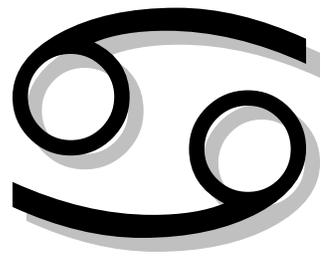


**VOLUME THREE  
APPENDICES**

**Section B  
Land Use Inventory  
Methodology**



## ***APPENDIX B***





# LAND USE INVENTORY METHODOLOGY

## 1973 AND 1993

### ***LAND USE INVENTORY METHODOLOGY - 1973***

The data used in the 1973 land use analysis was the result of a detailed land use survey conducted by the West Central Wisconsin Regional Planning Commission. All land uses were interpreted and transferred from the most current aerial photography available. As it was appropriate or necessary, reliable existing data such as, U.S. Geological Survey (USGS) topographic maps, plat books and Department of Transportation aerial photography was used to supplement the field survey. The field survey entailed actually driving all town, city, village, county, state and federal roads and highways and recording land use not obtainable from the air photo transfer. After the existing land use was recorded, area measurements were made.

To unify and simplify the task of land use measurement several assumptions were made in 1973. These assumptions resulted in procedures which were used only when it was impossible to make actual measurements from air photos or survey data. Residential lands in the rural areas were calculated by applying a 3 acre average development standard to each residential and farmstead dwelling counted in the data transfer or survey. All commercial, industrial, government, institutional, communication and utilities, and agricultural, forested and vacant lands were actually measured unless there was reliable existing data. The transportation system was calculated using the following factors provided by the Department of Transportation; State highways 13.33 acres per mile; Federal highways 42.42 acres per mile; County highways 9.69 acres per mile; Local roads 7.78 acres per mile; and , Railroads 12.12 acres per mile.

### ***LAND USE INVENTORY METHODOLOGY - 1993***

For reasonable comparability of the 1993 land use inventory to the 1973 data, the methodology from the former survey was duplicated as closely as possible given the differences in source information and the tools used for data capture. The data used in the 1993 land use analysis was the result of a land cover inventory conducted by the Minnesota-Wisconsin Boundary Area Commission and the West Central Wisconsin Regional Planning Commission, and a detailed land use survey conducted by the West Central Wisconsin Regional Planning Commission. During the land cover inventory, agricultural, forested and vacant lands were interpreted and transferred from 1991 Agricultural Stabilization and Conservation Service aerial photography onto USGS 7.5 minute quadrangle maps and digitized into PCArc/Info format. The land use survey consisted of a 1993 field survey where all roads and highways in the unincorporated area of the county were driven and a windshield survey performed. During this survey land use information was transferred to the St. Croix County Property Addressing Maps. The survey information was then used in conjunction with 1992 National Aerial Photography Program derived digital orthophotographs to map the land uses into Arc/Info. Active

land use areas over three acres were captured as areas or polygons and smaller areas were captured as points.

To perform land use measurement, assumptions were made for the 1993 data which were similar to those used in 1973. All area residential, commercial, industrial, government, institutional, communication and utilities, and agricultural, forested and vacant lands were actually measured using Arc/Info. Point information was assigned a development standard for each township not exceeding three acres. The 1993 transportation system was calculated using updated acreage per mile factors.

## **DESCRIPTION OF USES - LAND USE CLASSIFICATION SYSTEM**

### **Residential**

All lands used for residential purposes.

### **Commercial**

All lands used for commercial purposes, including wholesale and general retail, financial institutions, indoor recreation and entertainment.

### **Industrial**

All lands occupied for industrial land uses, including light and heavy manufacturing and extractive industries.

### **Transportation, Communication, and Utilities**

All lands occupied by transportation, communication or utilities, including state, federal, county and local highways, railroads, telephone facilities and electrical facilities.

### **Parks and Recreation**

All lands used for recreation, including public and private recreational lands, and lands for active recreational pursuits such as, golf, parks and campgrounds.

### **Government and Institutional**

This category includes many types of community facilities including schools, medical facilities, churches, cemeteries, town halls, police and fire stations, and community buildings.

### **Agricultural and Vacant**

All lands used for farming, such as dairy farming, truck farming, orchards and pastures. This category also includes marginal and fallow agricultural land and vacant or unused land.

### **Forested**

All lands covered by forest, including commercial woodlands.

## ***DIFFERENCES IN THE 1973 AND 1993 INFORMATION***

The differences between the 1973 and 1993 information accounted for a 720 acre discrepancy in the total acres for the county, or less than two-tenths of one percent difference. The slight differences in these data are caused by the manual versus digital techniques used in mapping, the various sources used, and interpretative differences. Overall, the 1973 and 1993 land use information provide a reasonable comparison for twenty years of land use change in the unincorporated areas of St. Croix County.

## ***LAND USE ACREAGE AND PERCENT CHANGE - 1973 TO 1993***

### ***Land Use Acreage and Percent Change - 1973 and 1993 St. Croix County Towns***

<b><i>Municipality</i></b>	<b><i>Residential</i></b>			<b><i>Commercial</i></b>		
	<b><i>1973</i></b>	<b><i>1993</i></b>	<b><i>Pct. Chng.</i></b>	<b><i>1973</i></b>	<b><i>1993</i></b>	<b><i>Pct. Chng.</i></b>
BALDWIN	744	858	15	3	59	1,867
CADY	672	708	5	10	31	210
CYLON	545	617	13	6	52	767
EAU GALLE	687	825	20	28	56	100
EMERALD	511	539	5	3	3	0
ERIN PRAIRIE	441	610	38	2	8	300
FOREST	555	617	11	9	55	511
GLENWOOD	590	707	20	8	23	188
HAMMOND	669	875	31	9	31	244
HUDSON	660	3,873	487	17	252	1,382
KINNICKINNIC	690	1,245	80	7	20	186
PLEASANT VALLEY	282	330	17	0	7	7,000
RICHMOND	627	1,075	71	13	71	446
RUSH RIVER	399	469	18	10	10	0
ST JOSEPH	800	3,476	335	17	225	1,224
SOMERSET	982	2,228	127	18	111	517
SPRINGFIELD	716	719	0	7	36	414
STANTON	573	700	22	2	54	2,600
STAR PRAIRIE	966	1,758	82	22	148	573
TROY	1,063	2,859	169	17	76	347
WARREN	492	1,024	108	6	25	317
<b>TOTAL</b>	<b>13,664</b>	<b>26,112</b>	<b>91</b>	<b>214</b>	<b>1,353</b>	<b>532</b>

**Land Use Acreage and Percent Change - 1973 and 1993 - Con't**  
**St. Croix County Towns**

<i>Municipality</i>	<i>Industrial</i>			<i>Transportation &amp; Utilities</i>		
	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>
BALDWIN	18	29	61	711	805	13
CADY	14	17	21	856	890	4
CYLON	9	0	-100	650	744	14
EAU GALLE	73	56	-23	866	932	8
EMERALD	6	0	-100	566	658	16
ERIN PRAIRIE	17	101	494	644	782	21
FOREST	16	0	-100	639	673	5
GLENWOOD	20	0	-100	816	867	6
HAMMOND	5	0	-100	649	729	12
HUDSON	21	13	-38	837	1,087	30
KINNICKINNIC	27	0	-100	696	921	32
PLEASANT VALLEY	4	0	-100	454	465	2
RICHMOND	25	108	332	702	813	16
RUSH RIVER	6	0	-100	517	539	4
ST JOSEPH	2	20	900	690	937	36
SOMERSET	6	32	433	943	1,196	27
SPRINGFIELD	48	185	285	633	789	25
STANTON	10	14	40	592	722	22
STAR PRAIRIE	16	3	-81	685	914	33
TROY	15	54	260	717	1,446	102
WARREN	46	31	-33	802	916	14
<b>TOTAL</b>	<b>404</b>	<b>663</b>	<b>64</b>	<b>14,665</b>	<b>17,825</b>	<b>22</b>

**Land Use Acreage and Percent Change - 1973 and 1993 - Con't**  
**St. Croix County Towns**

<i>Municipality</i>	<i>Recreation</i>			<i>Government &amp; Institution</i>		
	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>
BALDWIN	0	0	0	6	6	0
CADY	0	5	5,000	8	68	750
CYLON	1	3	200	17	10	-41
EAU GALLE	4	0	-100	3	18	500
EMERALD	9	36	300	4	10	150
ERIN PRAIRIE	21	9	-57	9	7	-22
FOREST	1	3	200	15	19	27
GLENWOOD	2	0	-100	10	6	-40
HAMMOND	93	73	-22	4	96	2,300
HUDSON	10	1,091	10,810	5	21	320
KINNICKINNIC	14	29	107	2	6	200
PLEASANT VALLEY	0	0	0	1	2	100
RICHMOND	20	0	-100	10	9	-10
RUSH RIVER	0	0	0	9	27	200
ST JOSEPH	128	1,560	1,119	10	36	260
SOMERSET	188	122	-35	1	5	400
SPRINGFIELD	48	657	1,269	8	4	-50
STANTON	0	0	0	5	8	60
STAR PRAIRIE	99	35	-65	41	57	39
TROY	372	228	-39	10	19	90
WARREN	0	0	0	17	20	18
<b>TOTAL</b>	<b>1,010</b>	<b>3,851</b>	<b>281</b>	<b>195</b>	<b>454</b>	<b>133</b>

**Land Use Acreage and Percent Change - 1973 and 1993 - Con't**  
**St. Croix County Towns**

<i>Municipality</i>	<i>Agricultural &amp; Vacant</i>			<i>Forested</i>		
	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>	<i>1973</i>	<i>1993</i>	<i>Pct. Chng.</i>
BALDWIN	17,553	16,648	-5	1,681	1,725	3
CADY	16,508	15,804	-4	4,417	4,700	6
CYLON	15,326	15,677	2	4,924	4,965	1
EAU GALLE	15,505	14,408	-7	4,877	5,368	10
EMERALD	18,077	17,709	-2	2,918	3,264	12
ERIN PRAIRIE	19,402	18,676	-4	226	2,522	1,016
FOREST	16,100	16,865	5	5,855	5,497	-6
GLENWOOD	17,247	15,974	-7	3,541	3,961	12
HAMMOND	20,138	19,315	-4	380	554	46
HUDSON	13,163	8,089	-39	3,287	2,310	-30
KINNICKINNIC	17,862	16,316	-9	3,251	4,085	26
PLEASANT VALLEY	10,276	10,146	-1	504	587	16
RICHMOND	19,553	18,191	-7	913	1,284	41
RUSH RIVER	9,764	9,467	-3	814	920	13
ST JOSEPH	15,185	10,748	-29	4,093	3,578	-13
SOMERSET	21,901	18,495	-16	5,958	7,501	26
SPRINGFIELD	16,693	15,369	-8	4,021	4,182	4
STANTON	18,520	18,352	-1	1,929	2,009	4
STAR PRAIRIE	15,638	14,100	-10	2,814	3,243	15
TROY	19,282	15,437	-20	3,792	4,333	14
WARREN	19,616	18,364	-6	1,196	1,778	49
<b>TOTAL</b>	<b>353,309</b>	<b>324,150</b>	<b>-8</b>	<b>61,391</b>	<b>68,366</b>	<b>11</b>