

ST. CROIX COUNTY
LAND INFORMATION PLAN

St. Croix County, Wisconsin
Land Information Office
January 2006

ST. CROIX COUNTY LAND INFORMATION PLAN TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	
A. Agency and Contact Information	1
B. Participants in the Planning Process	1
C. Summary of Plan	1
D. County Land Information Website	2
II. LAND INFORMATION MODERNIZATION & INTEGRATION PLAN	
A. Goals & Objectives	2
B. Progress Report on Ongoing Activities	5
1. Geographic Frameworks	5
2. Parcels	5
3. Soils Mapping	6
4. Zoning Mapping	6
5. Wetlands Mapping	6
6. Related Planning Mapping	6
C. New Initiatives	7
1. Proposed Projects	7
2. Assistance Requested	8
3. Problems Encountered	8
D. Custodial Responsibilities	8
E. Foundational Elements & Statewide Standards	10
1. Communication, Education, Training & Facilitated Technical Assistance	10
2. Geographic Reference Frameworks	10
3. Parcel Mapping	11
4. Parcel Administration	12
5. Public Access	13
6. Zoning Mapping	13
7. Soils Mapping	14
8. Wetlands Mapping	14
9. Institutional Arrangements & Integration	14
10. Election & Administrative Boundary System	15
11. Street/Road Centerline and Addresses	15
12. Land Use Mapping	15
13. Natural Resources	16
14. Data Base Design	16
15. Infrastructure & Facility Management	16
F. Integration and Cooperation	17
1. Integrative/Cooperative Relationships	17
2. Potential Partners & Projects	17
3. Data Shared or Used	17
4. County Department Participation	17
5. Other Agency Participation	17
G. Administrative Standards Not Associated with Foundational Elements	17
III. APPENDIX	

A. Status of PLSS Remonumentation, 12/31/99	19
B. List of Physical Features Maps	20

I. EXECUTIVE SUMMARY

A. Agency and Contact Information

David Fodroczi, AICP
Planning Director/LIO
St. Croix County Planning & Zoning Department
1101 Carmichael Road
Hudson, WI 54016
E-mail davidf@co.saint-croix.wi.us

Phone (715) 386-4672
FAX (715) 386-4686

B. Participants in the Planning Process

St. Croix County Planning & Zoning Committee

Jan Zoerb, Chair
Wallace Habegger
Stan Krueger

Lois Burri, Vice Chair
Brian Hurtgen

Land Records Committee

David Fodroczi, Planning Director/LIO
Brett Budrow, Planner/GIS Specialist
Shar Croes, Real Property Lister
Brian Halling, County Surveyor
Bob Heise, County Conservationist
Cheryl Slind, County Treasurer
Kathleen Walsh, Register of Deeds

C. Summary of Plan

The purpose of this document is to update St. Croix County's Land Information Plan as required by the Wisconsin Land Information Program (WLIP) and the Wisconsin Land Information Board (WLIB). The content and format of the Plan is based upon the WLIB's "Uniform Instructions for Preparing County Land Information Plans" dated December 2004. The Plan is intended to provide public agencies, private organizations, and other interested parties with current information about St. Croix County's land information activities. St. Croix County may occasionally amend the Plan as technology and issues change.

St. Croix County has a number of completed and ongoing land information improvement projects including PLSS remonumentation, geodetic control, parcel mapping, parcel record management, and a land information website. New initiatives for ongoing projects will continue to expand and improve PLSS monumentation, geodetic control, and parcel record management. New land information projects include improving and integrating the County's

existing property address data and mapping for wireless E911. Full implementation of the plan will be dependent upon the availability of funds and staff time to meet all goals.

D. St. Croix County Land Information Website

<http://72.21.230.178/website/pasystem/gisportal.htm>

II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

A. GOALS & OBJECTIVES

The overall goal of the St. Croix County Land Information Plan is the ongoing development and improvement of a countywide land records and information system that provides more accessible, accurate, efficient and economical products and services for all participants. This can best occur through expanding efforts to communicate, coordinate and cooperate within and between the County, other units of government, and the private sector.

The planning horizon for this plan is five years. This relatively short timeframe is a reflection of the rapidly changing technology and related cost structure for improving land records and information systems. The timeframe for some implementation activities will be contingent upon technological changes, cost advantages and the opportunities or barriers such trends present. Activities that could likely extend beyond the five year planning horizon will be identified.

The goals and objectives for this plan are organized around the foundational elements established by the Wisconsin Land Information Program. They were developed in response to issues and needs identified in our initial inventory process and updated to reflect past accomplishments and new priorities. They should serve as benchmarks for evaluating the progress and results of the activities identified in the balance of the plan.

Goal 1: Develop and improve the geographic framework throughout the County to maximize the accuracy and integratibility of land information.

Objective 1.1: Complete remonumentation of the remaining 8% of the Public Land Survey System section and quarter section corners.

Objective 1.2: Continue maintenance program of remonumented Public Land Survey System section and quarter-section corners and related evidence and records.

Objective 1.3: Extend the countywide geodetic reference system in conjunction with surrounding counties and related state and federal agencies.

Objective 1.4: Establish a countywide, large-scale base map series tied to the Public Land Survey System and expanded geodetic reference system.

Objective 1.5: Maintain and improve the County's existing property addressing system.

Goal 2: Improve the accuracy, consistency, accessibility and integratibility of parcel-based land information.

Objective 2.1: Evaluate and improve the County's land information website for user accessibility and ease of use.

Objective 2.2: Develop and implement a new, countywide parcel numbering system that attempts to meet both local and state needs.

Objective 2.3: Evaluate the feasibility of a unified, automated system for managing the County's parcel records with participation for interested municipalities and access for private interests.

Goal 3: Update and modernize existing soil survey information to improve its accuracy and use with other types of land information.

Objective 3.1: Maintain the County's digital soil survey maps.

Objective 3.2: Update the text of the County's soil survey with new and revised technical information available from the Natural Resource Conservation Service.

Objective 3.3: Coordinate all activities to improve the soil survey with the Natural Resource Conservation Service and related State agencies.

Goal 4: Improve the design and maintenance of zoning maps among all zoning jurisdictions within the County.

Objective 4.1: Develop a countywide system of zoning maps based on improvements to the County's geographic framework.

Objective 4.2: Coordinate improvements to County zoning maps with the expansion of the number and types of districts in the zoning ordinance.

Objective 4.3: Improve the scale and accuracy of existing floodplain and shoreland delineation maps based on improvements to the County's geographic framework.

Objective 4.4: Update and maintain the County's existing land use maps which were originally developed in 1974 and updated in 1993.

Goal 5: Develop a wetlands mapping system throughout the County that would meet multiple program objectives and avoid duplication among affected agencies.

Objective 5.1: Maintain a set of digital official DNR wetland maps.

Objective 5.2: Use federal wetland maps provided by NRCS for management of related farm programs.

Goal 6: Develop institutional arrangements between County departments, units of government and public/private interests that encourage efficient and economical production and management of all types of land information.

Objective 6.1: Maintain an interdepartmental County Land Information Committee to ensure coordination and integration of County land information improvements.

Objective 6.2: Establish a process for developing projected revenues and expenditures of County land records funds generated by the \$4.00 per document surcharge on real estate document recording fees.

Objective 6.3: Incorporate municipal participation in the development and implementation of the County Land Information Plan and related grant requests.

Objective 6.4: Prepare, review and recommend grant-in-aid requests to the Wisconsin Land Information Board in accordance with applicable statutes and administrative code.

Objective 6.5: Coordinate land information planning and improvements with surrounding counties through the Western Wisconsin Land Information Network.

Objective 6.6: Prepare an annual report of plan and program activities to submit to the Wisconsin Land Information Board and update this plan at least once every five years.

Objective 6.7: Coordinate land information activities with related State and Federal agencies to avoid duplication and foster the cost-effective integration of public land information.

Objective 6.8: Coordinate land information activities with related private interests to avoid duplication and foster the cost-effective integration of public and private land information.

Goal 7: Develop and promote opportunities for communications, education and training that will encourage and support the implementation of this plan and development of a countywide land information system.

Objective 7.1: Foster communications among producers and users of land information within the County and between counties.

Objective 7.2: Develop an ongoing and annual education and training program for County officials and staff responsible for land information management.

Objective 7.3: Identify and promote land information education and training opportunities to other users and producers of land information within the County.

Goal 8: Improve and maintain public access to land information.

Objective 8.1: Establish and maintain technical design and distribution procedures for land information that maximize accessibility at a reasonable cost.

Objective 8.2: Establish land information distribution policies that are consistent with the Wisconsin Open Records Law.

Objective 8.3: Protect confidential information from unauthorized access and other land information from unauthorized manipulation.

The internal and external needs of St. Croix County and its priorities are:

1. Completion of remonumentation of PLSS corners throughout the county;
2. Acquisition of geodetic control/coordinates on PLSS corners;
3. Integration of countywide addressing systems;
4. Integration of countywide digital parcel maps;
5. Conversion/Implementation of uniform, countywide parcel numbering system;
6. Maintain existing digital land information applications and map coverages;
7. Improve database design and management for new and existing land information;
8. Implementation of automated permitting process; and
9. Development of new initiatives described in section II. C. on page 8.

The County's GIS software vendor is Environmental Systems Research Institute (ESRI) which is also the State standard. ESRI is a member of the Open GIS Consortium and supports open GIS data transfer and data sharing requirements. The County Highway and Land & Water Conservation Departments also use AutoCad software with various software extensions. The County will attempt to ensure translatability and retrieval of data by using commonly accepted hardware platforms and software, as well as requiring ODBC compliance as part of our procurement process.

St. Croix County's map data is based on the Wisconsin St. Croix County Coordinate System. This system is mathematically relatable to the North American Datum (NAD) 83(91). Tabular land data, records and documents are generally referenced by parcel identification number, property address and PLSS location.

The County's land information system relies on client server architecture and a wide area network. GIS and land records applications use WinTel based technology for the operating and networking system as well as industry standard RDBMS systems. Land records applications and software are updated on a continual basis as budgets allow, maintaining industry standards and best management practices for database design. Metadata is maintained for each layer in the GIS system, and it is maintained or being developed for tabular land records data. Digital files of spatial and tabular data are routinely distributed in hard copy and various digital formats to a variety of private and public users.

B. PROGRESS REPORT ON ONGOING ACTIVITIES

1. Geographic Frameworks

The County Surveyor's Office (CSO) is continuing to take the lead role in developing and implementing a countywide geodetic reference system. In 1994, the St. Croix County GPS Network was developed as a densification of the Wisconsin HARN. Geodetic coordinates are now available for all GPS stations in the network.

The CSO also continues remonumentation of PLSS corners throughout the County. Remonumentation activities covered 212 corners from 1992 through 1999. Only 185 (8%) of the County's 2,351 corners remain to be remonumented. Appendix A gives a detailed status report of PLSS remonumentation as of the end of 1999. The CSO also began an aggressive PLSS maintenance program in 1996 to assure the perpetuation of remonumented corners. With the acquisition of GPS equipment in early 1999, the CSO is now establishing St. Croix County coordinates on all PLSS corners visited as part of ongoing remonumentation and maintenance activities.

2. Parcels

The County Planning & Zoning Department has completed parcel mapping for all municipalities in the County. The production data for parcel mapping is stored by municipality in the ESRI coverage format and published to shapefiles for distribution and use. The County is working toward migrating the parcel data to the ESRI Geodatabase.

The Planning & Zoning Department completed significant progress on a land regulation data model for an automated permitting system with spatial data integration capabilities. The Department anticipates completing the project in 2005 or early 2006.

3. Soils Mapping

Digital conversion of St. Croix County was completed by USDA-NRCS with County financial support from 1995-97. This SSURGO certified process included digital orthophotography developed by USGS from 1992 NAPP photography. The balance of our soil survey, originally published in 1978, remains to be updated as the NRCS schedule allows.

4. Zoning Mapping

Zoning maps for the 19 towns with zoning were converted to ESRI shapefiles in 1999 and 2000. The zoning maps will be vertically integrated with the parcel database when the County completes the parcel Geodatabase conversion. Floodplain studies and related mapping have also been completed for all dam breach areas for flood control structures in the Glen Hills watershed.

5. Wetlands Mapping

We have acquired the WDNR digital wetlands map files through the West Central Wisconsin RPC as part of the RPC's preparation of our County Development Management Plan. We have since imported the files to our system and converted them to the St. Croix County projection.

6. Related Planning Mapping

The RPC also acquired or developed several countywide digital map layers as part of our County Plan development. They include land use, land cover, street centerlines, closed depressions, woodlands, steep slopes, environmental corridors and various natural features. All map files and corresponding metadata have been delivered to the County and converted to the County projection.

C. NEW INITIATIVES

1. Proposed Projects

a. Geographic Frameworks: Complete remonumentation of remaining 185 (8%) PLSS corners and continue maintenance of the system, including the attachment of geodetic coordinates. Prioritize activities to support improved base maps and parcel maps in localized areas.

b. Parcels: Convert the existing coverage parcel data model to the ESRI Geodatabase model. Integrate parcel workflow with land regulation database and property address system. Convert existing parcel numbering system to a new, uniform system consistent with WLIP standards.

c. Zoning Mapping: Make improvements to zoning maps based on new parcel geodatabase and land regulation data model, including attribution of zoning district designations in the database design. Take advantage of any opportunities from applicable federal and state agencies to improve floodplain mapping. Integrate available digital zoning maps from cities and villages into a complete countywide zoning layer with links to related tabular records.

d. Wireless E911: St. Croix County has begun a project to update and integrate the county address system to support wireless E911. The Land Information Office is working closely with the Emergency Communication Department to ensure integration and compatibility between our datasets.

e. System Expansion: Evaluate and implement opportunities to expand system capabilities and applications in transportation, public safety, public health, local government and utilities.

f. System Integration: Continue to evaluate and implement opportunities to improve system design, functionality and performance.

g. Data Distribution: Continue to evaluate and improve procedures and policies for data distribution that both maximize availability for users and minimize time and expense for the County.

2. Assistance Requests

The County has actively sought input from other counties, agencies, consultants and vendors prior to implementing projects and will continue to do so for our new initiatives. The County has Internet connectivity and is connected to the WLIP Internet Land Information Clearinghouse and Technical List Server Service. The County looks to the WLIP and WLIA to provide practical standards along with a functional model for basic data sets.

The County is always looking for funding opportunities and has made a commitment to modernize its land records by appropriating levy dollars to our Plan. However, it is important that the WLIP continues so the retained fees and the grants are available for ongoing and new initiatives in St. Croix County. It is important for the WLIP to ensure the program continues to be focused on creation and maintenance of land information system elements to support all land information uses not just a select few.

The County will continue to adhere to County Purchasing Policy and State statutes for procurement of services/products related to this Plan. Multiple quotes are obtained for all products greater than \$500 in value, and a formal Request for Proposals is used for purchase of professional services greater than \$5,000 in value.

3. Problems Encountered

We have successfully dealt with unanticipated problems as they have occurred. There would be a problem if the WLIP adopts policies that would limit the use of WLIP funds for our planned activities. At this time, the only foreseeable problems would come for a lack of staff and funds to move ahead with all aspects of this plan.

D. CUSTODIAL RESPONSIBILITIES

Following are the St. Croix County departments and their land information custodial responsibilities. Text within {} indicates whether we HAVE, would LIKE, or WILL accept custodianship of the data. An asterisk * indicates that the records are filed or maintained for the operation of the office but are not a custodial responsibility. The authority for custodianship is noted in ().

Register of Deeds

Recorded deeds, mortgages, plat maps, certified survey maps, and other related documents.

{Have} (§59.43)

Tract index of recorded documents. {Have} (§59.43)

Grantor/grantee index of recorded documents. {Have} (§59.43)

Planning Department

GIS base map layers. {Will}
Property address database/coverage. {Have}{§59.54}
Digital parcel maps. {Have}{§70.09}
Existing hard copy parcel maps. {Have}{§70.09}
Zoning maps for unincorporated areas. {Have}{§59.69}
Wetlands and FEMA maps. {*}
Aerial photos. {*}
USGS 7.5 minute quad maps {*}
Orthophotography {Shared}{Internal}

County Surveyor/Planning

Information on PLSS corners, including monument record forms and section summary sheets. {Have}{§59.45}
Information on the high accuracy network (HARN) densification in the county. {Have}{§59.45}
Private survey maps. {Have}{§59.45}
Field notes and other survey source documents. {Have}{§59.45}

Zoning

Private sanitary system site plans. {Have}{§59.69}
Permit database. {Have}{§59.69}

Land & Water Conservation

Soils maps and tables. {*}
Orthophotography {Shared}
Historical aerial photos. {*}
NRCS Wetland Maps {*}

Highway Department

Right-of-way plats and construction plans. {Have}{§83.09(7)(g)}

Real Property

Description and ownership information of all parcels of property. {Have}{§70.09}
Information on school and other special district codes. {Have}{§70.09}
Tax rates and special assessment information. {Have}{§70.09}

Treasurer

Maintain tax information for all parcels. {Have}{§59.25}

E. FOUNDATIONAL ELEMENTS AND STATEWIDE STANDARDS

1. Communication, Education, Training, and Facilitated Technical Assistance

Documentation of County data. County staff attended State Cartographer's Office Wisconsin Metadata Workshop in the spring of 2002. The County maintains a data dictionary for data sets we create and will continue to update and maintain the dictionary.

WLIA training. Continue to participate in offerings of the WLIA for technical training.

Resources available. We will continue to participate in videoconferences, workshops, seminars, user groups, etc., as appropriate and where budget allows. We will continue to work with other counties and use the technical list server for technical assistance where more assistance is needed.

Identification of customers needs. The County has a Land Records Committee made up of the County departments who have land related interests. Discussion is held and customer needs prioritized.

Coordination of education/training with agencies, associations and educational institutions. As opportunities arise, we will participate as appropriate and where budget allows. St. Croix County has been a presenter at WLIA events. We will continue to share our experiences with others.

Use of technology to facilitate education and training. We have access to a satellite down link facility, the UW Extension ETN system and to the Internet.

Use of Clearinghouse and Technical Assistance List Server. The County has access to the Internet and e-mail that allows for use of the clearinghouse and technical assistance list server. We are participating and will continue to monitor the development of the clearinghouse and standards adopted.

Use of Land Information Officer education and training funds. The continues to use the funds for attending the WLIA annual conference.

2. Geographic Reference Frameworks

Geodetic control networks. In 1994 St. Croix County completed geodetic densification from stations within the Wisconsin High Accuracy Reference Network (HARN). The network consists of 56 stations which were established using the "Guidelines to Support Densification of the WI High Accuracy Reference Network (HARN) Using Global Positioning System (GPS) Technology", which were current at that time. There is adequate horizontal geodetic control strategically placed throughout the County to meet County and other users needs. Coordinate values are available in State Plane, St. Croix County and Latitude and Longitude, which can be converted to other coordinate systems. The County assumes the custodial responsibility for the densified control stations.

We plan on using the existing NGS and USGS vertical network for vertical control as well as those established by GPS readings at the time the densified HARN was established.

Public Land Survey System. The County has a corner remonumentation program that complies with the requirements of WI Administrative Code AE 7.08 and/or state statute, and we plan to continue the program countywide. We are establishing coordinates on the PLSS corners using a combination of conventional survey techniques and GPS technology meeting or exceeding the FGDC Third-order, class I accuracy standard. Coordinates are maintained in the Wisconsin St. Croix County Coordinate System that is mathematically relatable to the North American Datum (NAD) 83(91). We plan to continue work in those areas and municipalities that have indicated a desire to upgrade parcel mapping as a priority. In addition, highway construction areas will be a priority as well. Other areas will be controlled as need and budget allows. The County maintains the custodial responsibility for the PLSS.

Digital Elevation Models. The County received ortho grade DEM's as part of the 2004 orthophotography project. The DEM's meet National Map Accuracy Standards for producing 1"=100' scale Orthophotos.

Digital Orthophotos. The County acquired 6" pixel resolution digital orthophotography in the spring of 2004. The project was paid for with retained fees and a contribution based grant.

Contours. Through the 2004 orthophotography project 2' contours can be produced anywhere in the county without additional field work. This aspect of the project has provided the county with 15 square miles of 2' contours.

Satellite Imagery. We will be evaluating improvements in satellite imagery technology as a possible tool for base map updates, land classification, etc.

Ability to support Wireless 911. St. Croix County has begun a project to update and integrate the county address system to support wireless E911. The Land Information Office is working closely with the Emergency Communication Department to ensure integration and compatibility between our datasets.

3. Parcel Mapping

All parcel maps will be referenced to the lines of the public land survey system and will minimally be suitable for planning purposes and in many cases suitable for *assisting with* land title boundary or survey line determination. Our parcel maps are *not intended* to be a substitute for a certified land survey or guaranteeing title to property. Included in the Metadata or attribute database will be information that directs users to the original source document or recorded instrument. We will be monitoring the efforts of the WLIB in adopting parcel mapping standards, which are anticipated to meet FGDC's standards, and

we will attempt to comply where practical. **All maps** that are disseminated will include the following disclaimer:

“IMPORTANT NOTICE – These maps are NOT survey maps. They were compiled from the plats and deeds on record with the Register of Deeds Office, and filed with the Real Property Lister and Surveyor file, and in no manner represent a field survey. They should be used for reference purposes only.”

Geodetic Reference. Parcel maps will be referenced to the Wisconsin St. Croix County Coordinate System, which is mathematically relatable to the North American Datum (NAD) 83(91).

Parcel ID. The County is continuing a dual parcel identification system. However, the County will convert the current parcel number to the WLIB compliant PIN as part of this Plan. The current computer number will be maintained for a period of time to track tax delinquent parcels.

Topology. We will create topologically correct polygons for parcels as part of the conversion process.

4. Parcel Administration

St. Croix County’s database will support integration of converted digital parcel maps with property and ownership information by linking data through key fields.

Parcel ID. The County is continuing a dual parcel identification system. However, the County will convert the current parcel number to the WLIB compliant PIN as part of this Plan. The current computer number will be maintained for a period of time to track tax delinquent parcels.

Tax data. The tax database is designed so information can be accessed by owner name, computer number or property address. Related links will be added as software is updated. Future plans also call for linkages with the document imaging system.

Site Address. Site Addresses are maintained as an attribute in the assessment database. The County will be integrating the assessment site address with the address effort for Wireless E911.

Owner Name and Address. Owner name and address information can be accessed through the assessment database.

Real estate transactions, Liens, Evidence of Title, Easements, Covenants. Register of Deeds maintains a tract index. Searches can be made by grantor, grantee, legal description, document number or property address.

Easements. Spatial capture of easements is planned for the parcel Geodatabase model.

Tax exempt lands. A code exists as an attribute in our assessment database.

Assessment class. Tax exempt lands. These are carried as a code in the assessment database and could be linked to the GIS parcel coverage.

Optical Imaging. Imaging of documents relating to property transactions in the Register of Deeds began in January 1999. The image will be linked to the converted digital parcel coverage. As time and budget allows, we plan on inputting documents from prior years. Imaging may also be expanded to include other land records such as building permits, tax records, survey maps etc.

5. Public Access

Use of technology to facilitate efficient access. The County currently has 7 public access computer terminals available to the public for searching tabular property ownership data. The County has implemented a County web site, and we will evaluate the feasibility of further expansion to make our GIS data easily accessible. We will continue to monitor developments of the WLIP Internet Land Information Clearinghouse.

Data Sharing policies. St. Croix County adheres to the Wisconsin Open Records Law for access to any land record. Therefore we charge only the cost of reproduction. We do not copyright or license our data.

Open access to data in existing format. St. Croix County adheres to the Wisconsin Open Records Law for access to any land record. St. Croix County offers both tabular and graphic data for purchase in industry accepted interchange formats.

System security. The County's wide area network has built-in security that is managed by the Computer Services Department.

Privacy Policy. St. Croix County adheres to the Wisconsin Open Records Law and complies with State statutes for access to restricted records. The County relied heavily on the Wisconsin Land Information Association Information Policy Hand Book in developing its privacy policy for internet publishing of tax parcel records. The County does not allow searches by owner name on the public web site, however owner names are returned through other search methods. Owner name searches are allowed for subscription users. We will be monitoring the industry and the public concerns related to privacy and distribution of data.

Use of the \$1 fee designated for land information and housing data Sec. 59.72(5)(b)3. The County has used this fee to implement and maintain the land information website.

6. Zoning Mapping

The County has digital maps that depict general zoning districts. As amendments are made, these changes are made to the map files in the appropriate town. Zoning districts are mapped in accordance with the St. Croix County Zoning Ordinances.

Shorelands. We hope to develop a zoning layer to include shorelands (1000' buffer from lakes, 300' from streams). All towns in the county are covered by the shoreland ordinance. This zoning layer will be included on all zoning maps.

Floodplain and floodway. The County presently uses the hardcopy FIRM maps. We are interested in acquiring the Digital Q3 Flood Data if FEMA makes the data available.

7. Soils Mapping

Soils mapping activities. Digital conversion of St. Croix County was completed by USDA-NRCS with County financial support from 1995-97. This SSURGO certified process included digital orthophotography developed by USGS from 1992 NAPP photography. The balance of our soil survey, originally published in 1978, remains to be updated as the NRCS schedule allows.

8. Wetlands Mapping

Wetland mapping activities. The county has acquired the digital wetland mapping coverages from the DNR. We will continue to acquire updated data from the DNR as it comes available.

9. Institutional Arrangements and Integration

Formal data sharing agreements. The County has data sharing arrangements with the Cities of Hudson and New Richmond and the West Central RPC. The County will continue these arrangements and pursue others as opportunities arise. The County encourages others to use our digital data by setting a nominal cost or no cost. We encourage cost-free exchanges of information that will enhance our system.

Cooperative arrangements. The County has participated in a number of cooperative projects and plans on pursuing others as opportunities arise. We anticipate cooperative agreements with several local units of government, the RPC, state and federal agencies, and utilities.

Consortia. The County will evaluate opportunities as they arise.

Collaborative arrangements. The County actively participates in collaborative arrangements for data creation. We plan to continue our participation in the WLIA and their technical committees, WLIP Technical Assistance List Server and others as opportunities arise.

10. Election and Administrative Boundary System

State Outline. County Boundaries. Minor civil division boundaries. We incorporated existing coverages from both internal and external sources into our GIS system and will update as needs arise. These boundaries will be updated as data is created as the parcel mapping is converted.

Utility districts. Tax incremental financing districts. School districts. Lake districts. Public lands. The assessment database includes a code designating which parcels are within these districts. We hope to develop some graphic boundaries, and if needed others could be generated graphically in our GIS dynamically when the parcel mapping is completed.

Legislative districts. Reconciled election system boundaries. Census geographies. Agency administrative districts and Zip Codes. The County is interested in integrating the new (2000) census blocks and tracts but is unsure to what extent that is possible. We will use Census/TIGER products for redistricting.

11. Street/Road Centerline and Addresses

Transportation Network. The County plans to maintain its existing planimetric base map that includes centerlines of all named public and private roads in the county as well as railroads.

Rights of way. The right-of-way of public roads is part of the parcel mapping process.

Centerlines. Centerlines are maintained as part of the parcel mapping process and will be integrated with address ranges.

Address ranges. Reconciliation of street addresses and street network system. The County is developing address ranges for the County's E-911 system. We plan to work with Emergency Communications Department, local municipalities and the DOT in reconciling conflicting addresses, road names and road locations as we become aware of them.

Address Point, Structure and/or driveway. Address points are currently maintained as part of the county house number map series. The address points will be reconciled with the street address ranges as part of the Wireless E911 project.

Road Names. Road names will continue to be maintained as part of the county parcel mapping process.

Ability to support Wireless E911. The Land Information Office is working closely with the Emergency Communication Department in ensuring that the county GIS will support Wireless E911.

12. Land Use Mapping

Mapping of existing land use. The RPC completed a land use coverage as part of the development of the County Development Management Plan. The County's assessment database includes the DOR assessment code for land use, ie. residential, commercial, ag, etc. A graphic representation can be generated dynamically from the parcel base map.

13. Natural Resources

Land cover. Geology. Forests. Endangered resources. Impacts on the environment. Watersheds. Hydrography. The County has acquired some of these datasets and mapped them as part of the county comprehensive plan process. See Appendix B for a list.

14. Database Design

Design Evaluation. County staff reviews the design to determine the functionality of the data model or application. The design is reviewed to ensure compliance with applicable standards and open data exchange.

Project Approach. County land information and information technology staff coordinate to ensure the final design meets the needs of the end users. The project is completed through setting tasks.

Timeline. Timelines are created for the individual task and project as a goal for completion.

Metadata. The County maintains a data dictionary for GIS coverage and land records tabular data created by the County.

Security/Privacy. Database security is provided through normal information technology operating procedures. Privacy of land information data is controlled through the adopted privacy policy.

Implementation and Maintenance Strategy. After the county completes the scoping requirements and designs a database the database is implemented and maintained according to any applicable state or county regulations and office operating procedures.

GIS Data Model. The ESRI Geodatabase Parcel Model was used as the basis for the St. Croix County parcel data mode.

15. Infrastructure and Facility Management

Recreational Trails. The County maintains an inventory and map publication for all recreational facilities.

F. INTEGRATION AND COOPERATION

1. Integrative/Cooperative Relationships

St. Croix County has actively encouraged and supported integration and cooperation activities related to land records modernization as cited elsewhere in this plan and as indicated in past WLIP grant applications. The County plans to continue these relationships as appropriate.

2. Potential Partners & Projects

We are in the process of or are interested in developing relationships for parcel mapping, parcel records management and address mapping with the 14 cities and villages in the county to better integrate and standardize these system elements. In the future we would also like to develop a consortium of partners to develop a regularly scheduled orthophotography program.

3. Data Shared or Used

These integrative/cooperative relationships would provide for more uniform, consistent data for parcel and address maps and better access to parcel records throughout the entire county.

4. County Department Participation

We have a Land Information Committee of department heads and staff that coordinates land information activities throughout the county. The Planning and Zoning Department including the Real Property Lister, Register of Deeds, Land and Water Conservation, Surveyor, and Emergency Communications have all benefited from the WLIP through increased access to new and better data, new software, databases, and applications.

5. Other Agency Participation

The County supports and encourages collaboration and data sharing among local municipalities and other agencies.

G. ADMINISTRATIVE STANDARDS NOT ASSOCIATED WITH FOUNDATIONAL ELEMENTS

The St. Croix County Land Information Plan represents an agreement between the County and the Wisconsin Land Information Board. This agreement is intended to effectuate the objectives of the Program as embodied in the enabling legislation. In order for a Plan to be acceptable to the Board, the Board and the county agree and consent as follows below.

1. The County agrees to observe and follow statutes relating to the Wisconsin Land Information Program (WLIP) and other relevant statutes.
2. The County agrees to permit the Wisconsin Land Information Board (WLIB) access to books, records and projects for inspection and audit including unannounced audits by the Board.
3. The County agrees to complete the annual WLIP Survey.
4. The County agrees to update the plan every 5 years and in the interim if the plan should change.
5. The Board (*WLIB*) agrees to facilitate technical assistance to the County including an online Technical Assistance Service.
6. The Board (*WLIB*) agrees to maintain and distribute an inventory of land information and land information systems for the state. This will be provided through an electronic Clearinghouse.
7. Development and implementation of an acceptable Plan confers certain benefits on local government within a county, including continued eligibility for Program funding. A voluntary peer review process will be used to assess Plan acceptability by the land information community.
8. The Board (*WLIB*) agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
9. The Board (*WLIB*) agrees *to* make available electronically an Annual Report regarding the status of the Wisconsin Land Information Program and the activities of the Board.

APPENDIX A
PUBLIC LAND SURVEY SYSTEM
CORNER REMONUMENTATION STATUS, 12/31/99

<u>Town</u>	<u>Total Corners</u>	<u>Number Remon.</u>	<u>Percent Remon.</u>
Baldwin	133	128	96%
Cady	133	132	99%
Cylon	133	115	86%
Eau Galle	133	128	96%
Emerald	133	131	98%
Erin Prairie	133	129	96%
Forest	133	81	61%
Glenwood	133	132	99%
Hammond	133	126	95%
Hudson	144	140	97%
Kinnickinnic	133	131	98%
Pleasant Valley/ Rush River	133	119	89%
Richmond	133	119	89%
St. Joseph	167	158	95%
Somerset	101	96	95%
Springfield	133	111	83%
Stanton	133	113	85%
Star Prairie	133	126	95%
Troy	139	139	100%
Warren	133	124	93%
Meander	<u>20</u>		
Total	2,351*	2,166	92%

Source: St. Croix County Surveyor

*Does not total because total corners per town include shared corners.

APPENDIX B

PHYSICAL FEATURE ANALYSIS MAP SERIES

- Map 1 Bedrock Geology
- Map 2 General Soils
- Map 3 Limitations for Septic Systems
- Map 4 Limitations for Dwellings with Basements
- Map 5 Limitations for Small Commercial Buildings
- Map 6 Potentially Productive Agricultural Land
- Map 7 Potential Sand Deposits
- Map 8 Potential Gravel Deposits
- Map 9 Elevations
- Map 10 Water Bodies and Drainage
- Map 11 Groundwater Elevation
- Map 12 Depth to Groundwater
- Map 13 Floodplains
- Map 14 Shorelands
- Map 15 Wetlands
- Map 16 Closed Depressions
- Map 17 Steep Slopes
- Map 18 Woodlands
- Map 19 Grasslands and Prairie Remnants
- Map 20 Wildlife and Fisheries Areas, Natural and Scientific Areas and Rare and
Endangered Resources
- Map 21 Recreation, Scenic and Open Space Areas
- Map 22 Primary Environmental Corridors