from 7,170 in

1980 to 4,259 in 1990, or 41 percent.

-  In 1980, there were estimated to be 2,472 farm households, or 16.6 percent, of the total county households.
-  In 1990, there were estimated to be 1,516 farm households, or 8.6 percent, of the total county households.

AGRIBUSINESSES

-  Agribusinesses have increased in St. Croix County from 43 to 58 from 1978 to 1992.

-  Agricultural services had the largest increase in establishments from 12 to 28.

Types of Agribusinesses - 1978 to 1992
St. Croix County

<i>Type</i>	1978	1982	1987	1992
Agricultural Services	12	15	23	28
Manufacturing	9	10	10	11
Food & Kindred	8	9	9	10
Farm/Garden Machinery	1	1	1	1
Wholesale Trade	22	26	17	19
Farm Machinery/Equipment	11	15	6	6
Farm Supplies	11	11	11	13
Total Agribusinesses	43	51	50	58
Total Businesses	736	793	1,041	1,247

Source: U.S. Census, County Business Patterns, 1978 - 1992

-  In 1978, agribusinesses accounted for six percent of the total businesses in the county. In 1992, this amounted to 4.6 percent.
-  Between 1978 and 1992, agribusiness establishments grew

35 percent, while total businesses in the county grew 69 percent.

-  Farm machinery and equipment (wholesale trade) establishments declined from 11 to six.

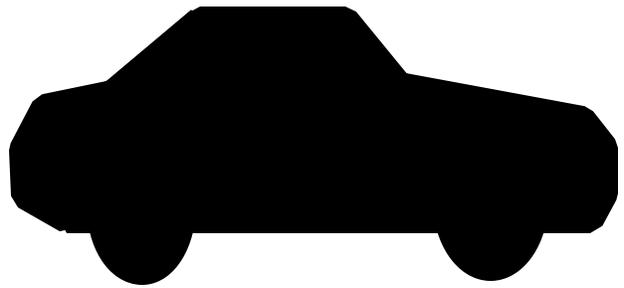
AGRICULTURE CONCLUSIONS

While agriculture is still a major contributor to the county's economy and a traditional way of life for many families, indications are that farming was a more dominant factor in the county's socio-economic situation 15 years ago. Since then, farms and the farm population have declined. Dairy farming, in particular, has declined significantly. Farmers are working other jobs to supplement their

farm income. The number of acres in farmland has decreased steadily the last 15 years.

Nonetheless, over 65 percent of the land in the county is still in farm acreage and the county ranks 19th in the State in terms of land in farms. Consequently, development policy will have to seriously take into account the impacts on agricultural lands.

TRENDS ANALYSIS



TRANSPORTATION

TRANSPORTATION

The transportation system of St. Croix County is a major factor in both promoting and sustaining the growth and development occurring in the county. A review of the county's multi-modal transportation not only confirms this

association, but also identifies the growth impacts on the transportation system. A trend analysis of this evolving transportation system provides insight into the future transportation needs of a growing St. Croix County.

AIR

- ✈ St. Croix County has one publicly owned airport located in the City of New Richmond. There is no scheduled passenger service at this facility.
- ✈ The New Richmond Municipal Airport is scheduled for design and construction of a terminal building and seaplane base in 1996 and 1997.

- ✈ The Minneapolis-St. Paul International Airport provides scheduled commercial air service.
- ✈ The Minneapolis-St. Paul International Airport will continue to provide the primary scheduled passenger air service for St. Croix County.

RAIL

-  St. Croix County is served by two railroads with east-west routes, the Union Pacific (UP) and the Wisconsin Central Limited (WCL).
-  The UP Railroad operates the former Chicago-Northwestern (CNW) mainline between Minneapolis-St. Paul and Chicago. This line serves the communities of Hudson, Roberts, Baldwin, Hammond, Woodville and Wilson.
-  The WCL Railroad operates a branch line that provides shipper connections in Minnesota and to

the east for the communities of Somerset and New Richmond.

-  The mainline connections of the UP route between Minneapolis-St. Paul and Chicago will continue to ensure rail service to communities along this route.
-  The availability of service provided by the regional WCL rail line will be more dependent upon the level of shipping generated by individual communities along this route and by access to larger rail systems to the west and east.

PUBLIC TRANSIT

-  St. Croix County contributes to the support of the River Falls Shared-Ride Taxi Service, which operates within a five-mile radius of the City of River Falls and provides approximately 24,000 rides annually.
-  The City of New Richmond also sponsors a shared-ride taxi service that operates within and outside of the city limits and provides approximately 5,000 rides annually.
-  Special transportation services for the elderly and handicapped are coordinated through the St. Croix County Department on Aging. The combined special transportation services provide approximately 43,000 rides annually.
-  The growing elderly population in St. Croix County will continue to place increasing demands on special transportation services.
-  The continued growth of the St. Croix County work force commuting to the Minneapolis-St. Paul Metropolitan Area would appear to warrant investigation of commuter transit linkages, particularly in conjunction with the development of strategically located park-and-ride lots.

BIKEWAY SYSTEM

-  St. Croix County has prepared a long-range bicycle transportation plan that proposes a bikeway system of 258 miles throughout the county.
-  The proposed bikeway system would consist of 187 miles of shared roadways, 52 miles of paved shoulders and 19 miles of bicycle paths/trails.
-  Given the increasing popularity of the use of the bicycle for recreational and commuting purposes, and combined with the population growth in St. Croix County, the county should pursue the implementation of the proposed bikeway system.

Wisconsin Railroads Map

St. Croix County Bikeway Map



TRAFFIC VOLUMES

Forty traffic count locations were evaluated for traffic volume growth between 1971 and 1994.

- 🚗 Traffic volumes at 83 percent of those locations increased from two to eight and one-half times.
- 🚗 Between 1982 and 1994, 28 locations experienced greater traffic volume rate increases, compared to 12 locations between 1971 and 1982.
- 🚗 Geographically, of the traffic count locations west of State Truck Highway (STH) 65, 43 percent of the locations experienced higher traffic volume growth rates between 1971 and 1982, while 57 percent of the locations experienced higher growth rates between 1982 and 1994.
- 🚗 East of STH 65, 16 percent of the traffic count locations experienced higher traffic volume growth rates between 1971 and 1982, while 84 percent of the locations experienced higher growth rates between 1982 and 1994.
- 🚗 State trunk highways comprised two-thirds of the sample locations, while county trunk highways comprised one-third.
- 🚗 Eight of the 10 highest traffic volume growth rate locations are on the County Trunk Highway (CTH) system.
- 🚗 Nine of the 10 highest traffic volume growth rate locations are west of STH 65.

COMMUTING PATTERNS

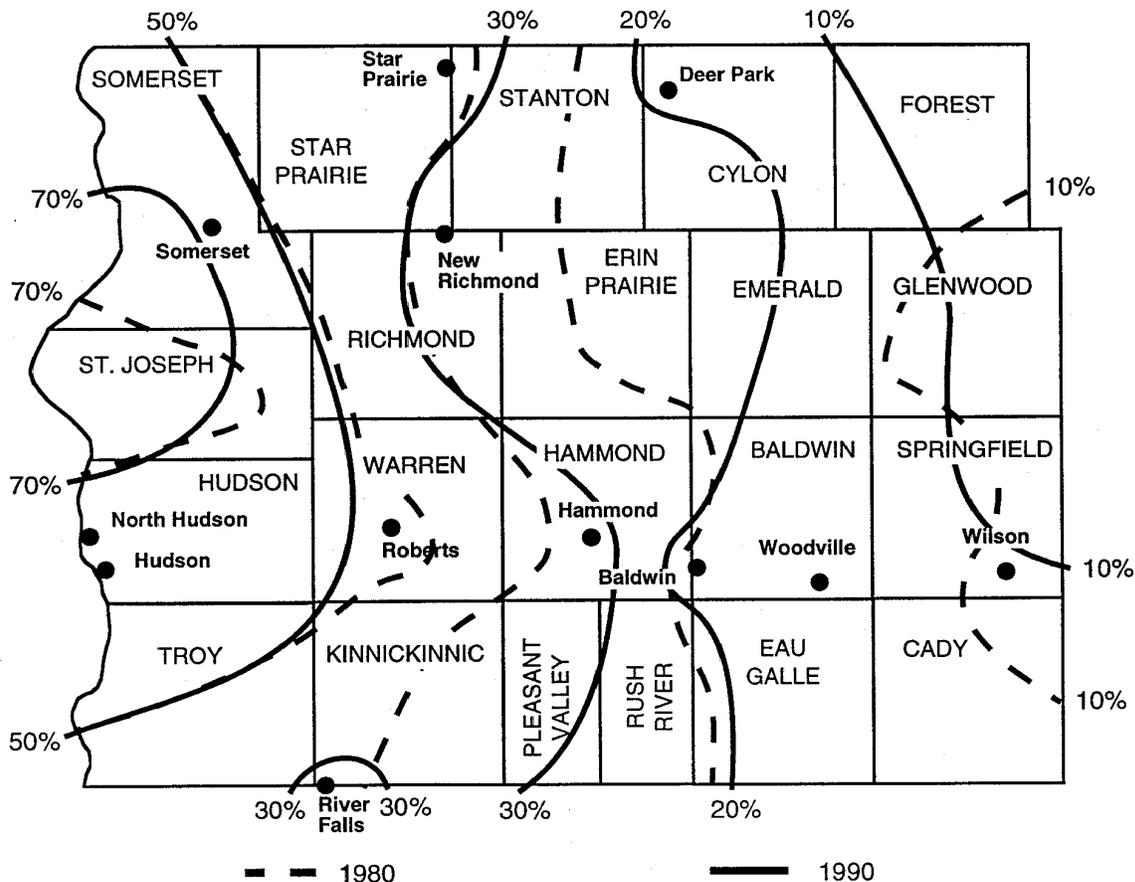
A comparison of the 1980 and 1990 commuting patterns for county residents working in the Twin Cities Metropolitan

Area indicates a continued growth in the percent of employed individuals that commute to Minnesota.

 In 1980, 31 percent of all employed persons in St. Croix County commuted to the Twin Cities for employment, while in 1990, this percentage increased to 39 percent.

 The number of persons commuting to the Twin Cities area increased by 63 percent between 1980 and 1990, while the population of the county increased by 16.2 percent during the same period.

**Minnesota Commuter Sheds - 1980 and 1990
St. Croix County**



SOURCE: U.S. Census Bureau

1994 AADT Map

20-Year Traffic Volume Forecast Map

HIGHWAY INVESTMENTS

Highway projects that are currently programmed by State and County Highway Departments to address

- Major projects totaling \$160.6 million include the Stillwater Bridge, STH 35/64 (Houlton to New Richmond), STH 35 (I-94 to River Falls), the STH 35 and USH 12 interchanges with I-94, and the I-94 westbound bridge expansion. All of these projects are located in the high growth area on the county's west side.
- WisDOT's six-year highway improvement program identifies an additional \$21.7 million in highway improvements for St. Croix County from 1996 to 2001. About 43

highway improvement needs reflect a substantial investment in the highway infrastructure in the county.

percent of these expenditures are directed at highway improvements to the west of STH 65.

- The St. Croix County Highway Department's six-year highway improvement program identifies an additional \$9.1 million for countywide highway work to be performed between 1995 and 2000. Approximately 26 percent of these programmed expenditures are directed at highway improvement needs in the western one-third of the county.

TRAFFIC FORECASTS

Traffic volume forecasts for selected highway improvement projects indicate

- The traffic forecast for the I-94 bridge expansion is projected to accommodate 81,300 vehicles per day in 2017.
- The traffic forecast for the Stillwater Bridge, together with the existing lift bridge, is 36,975 vehicles per day in 2017.
- Traffic volume forecasts for the STH 35/64 project predict a 33 percent to 77 percent increase in daily traffic between Houlton and New Richmond, and a 44 percent

the following growth in traffic volumes over the next 20 years.

increase in daily traffic on STH 64 east of New Richmond. Traffic volumes on STH 35 (south to Hudson) and CTH E (easterly) are projected to increase 141 percent and 374 percent, respectively, by 2017.

- Traffic volume forecasts for the STH 35 project (I-94 to River Falls) predict an increase in daily traffic of 129 percent to 231 percent from River Falls to I-94 in 2018. This traffic forecast assumes the

development of the large industrial park west of STH 35 and south of I-94.

- 🚗 Traffic volume forecasts associated with the reconstruction of the STH 35 and USH 12 interchanges with I-94 predict traffic increases of 50 percent and 70 percent on I-94 east of USH 12 and west of STH 35, respectively, in 2017. Traffic volumes on USH 12 to the north are projected to increase by 64 percent during this period.
- 🚗 The highway system serving St. Croix County and linking it with the Minneapolis-St. Paul Metropolitan Area will continue to be a major factor influencing growth and development in the county.
- 🚗 Programmed highway improvements will continue to increase traffic volumes by providing improved access to the

Twin Cities Area. This will also place greater demands on the local road system.

- 🚗 The county trunk highway system, which serves as a collector road network, will continue to experience high traffic volume growth rates as development patterns continue to move easterly in the county. This will require increased highway expenditures to maintain and upgrade the rural highway system.
- 🚗 The continued growth in the commuting work force may warrant investigation into the establishment of a commuter transit system to lessen the impact of the growing traffic volumes.
- 🚗 Management of land use and transportation facilities can better protect highway and infrastructure investments.

TRANSPORTATION CONCLUSIONS

The transportation system in St. Croix County will continue to be a significant influence on the growth and development patterns in the county. The highway network, in particular, plays the dominant role in the movement of people and goods and, as such, receives the lion's share of attention with regard to public investment in its maintenance and operation. The current level of programmed highway funding attests to the importance of the highway system and its relationship to the local and state economy. The changing character of the county from rural to urban and suburban reflects the relationship between the transportation system and development patterns.

However, the continuous cycle of *transportation improvements -- promoting development -- requiring more transportation improvements -- promoting more development*, must eventually reach a balance in order for both to operate efficiently and cost-effectively. The public today is requiring more from their investment in their personal choices, as well as their investment in public infrastructure needs. The growth management issues that St. Croix County is faced with will undoubtedly require consideration of best management practices not only for the public transportation facilities, but also for the development served by those facilities.

TRENDS ANALYSIS



RECREATION

RECREATION

Leisure time is an important component of people's lifestyles, whether they live in urban centers or sparsely-populated rural regions of the country. Shorter working hours, more disposable income, earlier retirement, and longer life spans have led to an increased demand for leisure-time activities, including outdoor recreation. As more and more people participate in outdoor activities, the increased pressures on existing recreational

facilities may endanger the environmental qualities that residents and non-residents are attracted to in the first place. Consequently, there is a need to provide for increasing recreational demand, while at the same time protecting and enhancing natural resources for future generations.

St. Croix County, presently, has a diversified recreational system, including land and water-based resources.

-  St. Croix County has three county parks totaling 726 acres. It also owns 59 acres along the Apple River.
-  The county owns a seven-mile recreational trail running from the Village of Woodville to the St. Croix County line.
-  There are 163 miles of maintained and groomed snowmobile trails throughout the county.
-  The county has designated 185 miles of county roadway as bicycle routes. The county has a bicycle facilities plan.
-  There are approximately 40 miles of designated cross-country ski trails in St. Croix County.
-  There has been created approximately 36 miles of hiking trails in county and community parks.

-  St. Croix County has 196 public and 1,236 private camping sites at eleven campgrounds.
-  There are approximately 10,273 acres of public hunting land in St. Croix County.
-  There are 13 public and private golf courses in the county.
-  There are 7,615 surface acres of fishing lakes and 80.9 miles of trout streams in St. Croix County.
-  There are 15 named lakes and flowages and 27 trout streams in St. Croix County.
-  Only four bodies of water can accommodate water skiing, large pleasure boats or sail boats. These are: Bass Lake, Cedar Lake, Lake Mallalieu and Lake St. Croix and the St. Croix River.

-  There are a limited number of swimming beaches in St. Croix County due to the size and quality of many of the lakes and streams in the county.
-  All cities and villages and several towns provide community recreational facilities.
-  St. Croix County's Apple River is a popular spot for tubing.

-  Canoeing is popular on the Apple, Willow and St. Croix Rivers.
-  There is one federal recreation area (Eau Galle) and one state park (Willow River) in St. Croix County.
-  St. Croix County completed a county recreation plan in 2000. The plan is a detailed analysis of the county recreation system, including proposed improvements.

RECREATION CONCLUSIONS

With the population of St. Croix County continuing to grow and the socio-economic trends leading to an increased demand for leisure-time activities, the demand on the existing recreational facilities will increase. According to the *St. Croix County Outdoor Recreation Plan*, there are

capacity, access, equipment and maintenance problems that will need to be addressed in the future. The challenge will be to provide quality recreational opportunities, while preserving the county's natural resources.

TRENDS ANALYSIS



AIR QUALITY

AIR QUALITY

The quality of air in St. Croix County is important for the health and enjoyment of present and future generations. Air quality is also important in maintaining a diverse and healthy environment for all living things in the county.

Wisconsin's air quality varies in different areas of the state. Location in relation to prevailing weather, physical geography and human development patterns all contribute to an area's air quality circumstances.

The 1994 Air Monitoring Program of the Wisconsin Department of Natural Resources analyzes the air for ozone, sulfur dioxide, total suspended particulates, fine particulates, carbon monoxide, lead and nitrogen dioxide. All of these compounds are known to irritate or distress normal lung function and can affect human health and activity.

In 1994, St. Croix County had a State and Local Air Monitoring Station testing for ozone and Special Purpose Monitoring Sites testing for sulfur dioxide and carbon monoxide.

 The Somerset site tested for ozone for five years from 1990 to 1994. During this time, ozone levels never exceeded the National Ambient Air Quality Standard. And, in 1994, this station never detected ozone exceeding two-thirds of the standard.

Monitoring stations were established in the City of Hudson to measure sulfur dioxide emissions from the Allen King

Power Plant located in Bayport, Minnesota, and to measure carbon monoxide emissions at a site located at the intersection of Carmichael and Stage Line Roads.

 There were no elevated levels of sulfur dioxide detected in the Hudson area, and monitoring at this site was discontinued in April 1995.

 The site established to monitor carbon monoxide emissions has never detected elevated levels. In 1994, carbon monoxide levels at this site were one-third of the maximum standard.

A Special Purpose Monitoring Site for carbon monoxide was also established near the Village of Luck in Polk County. This site was established to provide background carbon monoxide concentrations for rural areas in Wisconsin.

 The maximum standard for carbon monoxide is about seven times the background level observed at Luck.

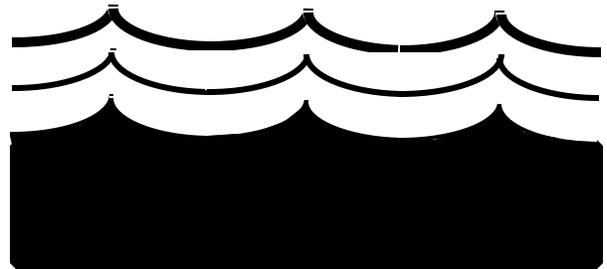
 The St. Croix County site observed carbon monoxide levels only about two times this background level.

The non-attainment areas of air quality standards associated with Minneapolis and St. Paul are seen as resulting from large concentrations of automobiles, industry, and urban structures and facilities. Across the St. Croix River from St. Croix County, most

of Washington County is in a non-attainment area for carbon monoxide. However, because of measures taken by the State of Minnesota, Washington County has reduced the number of times that it has exceeded the carbon monoxide air quality standard.

Air quality problems associated with large urban areas, such as Minneapolis-St. Paul, should not affect St. Croix County in the foreseeable future, even with its anticipated growth and development. It is probable that there will be no major air quality problems in St. Croix County for the next 20 years.

TRENDS ANALYSIS



WATER QUALITY

WATER QUALITY

The quality of water in St. Croix County is very important to the economic, social and recreational interests of its residents, businesses and

visitors. The following characteristics generally describe the water quality of surface and subsurface water in the county.

GROUNDWATER

 All of the potable water in St. Croix County is groundwater.

 The principal sources of this supply are the sand and gravel aquifer and the sandstone aquifer.

 The source of all groundwater is precipitation. Between one and ten inches of precipitation per year infiltrates and recharges the groundwater reservoir.

 The sandstone aquifer underlies all of St. Croix County and is the principal source of water for residential, municipal and industrial supplies.

 The quality of groundwater in St. Croix County is generally good.

However, some water has chemical characteristics that make it objectionable or unsuitable for domestic or industrial uses.

 Groundwater in St. Croix County is classified as hard or very hard due to the presence of calcium and magnesium.

 Iron and manganese are found in water from all of St. Croix County's aquifers. Concentrations greater than the recommended limits are common.

 Nitrate concentrations in the water are localized, but are becoming more of a problem in the county.

SURFACE WATER

 In general, water quality in the St. Croix and Lower Chippewa River Basins is good to excellent.

 The streams and rivers in the county meet fish and aquatic life and recreational use standards. Several of them are classified as trout waters.

 Lakes and impoundments in St. Croix County range from mesotrophic (having a moderate amount of nutrients) to eutrophic (nutrient rich and often seasonally deficient in oxygen), in nature, with some affected by weed and algae growth and sedimentation.

CONDITIONS BY WATERSHED

KINNICKINNIC RIVER



The Kinnickinnic River is classified as an outstanding resource water and is considered one of the most outstanding Class I trout streams in the state.



Water quality and aquatic habitat in the streams are threatened by non-point source pollution from agricultural land use, urban development and rural residential development.



Urban development in and around River Falls continues to increase the amount of untreated urban storm water runoff discharged to the Kinnickinnic River.



The segment of the watershed in St. Croix County is increasingly threatened by nutrient input. This portion of the river also has a fish consumption advisory for PCB and mercury contamination in fish tissue.

LOWER WILLOW RIVER



The segment of the St. Croix River in the Lower Willow River watershed is classified as an outstanding resource water upstream from Hudson.



This portion of the river has a fish consumption advisory for PCB and mercury contamination in fish tissue.



Recent water quality and fish surveys in the Willow River indicate that non-point source pollution is degrading water quality.



Dissolved oxygen, phosphorus and ammonia levels are specific concerns in the Willow River.

UPPER WILLOW RIVER



Issues in the Upper Willow River Watershed include sedimentation, groundwater contamination by

surface water entering through sink holes and livestock waste entering streams.

LOWER APPLE RIVER



This watershed should be considered a high priority for protection from degradation by non-point source water pollution.



The Apple River is a high value, warm water stream. The river is affected by non-point source pollution primarily from agriculture, although residential development is increasing.

EAU GALLE RIVER



The effects of polluted runoff from barnyards and feedlots, stream bank grazing and flooding threaten the many trout streams in the watershed.



Stream bank and hillside grazing and runoff from barnyards threaten Cady Creek.



The Eau Galle River is threatened by turbidity, natural erosion and stream bank grazing.

WILSON CREEK



Wilson Creek supports excellent brown trout populations. Ditching and stream bank pasturing are

contributing to the degradation of water quality in the creek.

SOUTH FORK HAY RIVER



Glen Lake experiences algae bloom and traps sediments originating from streams feeding into it.

LAKES



Lake St. Croix is a wide area in the St. Croix River and receives very heavy recreational usage. It is considered a eutrophic lake and a priority is to reduce phosphorus levels in the lake.



Bass Lake is a high quality mesotrophic lake. There are concerns over development pressure and its affect on lake water quality.



Little Falls Lake is the large impoundment in Willow River State Park. Limited water quality data exists for Little Falls Lake. Sedimentation is a problem in the upper end of the lake.



Pine Lake (Somerset) is a highly eutrophic lake caused primarily by agricultural use.



Cedar Lake has a long history of nuisance algae blooms due to internal nutrient recycling and runoff.



Mallalieu Lake, an impoundment on the Willow River at the confluence of the St. Croix River, is hypereutrophic. The lake has very poor water clarity and high levels of nutrients and algae. Eurasian water milfoil occurs in the lake.



Perch Lake has excellent water clarity and a diverse aquatic plant community. Potential rural residential development in the watershed and shoreline threatens the lake's ecosystem.



Pine Lake (Baldwin) has excellent water quality.



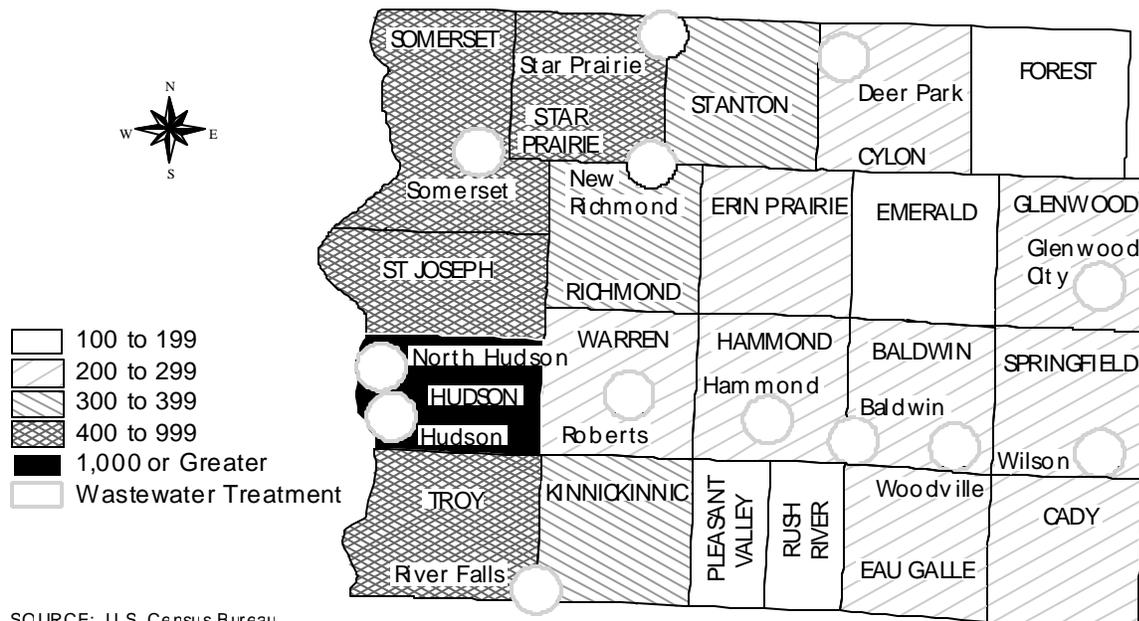
Squaw Lake experiences hypereutrophic conditions, including nuisance growths of filamentous algae, severe blue-green algae blooms and frequent winterkill.



Glen Lake experiences algae blooms and trap sediments originating from streams feeding into it.

ISSUES AFFECTING WATER QUALITY

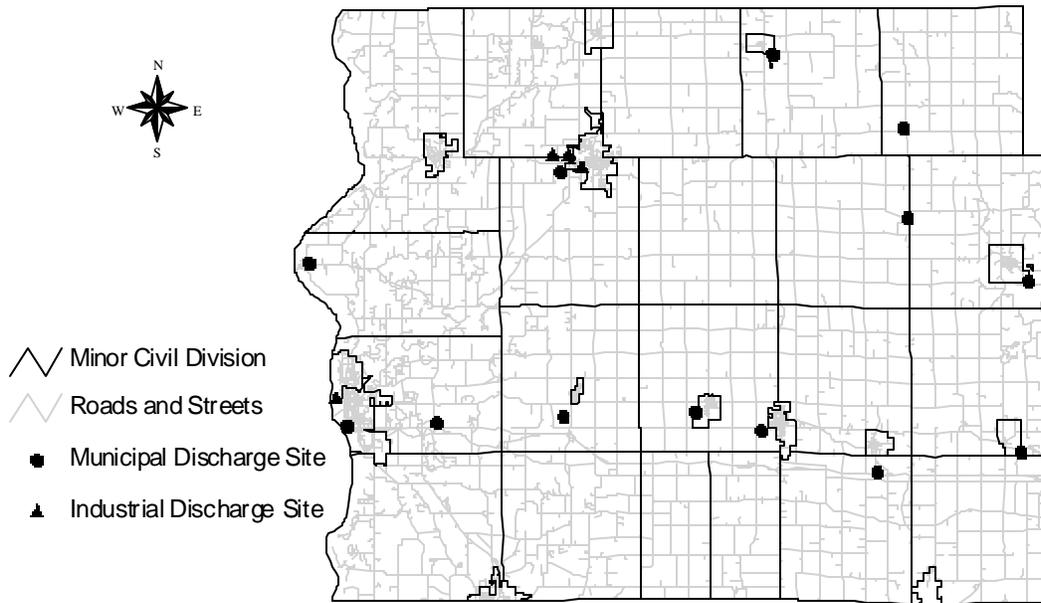
Number of Private Septic Systems by Town – 1990 St. Croix County



-  There are 13 municipal or sanitary district wastewater treatment plants that discharge to either surface or groundwater in the county.
-  There are four permitted industrial discharges in St. Croix County.
-  Efforts should continue to ensure effluent limits are being met and operation and maintenance are adequate to protect the waters of the county.
-  There are 8,631 (303 in incorporated areas) private sewer systems in the county as of 1990. This is an increase of 1,673, or 24 percent, since 1980 (U.S. Census).

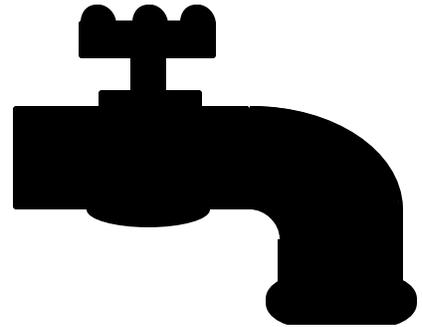
-  The increased number and density of private sewer systems can lead to nitrates in the groundwater.
-  Along with rural residential development come problems such as storm water control and soil erosion.
-  Increased lakeshore development has occurred in St. Croix County, causing increased runoff into the lakes, which can lead to water quality degradation.
-  Agricultural runoff into the lakes and streams of the county has contributed to the degradation of water quality in areas.

**Industrial Discharge Sites
St. Croix County**



SOURCE: Wisconsin Department of Natural Resources

TRENDS ANALYSIS



PUBLIC FACILITIES AND SERVICES

PUBLIC FACILITIES AND SERVICES

Review of the public facilities and services in St. Croix County will include an inventory of available facilities and services and identify those that may experience growth pressures in the next

few years. This information will provide an understanding of the impacts of growth and development on the public infrastructure.

PUBLIC WATER SERVICE

Public Water Systems and Capacities St. Croix County

MUNICIPALITY	NO. OF WELLS	MAXIMUM PRODUCTION (GPD)	MAXIMUM CONSUMPTION (GPD)	AVERAGE CONSUMPTION (GPD)	STORAGE CAPACITY	YEAR REPORTED
Baldwin	2	2,304,000	358,000	245,000	300,000	1990
Glenwood City	2	1,900,000	304,000	100,000	238,000	1991
Hammond	2	1,044,000	246,000	87,390	200,000	1991
Hudson	5	4,881,600	3,270,000	1,218,000	2,000,000	1992
New Richmond	4	4,852,800	1,589,000	660,000	550,000	1988
North Hudson	The City of Hudson supplies all water.					
River Falls	4	5,364,000	2,160,000	1,040,000	1,500,000	1991
Roberts	2	1,008,000	168,000	73,700	250,000	1994
Somerset	2	2,376,000	261,000	149,300	200,000	1991
Star Prairie	1	460,000	127,000	58,730	50,000	1992
Wilson	1	432,000	NA	8,200	60,000	1991
Woodville	2	1,220,000	113,000	68,000	75,000	1994

Source: Wisconsin Department of Natural Resources, Sanitary Survey Reports

Public Water System Capabilities St. Croix County

MUNICIPALITY	PERCENT OF MAXIMUM CONSUMPTION VS. MAXIMUM PRODUCTION	PERCENT OF AVERAGE CONSUMPTION VS. MAXIMUM PRODUCTION
Baldwin	15.5	10.6
Glenwood City	16.0	5.3
Hammond	23.6	8.4
Hudson	67.0	25.0
New Richmond	32.7	13.6
North Hudson	See City of Hudson	
River Falls	40.3	19.4
Roberts	16.7	7.3
Somerset	11.0	6.3
Star Prairie	27.6	12.8
Wilson	NA	1.9
Woodville	9.3	5.6

Source: Wisconsin Department of Natural Resources, Sanitary Survey Reports

 St. Croix County has 11 public water systems serving 12 cities and villages.

 Based on the information from the year reported, all public water systems appear to have adequate production capabilities.

 The greatest percent of average daily consumption versus maximum

daily production was for the City of Hudson, 25 percent, followed by the City of River Falls, 19.4 percent.

 The greatest percent of maximum daily consumption versus maximum daily production was also for the City of Hudson, 67 percent, followed by the City of River Falls, 40.3 percent.

PUBLIC WASTE WATER SERVICE

**Public Waste Water Systems and Capacities
St. Croix County**

MUNICIPALITY	AVG. MONTHLY DESIGN CAPACITY		AVG. MONTHLY USAGE	
	FLOW (GPD)	BOD LOADING (LBS./DAY)	FLOW (GPD)	BOD LOADING (LBS./DAY)
Baldwin	392,000	760	315,000	613
Deer Park	30,000	51	47,000	69
Glenwood City	262,000	373	186,000	131
Hammond	154,000	341	85,000	209
Hudson	1,100,000	2,400	871,000	1,283
New Richmond	846,000	2,025	591,000	1,102
North Hudson	The City of Hudson treats all wastewater.			
River Falls	1,800,000	3,152	830,000	1,606
Roberts	135,000	262	66,000	151
Somerset	150,000	302	118,000	165
Star Prairie	50,000	85	47,000	47
Wilson	24,000	55	18,000	36
Woodville	200,000	417	74,000	132

Source: Wisconsin Department of Natural Resources, Compliance Maintenance Annual Reports 1994

 St. Croix County has 12 public wastewater treatment systems providing service to 13 cities and villages.

 There are also other private wastewater treatment systems, as

well as private septic systems, serving residents and businesses operating throughout the county.

**Public Waste Water System Capabilities
St. Croix County**

MUNICIPALITY	PERCENT OF AVERAGE FLOW VS. DESIGN CAPACITY	PERCENT OF AVERAGE BOD VS. DESIGN CAPACITY
Baldwin	80.4	80.7
Deer Park	156.7	135.3
Glenwood City	71.0	35.1
Hammond	55.2	61.3
Hudson	79.2	53.5
New Richmond	69.9	54.4
North Hudson	See City of Hudson	
River Falls	46.1	51.0
Roberts	48.9	57.6
Somerset	78.7	54.6
Star Prairie	94.0	55.3
Wilson	75.0	65.5
Woodville	37.0	31.7

Source: Wisconsin Department of Natural Resources,
Compliance Maintenance Annual Reports 1994



In 1994, two of the 12 public waste water systems either exceeded, or were within 90 percent, of their designed flow or

Biochemical Oxygen Demand (BOD) capacities. An additional five of the systems were between 70 percent to 89 percent.

ROADS AND STREETS

**Roads and Streets by Jurisdiction and Classification - 1994
St. Croix County**

ROADWAY CLASSIFICATION	TOWNS	CITIES/ VILLAGES	TOTAL
Interstate	30.07	1.39	31.46
State Trunk	135.39	14.90	150.26
County Trunk	336.81	10.36	347.17
Local	965.14	159.21	1124.35
Total	1467.41	185.86	1653.27

Source: Wisconsin Department of Transportation, Town Plat Records, 1994



St. Croix County has a total of 1,653.27 miles of road and streets.



Of the total miles of roads, 1,467.41 miles (88.8 percent) are comprised of town roads, and 185.86 miles (11.2 percent) are comprised of roads located within city and village limits.



Of the total miles of roadways, 31.46 miles (1.9 percent) are classified as interstate highways, 150.29 miles (9.1 percent) are classified as State Trunk Highways, 347.17 miles (21 percent) are classified as County Trunk Highways, and 1,124.35 miles (68

percent) are classified as local roads and streets.

SCHOOLS

Public School Enrollment - School Years 1989-90 and 1994-95 St. Croix County

SCHOOL DISTRICT	SCHOOL YEAR 1989-90		SCHOOL YEAR 1994-95		PERCENT CHANGE
	ENROLLMENT	% OF TOTAL	ENROLLMENT	% OF TOTAL	
Amery	1,715	10.8	1,836	10.4	7.2
Baldwin-Woodville	1,163	7.3	1,289	7.3	10.8
Clear Lake	674	4.3	718	4.1	6.5
Glenwood City	825	5.2	842	4.8	2.1
Hudson	3,051	19.2	3,472	19.7	13.8
New Richmond	2,173	13.7	2,361	13.4	8.7
Osceola	1,255	7.9	1,499	8.5	19.4
River Falls	2,561	16.2	2,816	16.0	10.0
Saint Croix Central	937	5.9	1,035	5.9	10.5
Somerset	811	5.1	965	5.5	19.0
Spring Valley	691	4.4	768	4.4	11.1

Source: Wisconsin Department of Public Instruction, Information Series Items #90-5 and #95-5

A* St. Croix County includes all or part of 11 school districts, six of which are headquartered in the county. These districts include:

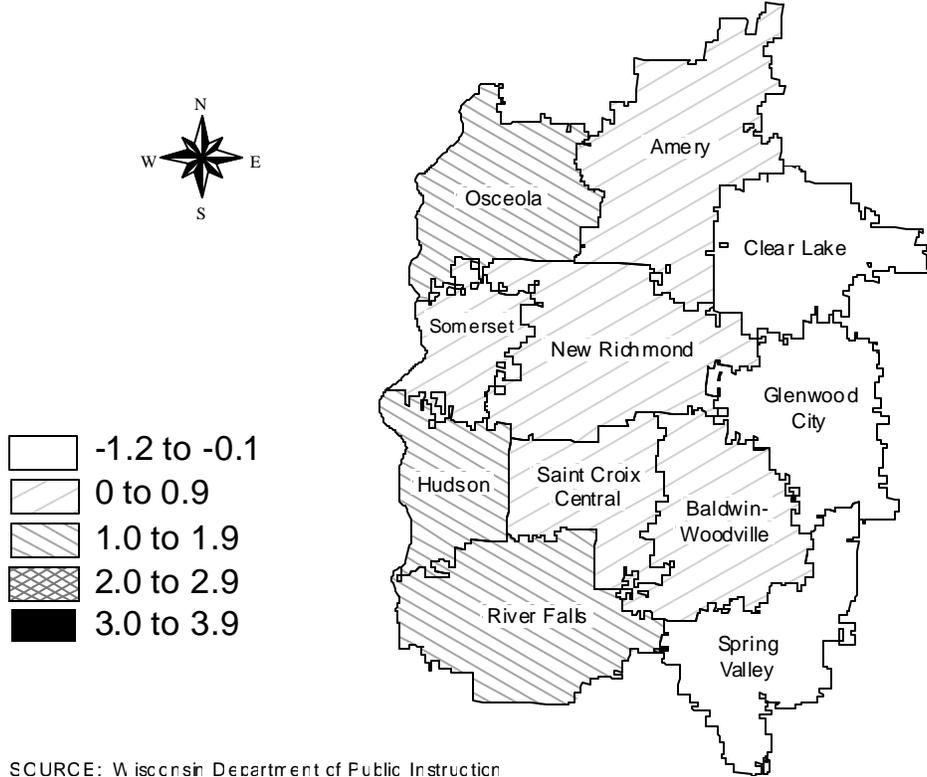
- Amery
- Baldwin-Woodville*
- Clear Lake
- Glenwood City*
- Hudson*
- New Richmond*
- Osceola
- River Falls
- Saint Croix Central*
- Somerset*
- Spring Valley

* Headquartered in St. Croix County.

A* Enrollment in these school districts increased by 2,544 students, 16.9 percent, from the 1979-80 school year to the 1994-95 school year.

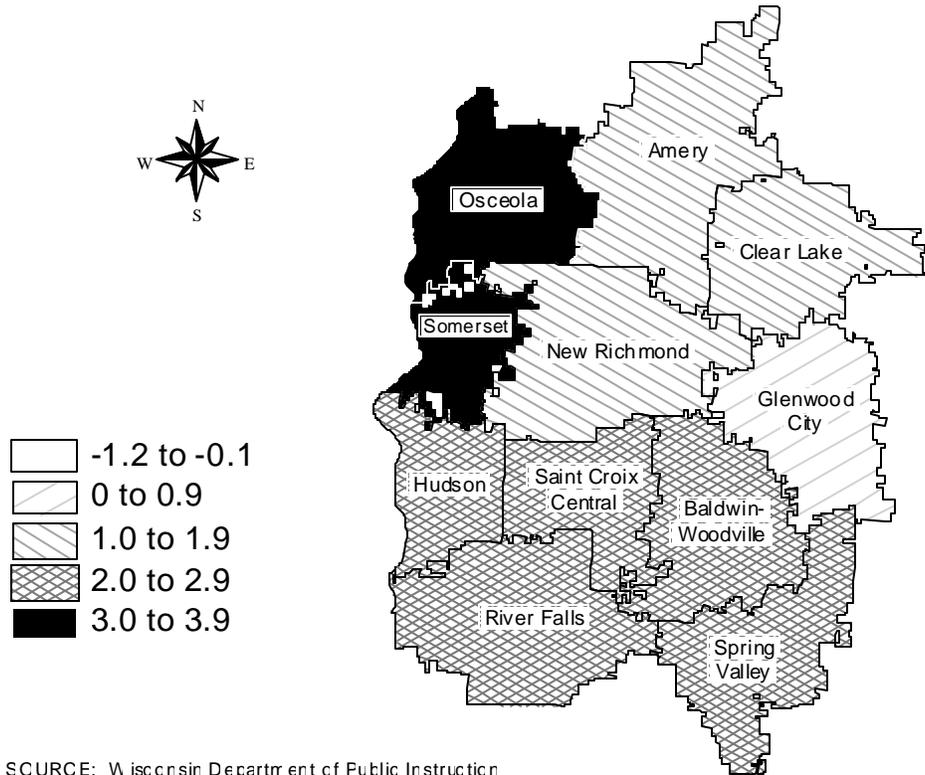
A* Annually, school districts averaged 0.5 percent growth from the 1979-80 school year to the 1989-90 school year, and 2.2 percent growth from the 1989-90 school year to the 1994-95 school year.

**Average Annual Percent Change in Public School Enrollment
School Year 1979-80 to School Year 1989-90**



SCURCE: Wisconsin Department of Public Instruction

**Average Annual Percent Change in Public School Enrollment
School Year 1989-90 to School Year 1994-95**



SCURCE: Wisconsin Department of Public Instruction

PUBLIC EMERGENCY SERVICES

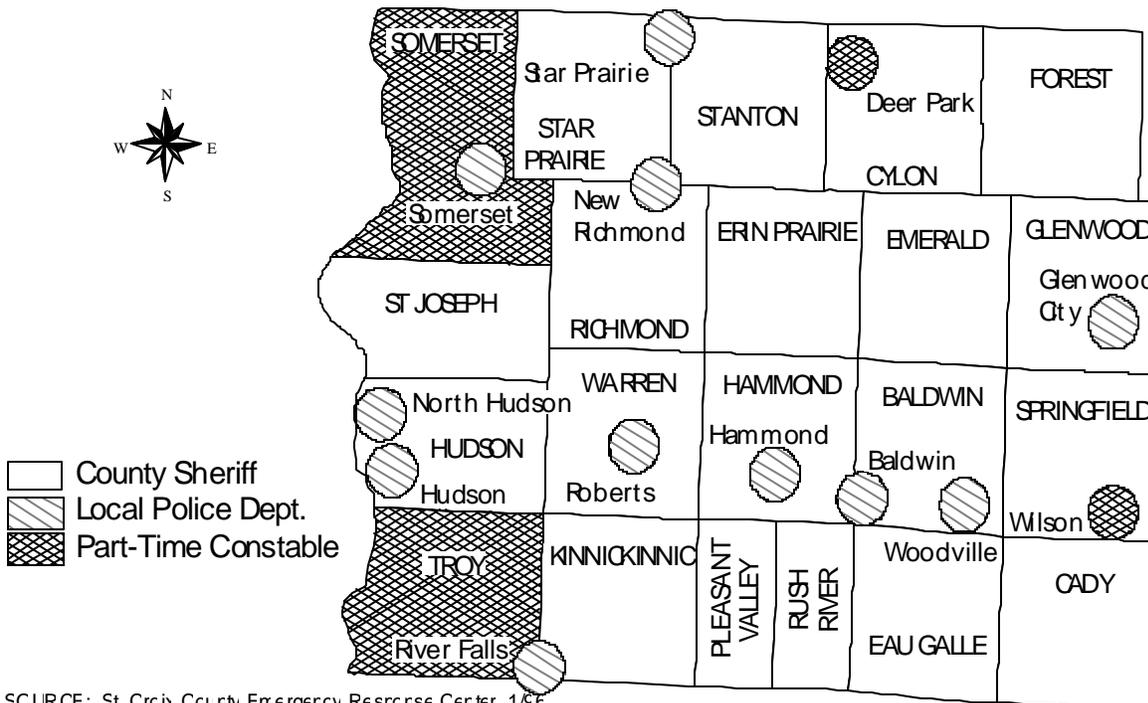
Emergency Service Headquarters St. Croix County

MUNICIPALITY	POLICE	FIRE	AMBULANCE
Baldwin	Baldwin PD	Baldwin FD	Baldwin
Deer Park	Part-Time Constable	Deer Park FD	FR/New Richmond
Glenwood City	Glenwood City PD	Glenwood City FD	Glenwood City
Hammond	Hammond PD	Hammond FD	FR/Baldwin
Hudson	Hudson PD	Hudson FD	Hudson
New Richmond	New Richmond PD	New Richmond FD	New Richmond
North Hudson	North Hudson PD	Hudson FD	Hudson
River Falls	River Falls PD	River Falls FD	River Falls
Roberts	Roberts PD	Roberts/Warren FD	Roberts/New Richmond
Somerset	Somerset PD	Somerset FD	FR/Stillwater
Star Prairie	Star Prairie PD	New Richmond FD	FR/New Richmond
Wilson	Part-Time Constable	Woodville FD	Woodville
Woodville	Woodville PD	Woodville FD	Woodville

NOTE: PD - Police Department; FD - Fire Department; and FR - First Responder/Ambulance Headquarters
Source: St. Croix County Emergency Response Center

POLICE

St. Croix County Police Protection

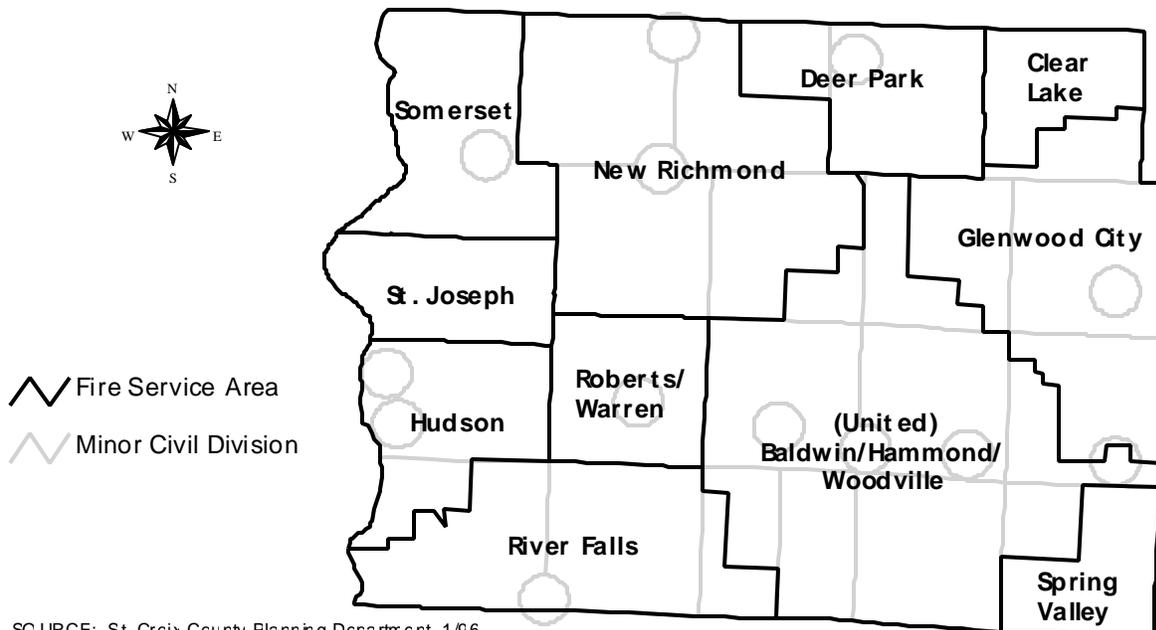


☼ St. Croix County has 11 municipal police departments, county sheriffs department, and four part-time constables combining to provide police protection and services in the county.

☼ The St. Croix County Sheriffs Department has authority in all areas where there is no other active police force.

FIRE

St. Croix County Fire Protection Areas



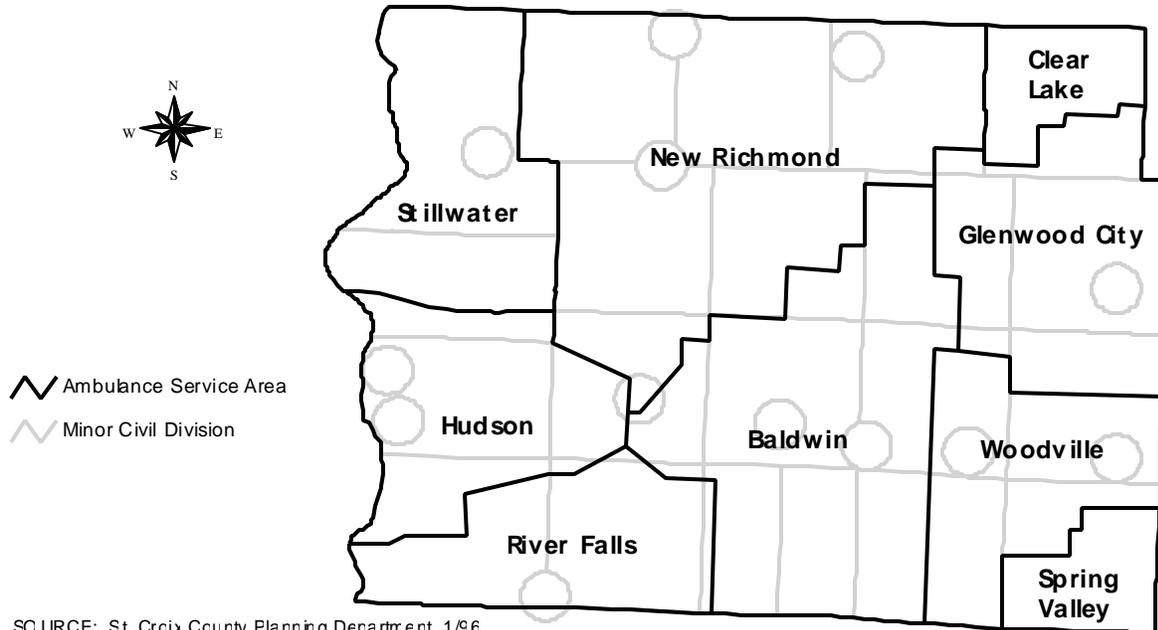
SOURCE: St. Croix County Planning Department, 1/96

☼ St. Croix County has 11 main fire service areas.

☼ Fire service areas are determined by contract negotiations and are subject to regular change.

AMBULANCE

St. Croix County Ambulance Service Areas

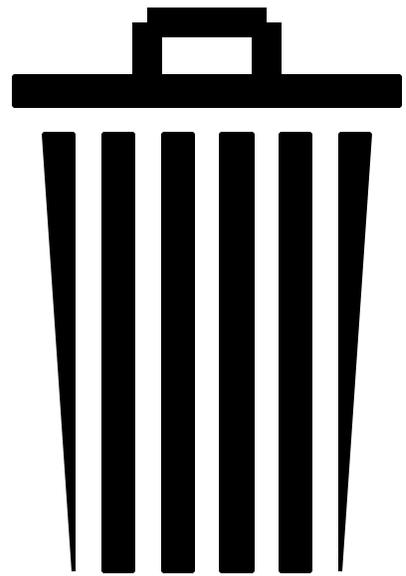


- * St. Croix County has nine main ambulance service areas.
- * Cities and villages have either direct ambulance service or a combination of a first responder unit, a group of local citizens that volunteer to be

contacted in case of an emergency, and back up ambulance service from a neighboring community.

- * Ambulance service areas are determined by contract negotiations and are subject to regular change.

TRENDS ANALYSIS



SOLID WASTE

SOLID WASTE

The provision of solid waste disposal facilities and service is impacted by the amount of solid waste generated. The growth of population and certain land uses also impact the composition of waste that needs to be disposed. If

public and private solid waste disposal providers are to maintain solid waste public health standards they must understand the potential changes in solid waste volumes and composition.

SOURCES AND COMPOSITION OF WASTE

The following is a description of the four general land use types that are the primary contributors to the solid waste

stream, and the general make-up of the types of wastes that are generated by these contributors.

RESIDENTIAL WASTES

The kinds of solid waste usually collected from single-family households

and multi-family residential buildings, of four housing units or less, include:

-  Newspapers, mail, paper packaging and a variety of other paper products
-  Leaves, brush and other yard wastes
-  Plastic and glass food packaging
-  Ferrous (steel), aluminum and other cans

-  Appliances
-  Food waste
-  Diapers
-  Household hazardous waste

COMMERCIAL WASTES

Solid waste collected from commercial establishments such as those engaged in wholesale and retail trade, finance, insurance, real estate and services. Multi-family residential buildings with more than four units, small

manufacturing facilities and construction and demolition wastes are also considered commercial for solid waste generation. Commercial wastes are characterized by:



Food waste



Aluminum and tin cans



Paper and plastic packaging



Corrugated packaging



Drink Cups



Office paper



Napkins



Masonry and wood materials

INSTITUTIONAL WASTES

Institutions such as government offices, educational facilities and

hospitals usually generate the following wastes:



Office paper



Corrugated packaging



Food service waste



Yard waste

INDUSTRIAL WASTES

Manufacturers, utility plants and other industrial institutions typically

generate the following types of non-hazardous wastes:



Various scrap metals and plastics



Pallets and sawdust



Plastic films



Office paper



Corrugated packaging



Ash materials

WASTE CHARACTERIZATION

Based on estimates of solid waste generation in St. Croix County, which include a range of low and high

estimates, the following generalizations can be made about the composition of the waste stream.

 In 1991, it is estimated that approximately 35,400 to 45,600 tons of municipal solid waste, construction and demolition debris, and industrial waste were generated in St. Croix County.

 Hazardous wastes, while making up a small percentage of the total waste stream, are significant because of their potential to cause pollution.

 Residential, commercial and institutional waste accounted for approximately 27,700 tons of the 1991 total.

 Based on a survey of 92 St. Croix County businesses, the waste materials most frequently generated by industry are:

 Approximately 2,500 to 6,600 tons of construction and demolition waste and 4,200 to 10,300 tons of industrial is estimated to have been generated in 1991.

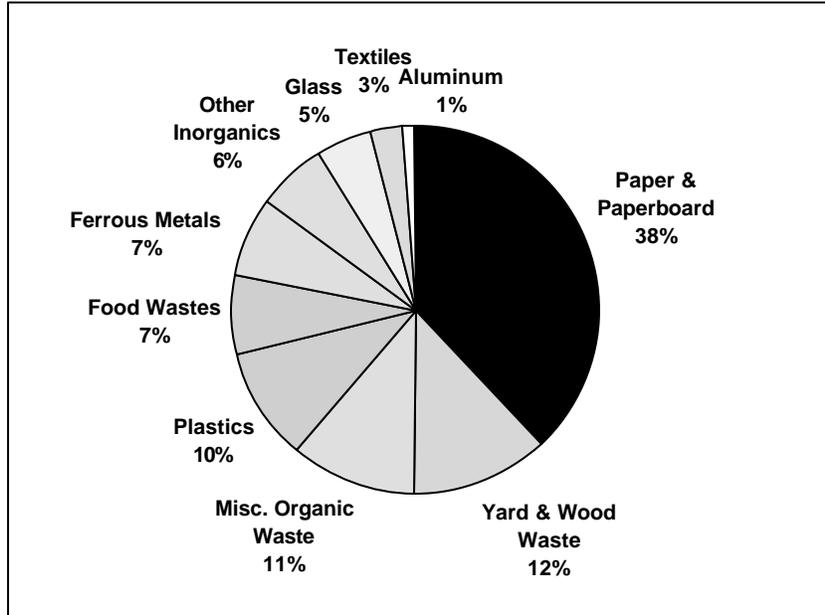
- unwanted mail (42 businesses)
- office paper (39 businesses)
- corrugated cardboard (37 businesses)
- pallets (28 businesses)
- aluminum (23 businesses)
- ferrous scrap (18 businesses)
- wood scrap (17 businesses)
- newspaper (15 businesses)
- various plastics (12 businesses)

 The average generation of solid waste in St. Croix County is over three pounds of waste per person per day.

The following figure illustrates an estimation of residential and commercial waste characteristics. It is based on

regional characteristics of solid waste generation in West Central Wisconsin.

**Waste Characterization Estimates
St. Croix County**



Source: R.W. Beck, 1989

WASTE FACILITIES

One change that has occurred during the past 10 years that dramatically affected the disposal of solid waste was the passage of the federal Resource Conservation and Recovery Act (RCRA). This legislation enacted regulations that totally changed the design criteria and financial responsibilities for the operation

and closure of waste disposal sites. This created an environment in which it became very difficult for smaller local governments to operate landfills, thus causing the closure of local waste disposal sites and the formation of fewer regional facilities.



There are no active municipal solid waste disposal sites operating in St. Croix County.

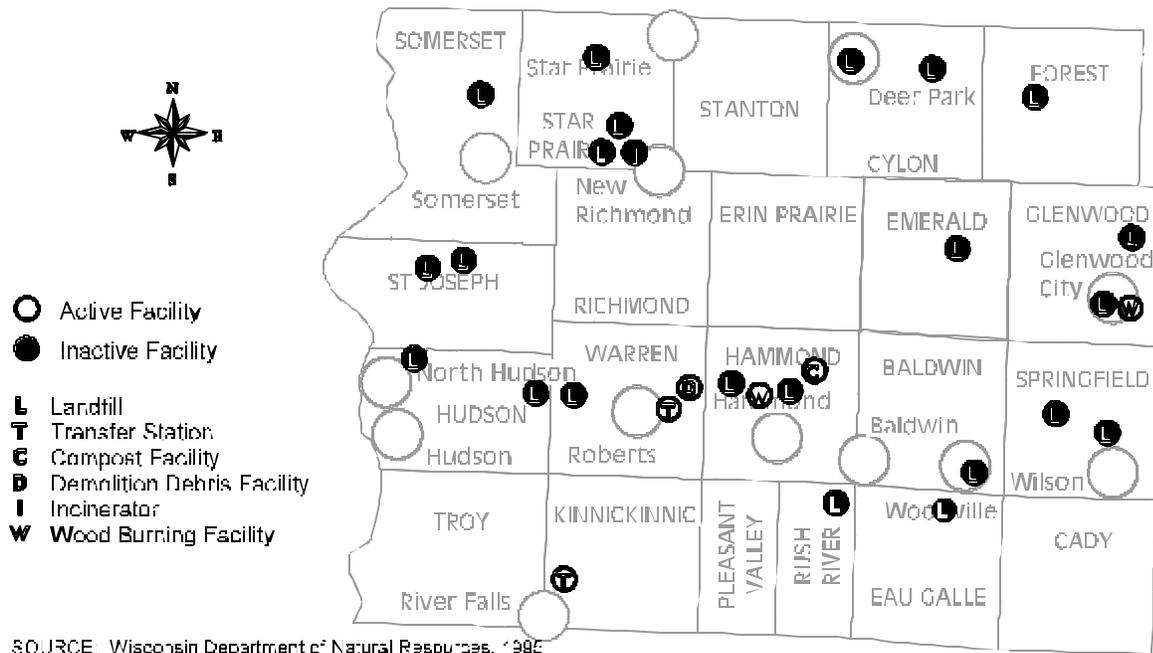


Hazardous wastes are strictly regulated and are usually kept out of ordinary waste disposal facilities.



There is a battery drop-off site located in the Baldwin-Woodville area.

**Active and Inactive Waste Disposal and Resource Recovery Facilities
St. Croix County**



RECYCLING

To reduce the burden on solid waste disposal facilities, the State of Wisconsin has mandated recycling of a variety of

household generated materials. St. Croix County assists local municipalities in operating their recycling programs.

 Recycling accounted for approximately 817 tons of recovered material in 1990 and more than 956 tons in 1991. In 1995, about 2,711 tons of material was recycled in St. Croix County.

 The waste materials most frequently recycled by industry are corrugated cardboard, aluminum, ferrous scrap, office paper, oils, cleaners and solvents, pallets, copper, steel drums and plastic film.

PROJECTED SOLID WASTE GENERATION

Projections of future solid waste generation were developed based on the St. Croix County Development Management Plan population projections and waste generation rates of 4.02 pounds per person per day for

incorporated communities over 1000 population, 2.76 pounds per person per day for incorporated communities under 1000 population, and 2.18 pounds per person per day for unincorporated communities.

 In 1995, it is likely that over 31,141 tons of solid waste will have been created in the county.

 By the year 2015 the solid waste generated each year in St. Croix County could be 41,754 tons.

 Between 1995 and 2015 the residents, businesses, industries

and institutions in St. Croix County could generate almost 1.5 billion pounds or over 723,185 tons of solid waste that will require proper disposal or recycling.

 In 1995, the county is likely to generate solid waste at a rate of 85 tons a day. By the year 2015 this rate could exceed 114 tons a day.

SOLID WASTE CONCLUSIONS

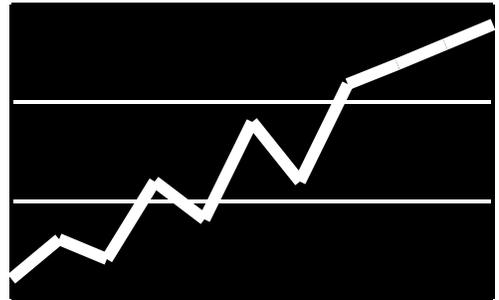
It is likely that there will be an increasing demand for solid waste services for the hauling, recycling and disposal of solid waste in St. Croix County. An increasing population and a growing industrial and commercial sector will drive this demand.

The amount of waste projected to be generated through the year 2015 will

place a burden on the present solid waste disposal and recycling system in the county, and will require the planning for expanded facilities to accommodate this waste.

Efforts in solid waste reduction, reuse and recycling will provide an opportunity to lessen the impacts of increasing solid waste generation.

TRENDS ANALYSIS



CONCLUSION

CONCLUSION

As is shown in the Trends Analysis section there has been significant change that has occurred over the past 20 years. St. Croix County's presence near the Minneapolis-St. Paul metropolitan area, appealing rural setting, and favorable business climate, have created an environment in which the county has grown significantly over the past twenty years, and is expected to continue to grow into the near future.

St. Croix County's proximity to the Minneapolis-St. Paul metropolitan area has had a dramatic impact on the growth and development of the county. Impacts of the metropolitan area could be seen as early as the 1960s, when more rapid population growth in the towns in the western part of the county began to occur. St. Croix County's inclusion in the Minneapolis-St. Paul Metropolitan Statistical Area (MSA) confirms the strong economic and social ties that exist between the two areas.

Population growth alone illustrates the changes that have occurred in, and the impact that the Minneapolis-St. Paul MSA has had on, St. Croix County. During the past 50 years, the county's population has doubled, with the majority of the growth occurring during the last 20 years. And, it appears that significant population growth is continuing in the 1990s.

This growth is even more dramatic at the municipal level. The towns, cities and villages along the western edge of the county experienced significant growth from 1970 to 1990. A number of these communities experienced

population growth of over 50 percent. In contrast, only the extreme eastern tier of towns in the county have lost population. However, growth occurred evenly among the incorporated and unincorporated areas throughout the county.

Although St. Croix County experienced an out-migration of population during the 1950s, net migration since that time has been positive. However, during this same period, population growth was primarily due to the natural increase (births - deaths) that occurred. During the past 40 years the natural increase has resulted in population growth, and has exceeded the increase from migration in all decades but the 1970s.

Economic indicators, such as income, employment, and property values, are another measure of the development changes that are occurring throughout the county.

During the period from 1980 to 1990, median household incomes in St. Croix County nearly doubled. This increase was mainly driven by the change in the growth in the number of households that earned \$75,000 a year or more. This rate of increase has significantly out-paced the rate of inflation, approximately 54 percent, for the same time period. Median household income increases in the western towns, villages and cities were generally greater than increases in the east, creating a greater disparity between the two areas.

Employment in St. Croix County also increased during the period from 1980 to 1990. Overall, there was a 32.2 percent increase in total employment within the county. The largest employment gains came from within the Wholesale/Retail Trade, Manufacturing, and Services sectors. These increases accounted for nearly 74 percent of the total employment gains for this period.

However, by 1990, there were still nearly 9,000 more employed St. Croix County residents than there were job opportunities available within the county. This indicates that a large number of residents are commuting to other areas for work. According to available commuting pattern information, the majority of people living in western St. Croix County are driving to the Minneapolis-St. Paul metropolitan area to work. Thirty-five percent of all workers in the county commute to Minnesota. And, in some of the communities in the western part of the county, over seven out of 10 workers do so. However, even though a significant number of workers take advantage of employment opportunities in Minnesota, rapid expansion of St. Croix County's employment base continues, especially in the manufacturing and retail trade sectors.

An analysis of the equalized valuation of properties between 1980 and 1990 reveals the magnitude of investments that were made in the residential, commercial and manufacturing sectors, and loss in valuation in the agricultural sector. These changes have again created a greater disparity between the higher valuation of property in the western part of the county versus the

primarily agricultural property in the east.

Another area in which the growth and development of the county can be measured is in the housing industry. The number of housing units in St. Croix County doubled from 1970 to 1995. The majority of the growth, especially in the unincorporated areas, was due to the increase in single-family housing.

Due to the significant increases in the number and demand for housing within the county, median housing unit values have nearly quadrupled during past 20 years. This growth and increase in values is again greatest in the western communities.

Residential growth has led to a change in the rural character of the county. The residential growth in the unincorporated areas has begun to transform the previously rural farm areas into rural residential areas. There has been a steady decrease in rural farm population over the past 20 years. Yet, there has been an increase in total rural population, indicating an increase in rural non-farm residents.

The number of farms has also decreased by nearly one-fifth during the past 20 years. Currently, farm households have declined, now comprising only about 8.5 percent of the total households in the county. These declines have led to a decrease in the amount of total county land devoted to agriculture. Agricultural acreage accounted for nearly 80 percent of the county's total land area 20 years ago, whereas it accounts for about 65 percent today.

The substantial economic and residential development in St. Croix County during the last two decades has required significant investments in public facilities and services. One obvious and highly visible effect growth and development has had on public infrastructure is the transportation system improvements required to accommodate the additional population.

Future growth and development in St. Croix County is expected to continue to be significant. During the 25-year period from 1995 to 2020, population is projected to increase by 40 percent, housing units by nearly 55 percent, and the local economic base, supported by increasing manufacturing and services sectors, is also expected to grow. The pattern of growth and development is expected to be similar to the geographic distribution pattern that is presently occurring. The western-most towns, villages and cities should experience a higher rate of growth and development than in the east.

As stated earlier, St. Croix County has experienced significant growth and development during the past 20 years, and this growth is expected to continue. Signs of growth can be seen in all major socio-economic sectors of the county including population, economy, housing, and agriculture. Much of the development is related to the strong social and economic ties that the county has with the Minneapolis-St. Paul metropolitan area. This relationship has resulted in a disparity in the geographic distribution of development throughout the county. Communities located in the western part of the county are experiencing higher rates of population, economic and housing growth, along

with a decline in the amount of agricultural related activities.

Understanding the changes that are occurring, and the changes that might occur, is an important step in establishing a development management philosophy that can maintain orderly growth and development activities, and preserve the desired resources of the county. St. Croix County is dealing with development issues that have seldom been discussed in the past. Issues such as:

- Land Consumption - including encroachment of development onto prime agricultural land and natural resource areas;
- Infrastructure Development - including access control, land use considerations, and corridor alignments; and
- Land Use Compatibility - including the type and intensity of permitted uses;

are becoming more of an everyday consideration during development discussions and activities. Projected future growth and development will continue to put additional pressure on the county and local governments to resolve these issues.

It is important that measures be taken to manage expected growth and to protect the public's investment in current and future infrastructure. Information regarding the socio-economic status of the county, along with the input of the residents and community leaders, will help the county to determine how to best manage growth and development to meet the needs of its residents.

