**UNIFORM INSTRUCTIONS FOR PREPARING
COUNTY LAND INFORMATION PLANS
December 2004**

## COUNTIES COVERED BY THESE INSTRUCTIONS

**Wis. Stat. Sec. 59.72 (3) Land Information Office**. The (county) board may establish a county land information office or may direct that the functions and duties of the land information office be performed by an existing department, board, commission, agency, institution, authority or office. The county land information office shall:

- Coordinate land information projects within the county, between the county and local government units, between the state and local governmental units, among local governmental units, the federal government and the private sector.
- Within 2 years after the land information office is established, develop and receive approval for a county-wide plan for land record modernization. The Plan shall be submitted for approval to the land information board under s. 16.967 (3) (e).
- Review and recommend projects from local governmental units for grants from the land information board under s. 16.967 (7).

## FOR ASSISTANCE WITH THESE INSTRUCTIONS

Contact the Wisconsin Land Information Board at (608) 267-3369.

## BACKGROUND

Plans are an indispensable component of the Wisconsin Land Information Program. Given the enormous promise of geographic and land information system technologies, these Plans yield large benefits for all levels of government in Wisconsin. These benefits include:

- reduction of duplication of effort across all levels of government;
- more accessible, useable, complete, accurate and timely information available to local units of government, state and federal agencies, public utilities and the public;
- improved analysis, decision support, and administration; and
- increased ability to provide greater public access to land information via the Internet.

Land information and information systems have become increasingly integrated with information technologies. Rather than planning separately for land information systems and information technologies, the Wisconsin Land Information Board has determined as policy to achieve collaboration among counties and agencies on a simplified, combined and common process of compliance with the various requirements for County Land Information Plans, Agency Land Integration Plans and the GIS components of Agency Strategic Information Technology Plans.

## DEFINITION OF LAND INFORMATION

***Do you have land information?*** Wis. Stat. Sec. 16.967(1) sets forth the operative definition. The definition is *inclusive* rather than *exclusive*. The definition is: ". . . *any* physical, legal, economic or environmental information or *characteristics* concerning land, water, ground-water, subsurface resources, or air in this state". The use of the term *"any"* is expansive and is not limited by the words that follow. The word *"characteristics"* is emphasized to highlight the notion that land information is any information that can be geographically referenced to areas, lines and points on the earth. Non-traditional examples of "geo-referenced" data include social, economic, public safety, health or other statistical information organized by or referenced to location, such as parcels, census blocks, zip codes, addresses, minor civil divisions, the Public Land Survey System, counties, service regions, natural zones, or regions  The statutes provide an extensive, but not exhaustive, list of other examples "including information relating to topography, soil, soil erosion, geology, minerals, vegetation, land cover, wildlife, associated natural resources, land ownership, land use, land use

controls and restrictions, jurisdictional boundaries, tax assessment, land value, land survey records and references, geodetic control networks, aerial photographs, maps, planimetric data, remote sensing data, historic and prehistoric sites and economic projections."

## FORMAT

The following are the minimum elements that must be addressed.  Please follow the format below.  You may expand on the format to include as much or as little detail as is needed or appropriate to make the Plan useful to others.  ***However, please note that this minimum information is required in order to receive approval of budget requests for land information related hardware, software, systems, application development projects, staff or vendor contracts to the Land Information Board or State Budget Office.  Please read over  the entire form before completing.***

## I.      EXECUTIVE SUMMARY

   **A.**  Identify your county and the name of the person completing this form.
   **B.**  Identify those who participated in the process of preparing the Plan.   List organizational affiliations, names, addresses and phone numbers of designated contact person(s) for this Plan.
   **A.**  Provide a concise summary of this Plan not exceeding one page.
   **B.**  If applicable, provide the address for your county's land information Website.
   **C.**  If applicable, provide the address(s) for any Websites serving land information that are maintained or sponsored by municipalities within your county.


## II.     LAND INFORMATION PLAN

### A.  Goals and Objectives

   **1.**  State the goals and objectives of the county relating to the horizontal and vertical integration of land information and systems among users of land information in Wisconsin.  Include a brief assessment of the internal and external customers' needs and priorities for land information and technology.  Identify the time line for meeting goals and objectives and *(where appropriate)* your measurement methodology for achieving them by addressing the following questions:

   a.  What data or information does the county need that it currently uses or can acquire from other state or local sources?
   b.  What data or information does the county need that it does not have and what problems are encountered acquiring it?
   c.  How is or will the county ensure that the land information it has is, or can be made available in a standard industry format for use by others?
   d.  How is or will the county ensure that the land information it has is geographically referenced for use by others?

   **2.**  Describe how the county's technology environment and database design standards and practices (including metadata and other elements listed below in the "Database Design" Foundational Element) supports the county's goals and objectives relating to land information and supports the county's information technology vision, mission, goals, strategies and Plan.

### B.  Progress Report on Ongoing Activities.

   Please provide a description of the county's progress towards achieving the goals and objectives listed in the previous section ("Goals and Objectives").  Include a description of any significant changes in goals and objectives from those described in the county's previous Plan.

**C. New Initiatives.**

*This section contains critical information. It is the basis upon which local units of government can proactively establish prospective arrangements for cooperation, collaboration and confederation of efforts to save money, time, and effort, and avoid duplication of land information. It also defines the obstacles to such efforts so that they can be identified and removed.*

Describe major initiatives, if any, the county intends to pursue over its planning horizon. This would include, but not be limited to, automation of land information or systems; new or updated data development; acquisition or development of land information system hardware, software, staff; Internet-based land information systems; mobile or wireless communications systems using land information; support of Wireless 911; delivery of major county programs such as comprehensive planning, emergency response or human services; and regional or intergovernmental initiatives.

**1.** <u>Proposed Projects</u>. Highlight specific activities that the county proposes to initiate to enable land information to be readily translatable, retrievable, and geographically referenced for use by any level of governmental unit and the public. Identify specific budget information, timeframes, staffing and other pertinent data associated with these initiatives.

**2.** <u>Assistance Requested</u>. Describe any initiatives the county would like the Land Information Board to assist with (such as adoption of policies, standards, coordination, integration efforts, user needs assessments, technical assistance, education, funding). The following questions must be addressed:

   a) What is your county's plan to secure the technical assistance needed to carry out your Land Records Modernization/Integration Plan, including your plan to connect to the WLIP Internet Land Information Clearinghouse and Technical Assistance List Server Service?
   b) What is your county's plan to finance the costs to continue previous investments in land records modernization/integration made in whole or in part with Land Information Program funding?
   c) How does the county plan to maximize resources by utilizing competitive procurement processes (bid, RFP and justified sole-source) consistent with State of Wisconsin and local procurement rules?

**3.** <u>Problems Encountered</u>. Describe any projects or activities your county would like to undertake that has not been stated above. Please describe obstacles that have prevented your county from proceeding, such as staff, funding, coordination problems etc. Please be specific.

**D. Custodial Responsibilities.**

   **1.** Identify the land information and data for which your county <u>has</u> custodial responsibility.
   **2**. Identify the source of your custodial authority: i.e. Wisconsin Statutes, Administrative Rule, Land Information Board Policy, Inter-governmental Agreement, internal policy, etc.
   **3.** Identify the land information, and data for which your county would like to assume custodial responsibility.
   **4.** Identify the land information and data for which your county will assume custodial responsibility if requested.

**E. Foundational Elements and State-Wide Standards.**

The WLIB has developed a specific and critical subset of land information called Foundational Elements and a corresponding set of state-wide standards relating to a specific subset of land information*. **All foundational elements are fundamentally important, interrelated and must be addressed for a successful land information plan. The Elements are listed below.***

- For each Foundational Element please discuss key features of Foundational Elements (see below).
- For each Foundational Element, please confirm your adherence to related standards or discuss your plan to maintain or achieve compliance with the standards corresponding to each element (see below).
- For each Foundational Element, please discuss your plan to assume or maintain custodial responsibility *(as applicable)*.
- For each Foundational Element, please discuss your plan to maintain the dataset.

**1. Communication, Education, Training and Facilitated Technical Assistance**
   **Those noted in bold are required to be addressed, discuss key features as applicable:**

   a. Documentation of county data.
   b. Resources available.
   c. Identification of customer needs.
   d. Coordination of education/training with agencies, associations and educational institutions.
   e. Use of technology to facilitate education and training.
   **f. Use of, or plan to participate in Clearinghouse and Technical Assistance List Server.**
   **g. Use of Land Information Officer education and training funds.**

   **Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
   - **No standards have been adopted, however county Internet connection to the WLIP Clearinghouse and Technical Assistance Service is required in order to participate in the WLIP.**

**2. Geographic Reference Frameworks**
   **Those noted in bold are required to be addressed, discuss key features as applicable:**

   a. **Geodetic control networks**
   b. **Public Land Survey System**
   c. Photogrammetric base maps
   d. Digital elevation models (DEM)
   e. Digital orthophoto (DOP)
   f. Digital terrain models
   g. Digital raster graphic
   h. Triangulated irregular networks (TIN)
   i. Contours
   j. Satellite imagery
   k. Ability to support Wireless 911

   **Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
   - Standards for Geodetic Reference Systems FGCC standards and specifications; **WLIB Specifications and Guidelines to Support**

**Densification of the Wisc. High Accuracy Reference Network (HARN) Using Global Positioning System (GPS) Technology - June, 1995.**
- Geodetic Control Clearinghouse Report 1994
- **Standards for Public Land Survey System Corners Corner Remonumentation. See Sec. 59.74 & 60.84 Wisc. Stats. and Wis. Admin. Code AE 7.08.**
- **Coordinate Values (FGCC Third Order Class I).**
- PLSS Database Definitions
- **Standards for Geographic Control Data (FGCC Third Order Class II for Horizontal Coordinate Values and Third Order for Elevation Values).**

## 3. Parcel Mapping
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. **The preparation of parcel property maps that refer boundaries to the public land survey system and are suitable for use by local governmental units for accurate land title boundary line or land survey line information.**
b. **The preparation of property maps that do not refer boundaries to the public land survey system that are suitable for use by local governmental units for planning purposes.**
c. **Coordinate system used**
d. **Parcel ID**

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
- FGDC's Cadastral Standards for the National Spatial Data Infrastructure.
- **The WLIB's Parcel Identification Numbering System.**
- Local Government standards compliance.
- **The WLIB's Digital Parcel Mapping Standard.**

## 4. Parcel Administration
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. **The design, development and implementation of a land information system that contains and integrates, at a minimum, property and ownership records with boundary information, including a parcel identifier referenced to the U.S. public land survey.**
b. **Activities associated with modernizing the use of parcel level information once created from and in support of parcel maps, for example:**
   **Parcel ID**
   **Tax data**
   Site Address
   Owner Name & Address
   Description/current document pertaining to parcel
   Document imaging
   Real estate transactions
   Easements and restrictions, including conservation easements
   Tax exempt status
   Zip codes (including +4)
   Assessment class
   Public lands
   Liens
   Evidence of Title,

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**

- FGDC's Cadastral Standards for the National Spatial Data Infrastructure.
- **The WLIB's Parcel Identification Numbering System.**
- Local Government standards compliance.

## 5. Public Access
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. **Use of technology to facilitate efficient access (e.g. Internet, query systems, CD).**
b. **Data sharing policies (copyright, licensing, fees etc).**
c. **Open access to data in existing format.**
d. Optional production of customized data on cost-recovery or other basis.
e. Internet accessibility (ADA compliance, security)
f. **System security.**
g. **Privacy policies.**
h. **Use of $1 fee designated for land information and housing data Sec. 59.72 (5)(b)3.**

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
- **Local government compliant w/security and individual right to privacy.**
- Data exchange Between Agencies (www.wlia.org/standards.html)

## 6. Zoning Mapping
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. Zoning Districts
b. **Shorelands**
c. **Floodplains and floodways**
d. Environmental corridors
e. Burial sites
f. Archeological sites
g. Historic/cultural sites

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
- **Zoning Mapping Standards (Local Gov't. Compliant)**
- DNR Floodplain Zoning NR 115/117

## 7. Soils Mapping
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. Soils mapping activities

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
- **Soils Mapping Standards (Natural Resources Conservation Service Compliant)**

## 8. Wetlands Mapping
**Those noted in bold are required to be addressed, discuss key features as applicable:**

a. Wetlands mapping activities

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**

- **Wisc. DNR Wetlands Map (Wisc. Stat. 23.32 Wisc. Stats.)**

**9. Institutional Arrangements and Integration**
**Those noted in bold are required to be addressed, discuss key features as applicable:**
   a. Formal data sharing agreements (Memorandums of Understanding etc.)
   b. Formal or informal data maintenance agreements between departments/agencies.
   c. Cooperative arrangements (e.g. agencies; libraries; schools; RPCs; utilities; privates).
   d. Consortia (e.g. inter-county, regional).
   e. Collaborative arrangements (e.g. sharing of:  local/state staff and budgets; technical assistance; peer review; collegial plan preparation; common help desk; bartering and mentoring etc.)
   f. Statutory relationships among counties and state agencies.

**Confirm your adherence to standards where applicable.  Unless noted as required in bold, all standards are advisory:**
   - *No standards have been adopted.*

**10. Election and Administrative Boundary System**
**Those noted in bold are required to be addressed, discuss key features as applicable:**
   a. State outline
   b. County boundaries
   c. Civil division boundaries (Towns, City, Villages etc)
   d. Utility districts (.e.g. water, sanitary, electric, etc.)
   e. Emergency Service Areas
   f. Legislative districts
   g. Election (voting district) boundaries, wards, supervisory, assembly, senate etc)
   h. Tax incremental financing districts
   i. School districts
   j. Lake districts
   k. Census geographies:
        Blocks
        Block groups
        Tracts
        Designated places
        Urban areas
        Traffic analysis zones
   l. Native American lands
   m. Agency administrative districts and Zip Codes
   n. Public Administered Lands, ie parks, forests etc

**Confirm your adherence to standards where applicable.  Unless noted as required in bold, all standards are advisory:**
   - **Local government compliant.**

**11.  Street/Road Centerline and Addresses**
**Those noted in bold are required to be addressed, discuss key features as applicable:**

   a. Transportation network (streets, roads highways, railroads)
   b. Rights of way
   **c. Centerlines**
   d. Address ranges
   e. Site address data base
   f. Address point, structure and/or driveway
   **g. Road names**
   h. Functional class
   i. Places/Landmarks

j. Integration with the County's/City Master Street Address Guide (MSAG)
k. Ability to support emergency planning, response and mapping
l. Ability to support Wireless 911

**Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
- **Local government compliant.**
- US Postal Addressing Standards Publication 28

12. <u>Land Use Mapping</u>
   **Those noted in bold are required to be addressed, discuss key features as applicable:**

   **a. Mapping of existing land use.**
   b. Mapping of planned land use

   **Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
   - **Dept. of Revenue Land Use Classification System**
   - **Local government compliant**

13. <u>Natural Resources</u>
   **Those noted in bold are required to be addressed, discuss key features as applicable:**

   a. Land cover
   b. Watersheds
   c. Geology
   d. Hydrogeology
   e. Forests
   f. Hydrography
   g. Non-metallic mining
   h. Endangered resources
   i. Impacts on the environment (e.g. air emissions; groundwater contamination, storm water)

   **Confirm your adherence to standards where applicable. Unless noted as required in bold, all standards are advisory:**
   - **DNR Classification of Land Cover from satellite imagery.**

14. <u>Data Base Design (see Item II.A.2. above for description)</u>
   **Those noted in bold are required to be addressed, discuss key features as applicable:**

   **a. Design Evaluation**
   **b. Project Approach**
   **c. Timeline**
   **d. Metadata**
   **e. Security/Privacy**
   **f. Implementation and Maintenance Strategy**
   g. Data quality management
   h. Needs assessment
   i. Data structure and format (e.g. topology)
   j. GIS Data Model
   k. Data Dictionary
   l. Coding schema
   m. Transaction management
   n. Organizational information flows
   o. Data Conversion

p.  Ability to integrate with other databases and information systems (vertical and horizontal)

**Confirm your adherence to standards where applicable.  Unless noted as required in bold, all standards are advisory:**
- Data Interchange Standards
- Data Exchange Between Public Agencies, WLIB, 1996
- Describe the data interchange standards used by your county.  Data Interchange arrangements may be formal or informal.  The Wisconsin Land Information Board has adopted standards for the exchange of GIS and geodetic control data (Refer to II.E. 2 and II.E.5).

15. **Infrastructure and Facility Management**
    **Those noted in bold are required to be addressed, discuss key features as applicable:**

    a.  Parks
    b.  Transit systems
    c.  Harbors
    d.  Airports
    e.  Recreational Trails (Ice Age/ bicycle/ hiking/ snowmobile/ horseback routing)
    f.  Utilities - not districts (e.g. gas, electric, sanitary, water, phone, telecommunications etc.)
    g.  Government facilities
    h.  Hazardous materials sites; LUST(Leaking Underground Storage Tank) etc.
    i.  Landfills
    j.  Bridges, culverts, traffic road signs
    k.  Boat landings

    **Confirm your adherence to standards where applicable.  Unless noted as required in bold, all standards are advisory:**
    - *No standards have been adopted.*
    - Governmental Accounting Standards Board (GASB)

**F.  Integration and Cooperation**

Wisconsin Administrative Code, Chapter Adm. 47 defines *integration* as the coordination of land records modernization to ensure that land information can be shared, distributed and used within and between government at all levels, the private sector and citizens.  *Cooperation* is defined as the explicit relationships within and between public agencies, and between public entities and private entities to share land information or collaboratively pursue land records modernization.  These cooperative relationships may be formal or informal, a single instance of exchange or an ongoing association.

**Please describe the following:**

1.  What integrative/cooperative relationships would your county like to develop?
2.  What potential partners and mutual projects does your county plan to pursue?
3.  What data would be shared and used in both of the above?
4.  How does your county allow for participation and coordinate funding allocations so that all departments benefit from the land information program?
5.  How does your county allow for participation so that municipalities and other agencies in the region benefit from the land information program?

**G. Administrative Standards Not Associated With Foundational Elements**

Plans represent 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.  If applicable, discuss any plans, problems, issues, or concerns relative to these agreements.

1.  The county agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes.
2.  The county agrees to permit the Wisconsin Land Information Board 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.
3.  The Board agrees to facilitate technical assistance to the county including an on-line Technical Assistance Service.
1.  The Board 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.
1.  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.
1.  The Board agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
5.  The Board agrees make available electronically an Annual Report regarding the status of the Wisconsin Land Information Program and the activities of the Board.