

# WISCONSIN LAND INFORMATION PROGRAM

## PREPARING THE COUNTY-WIDE PLAN FOR LAND RECORDS MODERNIZATION

### Approaches and Methodologies to Make the County-Wide Plan Successful

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# WISCONSIN LAND INFORMATION PROGRAM

## PREPARING THE COUNTY-WIDE PLAN FOR LAND RECORDS MODERNIZATION

### Approaches And Methodologies To Make The County-Wide Plan Successful

#### A. PREFACE

Local government participation in the Wisconsin Land Information Program ("Program") has been widespread and enthusiastic across the state. One requirement for continued participation in this Program is the development of the County-Wide Plan for Land Records Modernization. The purpose of this document is to assist local governments in the development of the County-Wide Plan for Land Records Modernization. This document intended to supplement, not replace the Land Information Board's *Recommendations and Requirements for County-Wide Plans for Land Records Modernization* ("Recommendations and Requirements"). This document is organized into two major sections. The first section provides a background to the planning process. The second section has individual subsections that correspond to the required format of the Plan. Each subsection provides suggestions and alternative ways to prepare the Plan. This document has been drafted as part of the *Land Information Office Reference Book*, which is a binder composed of a series of sections that provide references for relevant statutes, standards, the names of persons who may be contacted for questions about specific standards and other reference materials. This binder will be supplemented periodically.

Because there are 2592 units of government within the state with land records responsibilities, the Program has been organized at the county level to make it more manageable both at the state and local level. Moreover, county governments have many land records responsibilities. As a result, county government serves as the focal point for the Program at the local level. It must be understood, however, that this Program and the planning process is very much oriented to all local governments, not just county government. Two major objectives of the Program are cooperation and coordination. The benefits of these objectives do not stop at the boundaries of counties or any other minor civil divisions for that matter. To the contrary, inter-governmental cooperation and coordination may provide citizens the greatest benefit by reducing the enormous amount of duplication that goes on at all levels of government. These benefits may be amplified if cooperation and coordination are expanded to include private sector participation such as utilities and forestry companies. The major theme of the Program is, therefore, to find ways to improve and modernize land records and to seize the opportunity to coordinate activities within and between units of government and the private sector.

#### B. BACKGROUND

Land information and record keeping affect the operation of government at virtually every level of the public sector within the state. The array of activities and responsibilities of governmental agencies relative to land information is staggering. Not only does much of local governmental revenue depend on land and land information, a great proportion of programs and activities of government are organized around geography. Examples of the geographic impact on governmental efforts include the organization of civil divisions and jurisdictions, stewardship of natural and other public resources, management of facilities and public operations, emergency services and management, and a host of other public functions. Aside from these operational considerations, governments serve as the repository for the public records about land information. The significance of land information is evidenced by the fact that more than \$140,000,000 is spent each year by the public sector and utilities to collect and maintain land records in Wisconsin. This estimate does not include other expenditures made by the private sector and citizens. In all toll, democratic societies rely on

these public land records and land information as essential means to the preservation of property and other rights. These basic functions of land records also support the efficient organization and operation of government. To a large extent, the responsibility of carrying forward these essential tasks rests with local government.

Over the course of time, the means to organize land information has evolved institutionally in a very sensible and efficient fashion. Most land information and records are collected and maintained in a decentralized fashion by those who are most familiar with the information by virtue of their expertise, responsibility and proximity. Agencies and offices at every level of government collect, maintain and keep custody of information within and about their jurisdictions. Those with land information responsibility go about their duties on a day to day basis updating and improving the quality of the information.

Technologically, however, the approach to the management of land information has not evolved since Wisconsin became a state some 140 years ago. In addition, many individuals responsible for land information, quite justifiably, view his/her duties in the context of their own production environment and in terms of a limited group of end users of the information. As a result, many times the information tends to be collected in an arcane fashion with little emphasis, if any, towards uses other than the local responsibilities of the department collecting it. When this happens, the investment that is made in information does not yield as great a return to society as if the information had been more accessible and useful to a wider audience.

Fortunately, technology has progressed in such a way as to enable us to make information much more productive and ubiquitous. In particular, there exists an opportunity to more broadly share information than we do presently. Through "Systems Integration" the collection and dissemination of information can be coordinated so that information can be shared, distributed and used by many agencies and individuals. This coordination enables governments to reduce duplication of effort by sharing common elements of land information. The Program has been created to start the modernization of land records and the development of automated land information systems across the State of Wisconsin. The County-Wide planning process is one way of encouraging jurisdictions and agencies to coordinate activities and to share information. Even though automation is an important aspect of Systems Integration, it is not required for participation in the Program.

The focus of the Program in Wisconsin is upon information, not on any particular type of technology. In this way, local governments can take a variety of approaches to move toward Systems Integration. Some may simply improve existing manual systems. At the other extreme, some local governments will adopt state of the art, highly automated geographic information systems. Either extreme or somewhere in between will satisfy the requirements for Program participation if the activities that are pursued meet minimum standard levels for information quality and exchange. Another important aspect to the approach taken by Wisconsin is that it preserves and emphasizes the advantages and efficiencies of existing institutional frameworks while building technological innovation.

### C. PREPARING THE PLAN

In developing the Recommendations and Requirements, the Wisconsin Land Information Board had three major objectives for Plans and the planning process. First is flexibility. While certain standards must be adopted to make cooperation and coordination possible, local government is given the maximum amount of flexibility in the planning process and the specific activities that may be undertaken in the Plan. This recognizes the diversity that exists between jurisdictions across the state. The second objective is simplicity. The Plan and the planning process should be simple enough so that it can be done with existing personnel. This is not to discourage the use of consultants for preparing plans. Rather, the idea is to make sure that local governments understand that the Plan does not have to be so complicated that it cannot be done internally. In many areas, consultants may be used extensively. The option to use consultants should be made by local

decision makers, understanding that the "home grown" option is available. Finally, the Plan should be driven and oriented to the needs of those participating in the planning process. Specifically, the choices made in the Plan should reflect the needs, priorities and resources of the county. Program objectives can certainly be met by no more than the coordination of local activities that are driven by local circumstances.

It must be understood that there is no one "typical" county. Counties differ widely, institutionally and practically. As a result, there is no preferred way to prepare and implement a Plan. Plans may be simple and straight-forward or they may be detailed and complex. The type of Plan developed by any given county needs to reflect the context of that county. The context of a county is determined by a range of factors that include the status of land records, the political, economic and environmental forces within the county, the resources at the disposal of local governments within the county, the nature of personnel that can be devoted to various projects and, finally, the challenges and problems facing local government and the particular opportunity to include other participants such as federal agencies, utilities and other private sector groups.

The following sections discuss in some detail each essential component of the Plan. The Recommendations and Requirements detail four specific segments that must be included in every Plan. These segments are (1) Introduction, (2) Current Activities and Inventory, (3) Goals and Objectives, and (4) Modernization and Implementation Plan. In preparing the Plan, these sections may be organized in any fashion that is appropriate to the county. For example, each segment may be a chapter of the Plan. Conversely, each segment may simply be a sub-heading. These organizational details are left to the discretion of the County Land Information Office.

It should be noted that the required format of the Plan is meant to encourage the use of a practical methodology that will make the Plan successful. The Plan should be developed incrementally and sequentially. Each segment of the Plan is designed to lead to the next. If the segments are taken out of sequence, important details may be missed and the optimum discussion and formulation of the Plan may not occur. For example, if those who are preparing the Plan decide that the county should adopt geographic information technology without having completed the Inventory and Goals sections, it may be a very unwise decision. There are several steps that must be taken to make a geographic information system practical and useful. Those necessary steps may not be recognized without an assessment of the situation. As a result, there may not be specific determination of whether this type of automation would be appropriate. Laying the foundation for GIS takes time and effort. Some counties may only want to start improving land records and land information to build the foundation for automation over the first few years of the Plan.

#### **1. Introduction**

The purpose of the Introduction is to provide an overview of how the Land Information Office approached the Plan and to introduce the people involved in the Plan. The Introduction also permits the Board to know who participated in the planning process and who would be the contact for the Plan. Those who should be identified include the Contact Person for the County Land Information Office and the other members of the County Land Information Office. The Introduction should also detail the organizational structure of how the Plan was developed. For example, this could include sub-committees and their membership. If a consultant was used, the firm name and the names of the people who actually developed the Plan should also be identified. Other possibilities include organizations or committee resources which contributed to the planning process.

The Introduction may include other information about the county and the planning process to set the context of the Plan. For example, the Introduction may detail the history of local efforts in land information. It may describe the social, economic, environmental and political landscape giving rise to the Plan. While this type of information is not required, it is useful for both the Land Information Office and, ultimately, the Board.

## 2. Current Activities and Inventory

The Current Activities and Inventory is an extremely important part of the Plan. The primary purpose of this section is to give those preparing the Plan the opportunity to understand the current status of land records within the county. One objective of the inventory is to identify the type, location, and extent of land records which may be candidates for modernization. A secondary objective is to stimulate communication about land records among the participants and public officials. This is essential to discovering opportunities to coordinate activities and foster cooperation. Any planning of projects or activities without benefit of this inventory will result in decisions being made on incomplete information. To be something more than a meaningless exercise, the Current Activities and Inventory should be done prior to the Goals and Objectives and the Modernization and Implementation Plan. Without the "spade work" of the Inventory, the Plan will not meet its intended purpose or promote Systems Integration.

The type of land record is a general description of the instrument or document. As examples, a land record may be a deed, a plat of survey, an assessment record, a property tax billing record, or a building permit. A general description briefly summarizes the document. The land record type description may be expanded to include: (1) a summary of the data contained on the record such as names, addresses, document number, legal description, or measurements; (2) person responsible for generating or first filing the land record; and (3) a list or description of where the document is routed. These additional descriptions are not necessary for an initial land records inventory, but may be collected later. The land record type is used to help the Land Information Office categorize similar records and to communicate to each other the nature of land records used.

The location of the land record describes where the land record is stored and maintained for the county and its towns, villages, and cities. As examples, the township assessor may generate and store all assessment and value information, the register of deeds may first record and store all legal instruments, and the county surveyor may record and store all remonumentation records. The land record location may be expanded to include: (1) a description of the indexing; (2) who maintains the index; and (3) public access to records. The location information is used by the county Land Information Office to estimate access requirements for modernization and logistic estimates for modernization.

The extent of the land records could be an estimate of the number of plats, the number of books or volumes, the number of microfiche, the number of parcels, or any other indicator of volume. The extent is used to help the Land Information Office estimate how long it will take to modernize the land records and determine the priorities of various projects.

There are many different approaches to an inventory of land records ranging from a listing of materials to a full scale user needs analysis. Three possible approaches a Land Information Office may use are:

### \* Inventory by Jurisdiction

- List all villages, towns, and cities in the county;
- Identify all offices which create and/or store land records in each jurisdiction;
- In each office briefly describe the land record, where it is kept, and approximately how many records there are; and
- Review the county offices for the same information.



\* **Inventory by Foundational Element**

- Summarize the first five foundational elements listed in the Recommendations and Requirements; and
- For each element list offices or jurisdictions which create and/or store the data described in the foundational element and approximately how many records there are.

\* **Inventory by Record Type**

- Summarize and describe the primary land records used in the county, such as deeds, assessments, plats of survey, property tax records, and building permits; and
- For each land record describe which office or jurisdiction creates or stores the land record and approximately how many are there.

Included in the *Land Information Office Reference Book* are some specific examples of surveys that have been used to compile this type of information. (See Ventura, S.J., *Implementation of Land Information Systems in Local Government - Steps Toward Land Records Modernization in Wisconsin*) The identification of problem areas and successes should be part of this assessment. Knowing what is right and wrong about the current state of land records will assist the planners in formulating the Goals and Objectives and the Modernization and Implementation Plan. In addition, the Plan will be more successful if it helps solve current, real-life, day to day problems.

While the Current Activities and Inventory may be flexible, a history of budget items for land records modernization projects over the last three years must be included. This history may simply be a synopsis of such expenditures. The history does not need to be extensive and should not cover day to day activities but should include specific improvement items. Examples include: remonumentation projects, establishment of coordinates, updating and/or automation of parcel mapping, conversion to tract indexing, automation of systems or data, computer and software purchases, document preservation projects, new data capture efforts or staff additions.

Ultimately, the Current Activities and Inventory should provide those preparing the Plan with enough information to proceed with the balance of the Plan. Without this information in hand, it would be difficult, if not impossible, to accurately assess what the goals and objectives should be and, thus, what projects should be undertaken in the Plan.

C. **Goals and Objectives**

The purpose of the goals and objectives is to provide a framework for the discussions of what should be undertaken in the Modernization and Implementation Plan and to provide a statement of the general direction and intent of the Land Information Office. The Goals and Objectives should emerge from the assessment undertaken in the Current Activities and Inventory. Goals and objectives may also be the most difficult part of the Plan to construct. The Plan may just include selected goals and objectives that will be pursued. Whether only selected items are included or not, the process of developing goals and objectives should involve those of all participants, realizing that not everything can be included in the Plan. Without identifying all goals and objectives, the risk is run that something important will be missed.

Goals can be defined as the broad policy aim. Objectives, on the other hand, are the means by which the goals will be addressed. The goals and objectives should be short, clear and concise. For example, a set of goals and objectives might include:

Goal:

Improve access to information about parcels to the general public and the private sector.

Objective:

Step One: Develop an automated tract indexing system

Step Two: Assess and develop optical imaging systems for all official public records

Goal:

Promote the sharing of information within and between jurisdictions.

Objective:

Relate the existing parcel identifiers to the recommended data exchange standards for all parcels, but not to change the current in-county parcel identifier.

Goal:

Improve parcel mapping systems for taxation and administrative purposes.

Objective:

Step One. Complete a manual tax parcel mapping program for all areas of the county, which at a minimum, will be related to the PLSS.

Step Two. Work towards an automated parcel identifier and mapping program which will accommodate the parcel data exchange standards and will compile all the county's parcel maps on one system or network of systems that are linked.

Goal:

Make the Plan dynamic and appropriate over time.

Objective:

Develop quarterly status meetings for all Plan participants with the intent of doing annual status/update reports for the Plan

Goal:

Improve zoning systems.

Objective:

Compile and reconcile the various zoning ordinances with their boundaries and classifications onto one map for the entire county.

Appendix A of the Recommendations and Requirements contains some examples of potential activities that may be included in the Goals and Objectives.

The Goals and Objectives must identify the planning horizon of the Plan. There is a minimum horizon of five years. The Plan may be much longer if that is appropriate. The important issue in having a minimum planning horizon is to look beyond the next few years and current demands, to take in the "big picture". Looking forward, the Land Information Office should envision what the possibilities for land information and land information systems could be five years from now. The goals will set the general direction and priority for the land information office over the next five to ten years. The goals should be realistic and should reflect the true intent of the Land Information Office. Finally, the Administrative Standards require annual status reports and full Plan updates every five

years. In effect, the planning process is never really finished. Local government is encouraged to take the opportunity to learn from both successes and failures as projects are pursued. In addition, the goals, objectives and implementation strategies may change over time. These changes in circumstance will most likely warrant a continuing review of the Plan.

#### D. Modernization and Implementation Plan

The Modernization and Implementation Plan segment of the Recommendations and Requirements is broken into four parts. The first part describes Foundational Elements. The second part establishes data quality standards for each Foundational Element. The third section describes Data Interchange Standards and provides one such standard. The final section details Administrative Standards. The Modernization and Implementation section of the Plan serves several purposes. It describes what activities will be undertaken and how the Land Information Office is going to address the Foundational Elements. For those activities that are not specifically identified as a Foundational Element, the relationship between the proposed activity and one or more Foundational Elements must be established. Thus, every activity undertaken in the Plan must further, in some way, one or more Foundational Elements. This section of the Plan must also detail how those activities undertaken will meet or exceed the standards that have been adopted. Finally, utilizing the systematic approach to planning, the purpose of the Modernization and Implementation Plan is to provide the details on how the Land Information Office will affect the goals and objectives. It is the culmination of the analysis undertaken in the other parts of the Plan.

Again, the structure of the Modernization and Implementation Plan is up to those preparing the Plan. However, there are some requirements. Each Foundational Element must be addressed in the Plan, even if the extent of the response is "no planned action on this foundational element". The Recommendations and Requirements require the following analysis for each Foundational Element or other activity undertaken:

1. **A description of the activity or program, including the source and nature of automated land information.** This requirement is simply a narrative of what is being proposed to be done. If automated data is part of what is being proposed, it should be noted.
2. **Relationship of the activity or program to other modernization activities or programs.** This requirement is intended to put the activity in context of the other activities that are going to be undertaken. Clearly, individual components of what is being proposed in the Plan should interrelate. This provision simply requires that the relationship be established.
3. **Status of the activity or program, including status to date and estimated completion date.** In some measure, this element should be included in the Current Activities and Inventory. If the status has been addressed, it may be simply referenced. If not, a simple statement of the current status will suffice. This element also requires that the estimated completion date be included. This estimate can be very specific or may be a "best guess" given staffing, funding, grants etc. Nonetheless, some time frame should be articulated.
4. **The anticipated benefits of any programs or projects.** There must be some reasoning why the project is going to be undertaken. The reasons may be something tangible such as a cost savings or something intangible along the lines of providing improved products or services. Another benefit may be how the project fits into the overall scheme of the Plan. For example, one benefit of remonumentation and coordination may be the development of a highly accurate parcel map. This is to suggest that



remonumentation may not be a benefit in and of itself, but that it will lead to products that would be very beneficial.

One suggested approach would be to structure the Modernization and Implementation Plan to follow the Foundational Elements one by one. If additional activities are to be undertaken, they may follow the Foundational Elements. In considering each Foundational Element or additional activities, the above requirements may be answered in turn. Another aspect to this approach would be to discuss the relevant standards as part of the analysis. An abbreviated example of this approach follows:

**Geographic Frameworks.** Badger County has completed remonumentation on roughly 57% of the Public Land Survey Corners. Of these remonumented corners, 75% have coordinate values attached. Badger County intends to continue this remonumentation effort until all PLSS Corners have been completed, including the establishment of coordinates on all corners. This is a long term project. It is anticipated that to complete this project will take 3 to 5 years, depending on funding and staffing levels. Remonumentation is an important link to other Plan activities. At a minimum, the establishment of this control will assist the county in the preparation of automated tax parcel maps. In addition, this control work will be part of the county's overall strategy to implement a geographic information system ("GIS") over the next decade. This improved control will have the immediate benefit of providing tax parcel maps that are accurate enough to improve tax assessment and collection activities. A second longer term benefit of the improved control will be to support other automated mapping and GIS. This remonumentation project will be undertaken in conjunction with the City of Badger on a cooperative basis. In this remonumentation effort, North American Datum 1983 will be used and statistically related to the legislatively established datum identified in Chapter 236.18 of the Wisconsin Statutes. In addition, coordinate values will meet and, in some cases, exceed Federal Geodetic Control Committee Third Order Class I Standards. A monument record will be filed for all monuments that have had coordinate values placed on them. Specifications for the monuments are included in Appendix 6.

**Parcels.** Badger County currently has a manual tax parcel mapping system. This system does not offer adequate accuracy or resolution to adequately support mapping tax assessment and tax collection activities as Badger County further develops. Badger County proposes the development of an automated tax parcel mapping system. A study will be undertaken by the county and the towns, villages and municipalities within the county to determine the precise specifications required for this project. Once this study has been completed, this automated system will be undertaken in an incremental fashion, starting in those areas of the county where remonumentation has been completed. This automated tax parcel map will not be completed until some time after remonumentation is complete. It is anticipated that this tax parcel mapping program and system will be fully operational on a county-wide basis in 4 to 6 years. The intent of this parcel mapping project is to provide a relatively accurate county wide parcel map that can be used by all jurisdictions. This map will support a number of other activities, including zoning, wetlands zoning, assessment and tax collection. This project will benefit local participants through better tax administration and increased collection efforts. In addition, this map will serve most jurisdictions well for parcel administration.

**Wetlands Mapping.** Badger County has analyzed its needs and has determined that it will not pursue a Wetlands Mapping project until some time in the future. Currently wetlands maps are on mylar and are only about 6 years old. Badger County will look

to pursue a new wetlands mapping project in 5 to 6 years after the remonumentation and tax parcel mapping projects are completed.

**Tract Indexing.** The Badger County Register of Deeds Office currently has no tract index. Badger County proposes to develop an automated tract indexing system. This project will be undertaken in part to provide the beginnings to a common parcel identification numbering system. The automated system will be organized and related to the PLSS at the quarter-quarter section level. Badger County will assign a four number code at the end of each PLSS descriptive number as a unique parcel identification number. This parcel numbering scheme will conform to the Land Information Board's parcel numbering scheme detailed in the Data Interchange Standards. All jurisdictions will be encouraged to adopt this numbering system over time. This encouragement will come, in part, from the utilization of the number on the automated tax parcel mapping project. By using this parcel numbering scheme on the tax parcel map, other jurisdictions will have an incentive to adopt this parcel numbering system. Aside from the benefits of coordination, the automated tract index will improve public access and use of Register of Deeds records. This project will reduce costs over time within the county and will reduce costs for citizens who need information about their land. It is expected to take approximately three years to implement the automated tract index system. This time period will include an analysis of various systems, the development of a request for proposal for the system components and for implementation of the system. The County may employ a consultant to design the system. That determination will be made after further study of the issues involved. Any system adopted will be in conformance or exceed the requirements set forth in Sec. 59.55 of the Wisconsin Statutes.

The foregoing example is somewhat incomplete. It does not address each Foundational Element or the array of other potential activities. It does provide a thumb nail sketch of the way the implementation plan can be approached. Please note how the tract indexing proposal is specifically related to several Foundational Elements. To undertake activities other than Foundational Elements, this relationship must be established. In addition, each item of discussion addressed the four required questions, except wetlands mapping. In this example, that Foundational Element was deferred until a time in the future. The implementation analysis may be more complex than what is suggested above. It may be difficult to make the discussion much less analytical and still answer all of the questions and address all of the standards.

Other considerations in this segment of the Plan include Data Interchange Standards and Administrative Standards. Data Interchange Standards need to be addressed only for formal data sharing arrangements. Administrative Standards must be addressed by each Plan. The county must agree to the list of standards articulated. This may be met by a simple affirmation that the County will observe these standards.

#### **D. CONCLUSION**

The planning process is meant to be a useful exercise for local governments, not an onerous and bureaucratic task. In large measure, meeting this intention is up to those preparing the Plan. The Land Information Board has striven to make this process flexible, simple and meaningful for local governments. The Board and its staff welcome comments and questions on this process and other phases of the Program.

## **WISCONSIN LAND INFORMATION PROGRAM**

### **RECOMMENDATIONS AND REQUIREMENTS FOR COUNTY-WIDE PLANS FOR LAND RECORDS MODERNIZATION**

January, 1991

#### **I. INTRODUCTION**

##### **A. Overview of the Wisconsin Land Information Program**

The Wisconsin Land Information Program ("Program") was created in 1989 Wisconsin Act 31. Act 31 also created the Wisconsin Land Information Board ("Board") and gave it the authority and the responsibility to implement the Program. 1989 Wisconsin Act 339 provided the funding mechanism for the Program and refined the policy instruments for its implementation. Taken together these pieces of legislation provide the framework and the context for the Program.

A copy of the statutes that directly pertain to the Program are attached. Also attached is the Board's Interpretation of the Enabling Legislation, 1989 Acts 31 and 339. Both the statute and its interpretation should be fully understood prior to reading this document. This document, its requirements and recommendations, are deeply rooted in the statutes and the legislative and gubernatorial intent in the Acts creating this Program. Numerous other statutory provisions have an effect on this Program and local governmental operations. These statutes must also be considered as an integral part of the planning process.

The objective of the Program is to facilitate the development of land information systems in the State of Wisconsin that are integrated, vertically and horizontally. This is not to suggest the creation of a single, centralized land information system. Rather, the intent is the development of a decentralized confederation of systems where those with existing land records responsibilities would continue to collect, maintain and keep custody of land information. Other organizations at the local, county, state and federal levels and the private sector would have access to this information through a series of formal and informal data sharing arrangements.

##### **B. County Participation in the Wisconsin Land Information Program**

It is the intent of the Board to afford each County the widest possible latitude in its interpretation of land records modernization and the development and implementation of the County-Wide Plan. However, this intent must be balanced by the need for the effective use of public funds for programs which are consistent, efficient and which will ultimately be able to contribute to a fully confederated network of land information systems. With these objectives in mind, the Board has structured the Plan format and its components in a way so as to focus Program requirements on current, statutorily defined County responsibilities. In this fashion, no new activities or programs need be undertaken by a County, unless it chooses to do so on its own. An approved County-Wide Plan represents an agreement between the County and the Board. This agreement is designed to facilitate the Program objectives of land records modernization and the integration of land information.

The County-Wide planning process is one of the means available to meet the objectives of the Program. This planning process is not directed toward the needs of the Board. Rather, the planning process should be driven by the needs, priorities and circumstances as they exist in each participating County. The planning process should be viewed by the County as a tool to evaluate and improve land records and information systems within the County.

County participation in the Program entitles the County to retain a portion of the increased recording fees collected at registers of deeds offices and to be eligible to apply for Grants-In-Aid for itself or any other local governmental unit within its boundaries. Participating counties may also avail themselves of resources, expertise and guidance from the Board. Qualification for

Participation in the Program is based, in part, on the County Land Information Office preparing and receiving approval from the Board of its *County-Wide Plan for Land Records Modernization*. Sec. 59.88 (3) (b) and 59.88 (5) (b) Stats.

### C. Primary Definitions

Within the statutory framework of the Program, there are two primary concepts, "*Land Records Modernization*" and "*Integration*". Although not explicitly defined in the statutes, the phrase "Land Records Modernization" is very significant within the context of the Program. Given the tenor of the statute and the legislative history, Land Records Modernization means the undertaking and process by which Land Information can ultimately be shared and integrated through the implementation of automated Land Information Systems.

The concept of "Integration" is one where information that is housed in one department or jurisdiction will be able to be shared with other departments and jurisdictions at every level of government, utilities and the private sector. This confederation of systems will be independently developed and operated and will be linked by formal and informal data sharing arrangements.

Within this context, "Land Information" is the particular *Characteristic* concerning land that is described and/or displayed. Sec. 16.967 (1) (b) Stats. "Land Records" are the *Medium* in which Land Information is stored. Sec. 16.967 (1) (b) Stats. "Land Information Systems" are the *Means* by which Land Information is organized and managed in an orderly fashion. Sec. 16.967 (1) (c) Stats. Finally, for the purposes of this Program, "Local Governmental Unit" means a city, village, town, regional planning commission, special purpose district or local governmental association, authority, board, commission, department, independent agency, institution or office. Sec. 59.88 (1) (c) Stats.

## II. PRINCIPLES FOR LAND RECORDS MODERNIZATION

The following principles for land records modernization have been adopted by the Board to serve as the framework for meeting Program objectives. Similarly, these concepts should serve as the framework for the development of County-Wide Plans. The Board envisions and intends that Land Information Systems developed through the Wisconsin Land Information Program will be:

### A. Multi-Participant and Multi-Purpose

Land information systems that will be developed through the Program are intended to be multi-participant and multi-purpose. In Wisconsin, this will be accomplished through the creation of a land information network. This network will consist of a confederation of independent, automated, information systems operating at all levels of government and in the private sector. Land Information of known quality will be able to be transferred between systems using standardized methods and protocols.

### B. Focused on Information

A primary objective of the Program is the organization and sharing of Land Information. It must be recognized that these are "*data-driven systems*" and are not hardware or software dependent. This dramatically alters the connotation of the term "system". Information is the critical component of the system and, as a consequence, the technical specifications are focused on the data.

**C. Independent of Specific Technology**

The confederation of land information systems will exist as a set of independently held databases residing on a variety of computer hardware and software configurations. The emphasis is on the information contained within the system and not on the technical details of the computing environment. For example, there is no requirement that qualification for an approved Plan is dependent upon the purchase and adoption of any specific technology or computer system.

**D. Evolutionary**

The Board recognizes that the accomplishment of the Program intentions will be evolutionary. This preserves investments in existing land records modernization programs and provides a framework and direction for future programs.

**E. Encompasses Many Types of Land Information Activities**

Land Information, as defined by Act 31, encompasses most of the data collected and used by public agencies. To simplify standards development and set modernization activity priorities, the Board has defined the following "*Land Information Activities*". These activities relate directly to the "*Foundational Elements*" for County-Wide Plans. The Foundational Elements are listed in Section III, D, 1. This is not an exhaustive list and there is no priority of any one activity intended by location on the list:

1. **Agricultural Planning And Management;**
2. **Forest Management;**
3. **Geodetic Reference Framework and Base and Image Mapping;**
4. **Historical and Archaeological Management;**
5. **Infrastructure And Facility Management;**
6. **Land Records Management;**
7. **Land Use Planning and Zoning Administration;**
8. **Natural Resource Planning And Management;**
9. **Public Administration And Planning; and**
10. **Real Estate Taxation Management.**

Each of these activities contain spatial and non-spatial data. Other Land Information Activities may be applicable to the Program.

**F. Geographically Based**

In order that data be useful, the location of all spatial data shall be described in such a way as to establish its true position on the surface of the earth within some known degree of confidence. This means that all coordinate values must relate to real world or geographic locations and not map locations. Any spatial data that is generated should state and



document the level of accuracy. Three primary methods of location are used in describing the position of spatial Land Information:

1. Geographic Coordinates. Examples: Latitude and Longitude, State Plane Coordinates, Universal Transverse Mercator, etc.
2. Public Land Survey System.
3. Parcel Legal Descriptions.

**G. Reliant Upon Public to Public and Public to Private Partnerships**

Public to Public and Public to Private Partnerships form an integral part of a modern Land Information System. Counties are encouraged to establish formal and ad hoc relationships among their own departments and with other governmental entities such as cities, villages, towns, regional planning commissions, special purpose districts, state and federal agencies. The private sector, particularly utilities, are important participants and should be included in this process.

**H. Based on Democratic Principles**

Programs established in support of land records modernization shall be based on democratic principles consistent with the tradition of good government in Wisconsin. Particular attention should be paid to open, public access to information, governmental responsiveness to the public, equitable treatment of all individuals, and protection of an individual's right to privacy.

**III. COUNTY-WIDE PLAN FORMAT AND CONTENT**

The County-Wide Plan ("Plan") is a tool for the County to evaluate, analyze and strategically plan for the improvement of land records, land information and land information systems over time. The complexity and detail of the Plan is, in large measure, up to the County. However, the Board has been given statutory authority to direct and supervise the Program and to prepare guidelines to coordinate the modernization of land records and land information systems. To facilitate meeting the objectives of the Program, the Board is requiring that Plans have a standard format and must address certain central issues. It should be understood that what is required is a standard format for Plans, not standard plans or standard planning processes. In this fashion, counties may address their own needs and priorities in the Plan and the planning process.

The following provides an outline detailing the minimum elements that must be included in the Plan in order to be approved by the Land Information Board. These elements are followed by a brief explanation of what is to be included under these headings. The County may expand on the format and may include as much detail as it needs to make the planning process useful to the County and other participants in the Program at the local level. It should be noted that the County-Wide Plan may be a dynamic document and process. Counties are encouraged to update and revise Plans where appropriate to the needs of the County. All Plans shall have four sections, organized as follows:

**A. INTRODUCTION**

The Introduction shall identify the participants in the planning process and the form of the Land Information Office. Identification includes a listing of all the departments, agencies, utilities and other private sector participants in the planning process. The Introduction includes the name, address and phone number of the designated Land Information Office or the contact person for the Land Information Office.

## **B. CURRENT ACTIVITIES AND INVENTORY**

An essential element to the planning process is an inventory and assessment of the current status of land records, land information and land information systems within the County. An attempt should be made to contact all local officials with land records responsibilities, including the federal, state and the private sectors. The assessment component may be a formal user needs assessment. Alternatively, the assessment may be an informal evaluation of the current status of land records in the County and an identification of the needs and priorities of the County. This inventory must include a history of budget expenditures for land records modernization projects. A synopsis of budget items for the last three years satisfies this requirement. The purpose of this inventory is to enable those preparing the Plan to devise a thoughtful Program implementation strategy from an informed perspective.

## **C. GOALS AND OBJECTIVES**

The County-Wide Plan shall include a statement of the goals and objectives of the participants in the Program at the local level. These goals and objectives include those of all participants in the Program such as other local governments, utilities and other private sector participants. The central theme of any successful Plan is a set of goals that emphasize coordination and cooperation within and between local governments and the private sector. The planning horizon for land records modernization must be identified in this section. The minimum planning horizon is five years. The Plan may incorporate a planning horizon that is much longer if the needs, priorities and resources of the participants warrant. The goals should be specific as to what the participants hope to accomplish within the full time frame of the planning horizon. The goals should be achievable and consistent with other parts of the Plan and the statutes.

## **D. MODERNIZATION AND IMPLEMENTATION PLAN**

This section details the required focus for the Plan. In addition, it identifies the various standards that the Board will apply in the evaluation of the Plan. This section is composed of four parts, 1. Foundational Elements, 2. Standards, 3. Data Interchange Standards, and 4. Administrative Standards. Each section defines different components and minimum levels of activity that will result in a Plan that will be approved by the Wisconsin Land Information Board. It is the Board's conviction that adherence to these Requirements and Recommendations will effect the objectives of the Program, namely land records modernization and systems integration.

### **1. Foundational Elements**

Program success, both from a state and local perspective, is dependent upon a focus for Program activities. In addition, public benefits will accrue earlier once all participating counties have achieved a standard or minimum level of modernization. As a result, the Board has placed the highest priority on each of the following land records modernization elements. In order for a Plan to be approved by the Board, it must address each of the "*Foundational Elements*" that follow.

Each of the Foundational Elements must be fit within the planning horizon of the County-Wide Plan. Again, the minimum planning horizon is five years. Recognizing that the circumstances, resources and priorities of each County differ, the length of the planning horizon may be determined by the participants to the Plan based on their own preferences, resources and needs for modernization projects over time. For example, the County may elect to undertake one or more of the Foundational Elements in the first few years of its Plan and defer other Elements until later years.

Foundational Elements a through e are technical and statutory elements that are addressed in Act 31. Foundational Elements f through h relate to institutional and implementation issues that must be addressed in order to make the Plan and the planning process successful.

- a. **Geographic Frameworks.** These frameworks include Public Land Survey Monumentation and Coordinate and Elevation Determination;
- b. **Parcels;**
- c. **Wetlands Mapping;**
- d. **Soils Mapping;**
- e. **Zoning Mapping;**
- f. **Institutional Arrangements;**
- g. **Communications, Education and Training; and**
- h. **Public Access Arrangements.**

Additional activities and programs may be included in each Plan. A list of potential qualifying activities is included in Appendix A. The list in Appendix A is a representative sample of the kinds of modernization activities which may be included in the Plan. It is intended to be suggestive of the kinds of specific programs which can be constructed and is not an exclusive or exhaustive list. An activity that is proposed to be undertaken in the Plan, whether on the list or not, must be accompanied by a description of its relationship to the Foundational Elements.

For each of the Foundational Elements and Additional Potential Activities listed in Appendix A that may be pursued, the Plan must also address the following:

- a. A description of activity or program, including the source and nature of automated land information;
- b. Relationship of the activity or program to other modernization activities or programs;
- c. Status of the activity or program, including status to date and estimated completion date; and
- d. The anticipated benefits of any programs or projects.

## 2. **Standards**

Associated with each Foundational Element is a set of Standards. Because there are many methods used across the range of Land Information Activities, it is crucial that standardized methods of evaluating and exchanging this information be adopted. This is to ensure that information that is shared can be relied on by others with respect to data accuracy and understanding. This list of Standards represents a minimum set of qualifying criterion, not a broad enumeration of all possible standards. These Standards must be observed in both the Plan and its implementation as a condition of the County's participation in the Program. Depending on the type, purpose and use of the information, these Standards may be superseded by other standards established by statute.

a. **Geographic Frameworks.**

Two of the principles of land records modernization are that these systems are focused on information and that spatial data must be related to geographic locations. Therefore, every land records modernization program must have a plan for collecting and organizing base geographic information. There are three primary categories of base geographic information which must be addressed. This collection of base geographic data may be called a Base Map.

1. **Geodetic Reference Systems.** All geographic coordinates must be based on legislatively established datums or related to legislatively established datums through Federal Geodetic Control Committee approved mathematical or statistical procedures. Chapter 236.18 defines the current Wisconsin coordinate system and datum.
2. **Public Land Survey System Corners.** There are two activities for Public Land Survey System corners which are related to Geographic Frameworks, remonumentation and coordinate values. These two activities should be considered together. No remonumentation activities may be undertaken without establishing coordinate values on the resulting monument. Conversely, activities to establish coordinate values on existing monuments must include filing a monument record.
  - a. Public Land Survey System corner remonumentation is guided by Sec. 59.63 (1) and 60.84 (3) (c) Stats. The records of remonumentation are guided by Sec. 59.635 (B) Stats. and Wis. Adm. Code, AE 7.08(2).
  - b. Coordinate values established on section and quarter section corners must meet or exceed Federal Geodetic Control Committee Third Order Class I standards.
3. **Geographic Control Data.** To support the mapping and management of other foundational elements, control data coordinate and elevation values must meet or exceed Federal Geodetic Control Committee Third Order, Class II standards. All other man made and natural resource features such as traveled ways, shoreline, river banks, fence lines, buildings, and improvements shall meet National Map Accuracy Standards. This base geographic data can be collected from maps, aerial photos, and other media to establish coordinates and elevations on these features.

b. **Parcels**

Parcels are areas of land which can be described by boundaries or lines forming closed geometric features or polygons. Parcels are generated for many purposes including property taxation, determination of interests of ownership in land, zoning regulation, and land use. There are four distinct categories of data related to parcels.

1. The first category is Cadastral or Legal Evidence. These data are the legal building blocks of the spatial representation of land ownership. Examples are remonumentation records and

measurements, deed and plat measurements, and other survey information.

2. The second category is Parcel Boundaries. A collection of parcel boundaries forms a parcel. There are two types of procedures to produce parcel boundaries.
  - a. The first type of parcel boundary is collected from legal records and geographic base data. Each boundary is referenced to its source document. It is possible for parcels formed from this type of boundary description to have significant overlaps and gaps with neighboring parcels. The gaps and overlaps of neighboring parcels shall be shown or disclosed with this type of parcel boundary collection. Resolution of single parcel mis-closures and gaps and overlaps of neighboring parcels is encouraged through whatever means are available including assessor plats.
  - b. The second type of parcel boundaries are collected from generalized representations of boundaries, shapes, and locations. This type of boundary collection represents a wide range of precision and resolutions.
3. The third category is Parcel Administration. Examples of parcel administration include, topological data structures, attaching evidence of title to areas of land, zoning classification, attaching property tax and assessment files to areas of land, and other administrative details. The type of parcels administered, how their boundaries are collected, and what they can and cannot be used for shall be clearly stated. Parcels may include information related to registers of deeds records such as tract indexing systems that meet or exceed the requirements set forth in Sec. 59.55 Stats.
4. The fourth category is Parcel Identification. For both internal and external uses, each parcel of land shall have a unique parcel identification number assigned to it. Automated maps in land records modernization make it possible to easily identify where parcels are in relationship to Public Land Survey System township, range, section, quarter section, and sixteenth section. All parcel identification schemes must relate, at the minimum, to the quarter section of the Public Land Survey System. The functionality of sixteenth section identification is optional and may be met with a geo-code parcel identifier or by relationship to tables of geo-code attributes. Section III D 3 c, Data Interchange Standards, defines the specific standards for parcel identification systems. Appendix B contains a geo-code parcel identification method for both manual and automated methods.

**c. Wetlands Mapping**

County Wetland Maps shall be based on the statutorily defined Department of Natural Resources Wetlands Map, pursuant to Sec. 23.32, Wis. Stats.



d. **Soils Mapping**

Modern County Soil Surveys shall be based upon, compatible with and accurate to the level of the U.S. Soil Conservation Service Maps.

e. **Zoning Mapping**

Zoning Maps of the County shall reflect a compilation of the existing local governmental zoning on a county-wide basis.

f. **Institutional Arrangements**

The Plan must describe all Institutional Arrangements the County has entered into and plans to enter into in the development, implementation and maintenance of the County-Wide Plan. This description should include a listing of all actual and potential participants in the planning process. In addition, the nature of the relationships and responsibilities shall be disclosed. This should include both formal and informal agreements. In describing these relationships, it will be adequate to simply attach a copy of any agreements that have been entered into as an attachment to the Plan.

g. **Communications, Education and Training**

The Plan shall describe, in as much detail as is appropriate, the County's strategy for communication, education and training concerning the County's land information system.

h. **Public Access Arrangements**

The Plan shall describe, in as much detail as is appropriate, the County's strategy for providing public and private access to the various records as they are modernized. This should include discussion of system security and preservation of an individual's right to privacy.

3. **Data Interchange Standards**

The standards enumerated above for the Foundational Elements are "Content Driven" standards. Data Interchange Standards fall into two categories, informal standards and formal standards.

a. **Informal Data Interchange Standards.** Informal exchange standards are simply those methods and formats for exchange that can be agreed upon between two or more entities that are sharing data. Informal standards are relatively uncomplicated. For the present time, informal standards serve as the primary means by which data integration and sharing will occur.

b. **Formal Data Interchange Standards.** Formal exchange standards may be based on the Spatial Data Transfer Specifications that are presently in development by the U.S. Geological Survey. These standards will be considered and evaluated by the Board, in one form or another, as they become available.

The Board has adopted one set of Data Interchange Standards with respect to unique parcel identification numbering systems.

- c. **Parcel Identification Numbers.** For both internal and external uses, each parcel of land shall have a unique parcel identification number assigned to it. This numbering system is divided into three distinct components. The components that have mandatory formats are identified in Part I and Part II respectively and are explained below. The optionally formatted components are described in Part III. When parcel information is formally shared, parcel numbers shall be in the following field format which is composed of 13 numbers and characters that are in a mandatory format and 5 optionally formatted numbers and characters. All components are mandatory.

**PART I.** Part I codes identify both the county and minor civil division in which the parcel lies. These codes may be associated or related to the parcel in several ways. For example, the codes may appear as part of other relational tables, at the top of headers to ranges of parcel numbers, as prefixes or suffixes to parcel identifiers, or as geo-processing relationships using geographic information system software.

2 Digits. The first two digits are the County Code as defined by the 1990 Wisconsin Department of Revenue, *Property Assessment Manual*.

3 Digits. The next three digits are the Municipal Code as defined by the 1990 Wisconsin Department of Revenue, *Property Assessment Manual*.

**PART II.** Part II is a parcel location identification system that utilizes the Public Land Survey System to ascertain the position of the parcel within a specific Quarter Section. Some areas of the State are not part of the Public Land Survey System. For those parcels not covered by the Public Land Survey System, the Board will provide specific codes at a later date to define Part II parcel location identifiers.

1 Digit. The next digit defines whether the parcel lies east or west of the 4th Principal Meridian. Those parcels that lie east of the 4th Principal Meridian are denoted by the number 4. Those that lie west of the 4th Principal Meridian are denoted by the number 2. Those parcels not covered by the Public Land Survey System may be denoted by the number 0.

2 Digits. The next two digits define the Township north of the baseline. For parcels not covered by the Public Land Survey System, the content of these two digits identifying the Township may be alphanumeric to indicate the lack of coverage by the Public Land Survey System. These alphanumeric codes will be provided by the Board upon request at a later date.

2 Digits. The next two digits define the Range. For parcels not covered by the Public Land Survey System, the content of these two digits identifying the Range may be alphanumeric to indicate the lack of coverage by the Public Land Survey

System. These alphanumeric codes will be provided by the Board upon request at a later date.

2 Digits. The next two digits define the Section.

1 Digit. The final digit defines the Quarter Section by Northeast = 1, Northwest = 2, Southwest = 3, and Southeast = 4. If the Quarter Section is unknown or otherwise unavailable, it shall be denoted by the number 0.

**PART III.** An optional format for specific parcel identification is as follows:

1 Digit. The first optional digit defines the Quarter-Quarter Section by Northeast = 1, Northwest = 2, Southwest = 3, and Southeast = 4. If the Quarter-Quarter Section is unknown or otherwise unavailable, it shall be denoted by the number 0.

3 or 4 Digits. The final three or four optional digits may be used to define a specific parcel identifier within this parcel identification numbering system. Whether three or four digits are used is also optional. If these optional numbers are used, the Quarter-Quarter Section code must also be used to maintain a standard format.

All delimiters, e.g., commas, dashes and spaces, must be removed before information is shared. It should be noted that this standard does not affect existing, internal parcel identification systems. This standard does not govern any informal data sharing agreements. Instead, this standard refers, at a minimum, to the employment of the above field format in formal data exchange settings. See Appendix B for further explanation and an example of this numbering system.

**4. Administrative Standards**

The County-Wide 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. A copy of the Board's interpretation of the enabling legislation is attached. In order for a County's Plan to be approved, the Board and the County agree and consent as follows:

- a. The County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes. A copy of the Program statutes are attached hereto and made part hereof;
- b. The County agrees to permit the Wisconsin Land Information Board access to books, records and projects for inspection and audit upon reasonable notice by the Board;
- c. The County agrees to provide an annual status report of Plan progress and to update the Plan at the end of five years; and
- d. The Board agrees to provide technical assistance to the County.

- e. The Board agrees to maintain and distribute an inventory of land information and land information systems for the state.
- f. The Board agrees to review and, where appropriate, approve Plans and to provide guidance to counties with respect to Plan development. In addition, the Board agrees to review and, where appropriate, approve updates and revisions to County-Wide Plans.
- g. Board approval of a County-Wide Plan confers certain benefits on local government within the County, including continued participation in the Program and eligibility to make application for Grants-In-Aid.
- h. The Board agrees to review Grants-In-Aid project applications and to provide guidance to counties with respect to the development of such applications.
- i. The Board agrees to provide participating counties with an annual report regarding the status of the Wisconsin Land Information Program and the activities of the Board.
- j. A County will be entitled to retain increased recording fees upon designation of a Land Information Office provided that within two years of the designation it submits a County-Wide Plan to the Board which is approved. Board approval of the County-Wide Plan also enables the County to apply for Grants-In-Aid for itself or any other local unit of government within its borders.

## APPENDIX A

### List of Additional Potential Activities

With the exception of the category, "Land Records Modernization Planning", the following List of Potential Activities corresponds directly to Land Information Categories set out in Section II E. It should be clear that there is an explicit dependency between these potential activities and the set of standard Foundational Elements. All Foundational Elements must be addressed by the Plan. For any "Additional Activity", whether on this list or not, a statement must be made directly describing the relationship between the proposed Additional Activity and the Foundational Elements. Every Additional Activity must further one or more Foundational Elements to an acceptable activity in pursuit of Land Records Modernization. Please note that there is no priority intended for any category or sub-category by its location on the list.

1. **Agricultural Planning and Management.** Required Foundational Elements: Parcels, Wetlands Mapping, Soils Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Soil Erosion and Mitigation Monitoring and Planning
  - b. Food Security Act Conservation Provisions
  - c. Pesticide and Herbicide Management
  - d. Conservation Reserve Program Eligibility
  - e. Farmland Preservation Program Eligibility
  - f. Etc.
2. **Forest Management.** Required Foundational Elements: Parcels, Wetlands Mapping, Soils Mapping, Zoning Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Forest Tax Fund Coordination
  - b. Fire Protection
  - c. Disease Control
  - d. Forest Inventories
  - e. Etc.
3. **Geodetic Reference Framework and Base and Image Mapping.** Required Foundational Elements: Geographic Reference Frameworks, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Public Land Survey System Remonumentation;
  - b. Densification
  - c. Coordinates and Elevations
  - d. Maintenance Mapping
  - e. Aerial Photography and Orthophotography
  - f. Digital Conversion
  - g. Topographic Mapping
  - h. Etc.



4. **Historical and Archaeological Management.** Required Foundational Elements: Parcels, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Archaeological and Historical Sites
  - b. Historical Inventories
  - c. Etc.
5. **Infrastructure and Facility Management.** Required Foundational Elements: Parcels, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Transportation Networks
  - b. Utility Networks
  - c. Site Analysis
  - d. Underground Storage
  - e. Solid Waste
  - f. Building Permits
  - g. Etc.
6. **Land Records Management.** Required Foundational Elements: Parcels, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Media Conversion
  - b. Document Preservation
  - c. Tract Indexing
  - d. Assessor's Plats
  - e. Certified Survey Maps
  - f. Public and Private Survey Record
  - g. Etc.
7. **Land Records Modernization Planning.** Required Foundational Elements: Geographic Frameworks, Parcels, Wetlands Mapping, Soils Mapping, Zoning Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Planning
  - b. Systems Configuration
  - c. Management and Management Strategies
  - d. Requests for Proposals for Hardware and Software Purchases
  - e. User Needs Assessments
  - f. Training
  - g. Education
  - h. Etc.
8. **Land Use Planning and Zoning Administration.** Required Foundational Elements: Parcels, Wetlands Mapping, Soils Mapping, Zoning Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Land Use
  - b. Shore Line
  - c. Flood Plain
  - d. Etc.

9. **Natural Resource Planning and Management.** Required Foundational Elements: Parcels, Wetlands Mapping, Soils Mapping, Zoning Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Recreation and Parks
  - b. Non-Point Pollution
  - c. Ground Water Contamination
  - d. Mining
  - e. Waterways
  - f. Etc.
10. **Public Administration and Planning.** Required Foundational Elements: Parcels, Zoning Mapping, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Demographic Analysis
  - b. School District Determinations
  - c. Redistricting/Election Districts
  - d. Land Use Planning
  - e. Public Safety
  - f. Public Notice
  - g. Etc.
11. **Real Estate Taxation Management.** Required Foundational Elements: Parcels, Institutional Arrangements, Communication, Education and Training, Public Access Arrangements.
  - a. Assessment
  - b. Equalization
  - c. Etc.

A statement of coordination with the preceding Foundational Elements shall be included for each Additional Activity included in the Plan, whether on this list or not.

## APPENDIX B

### Unique Parcel Identification Numbering System

One Data Interchange Standard requires the use of a unique parcel identification number in formal data sharing arrangements. Counties are not necessarily required to adopt this numbering system for internal purposes. Furthermore, this numbering system does not necessarily apply to all data sharing arrangements. For example, where two or more entities are sharing information on an informal basis, they may adopt any numbering system that is acceptable to them. The numbering system adopted in the Data Interchange Standards makes use of several common numbering system elements so that it is reasonably adaptable to most parcel identification schemes.

This parcel identification numbering system adopts certain components of the Wisconsin Department of Revenue parcel numbering system as set forth in the 1990 Department of Revenue, *Property Assessment Manual*. It is also tied to the Public Land Survey System. There are several areas in the State that are not covered by the Public Land Survey System, e.g., original French land grants and Indian claims. In these instances, the Board will provide specific codes for the content of the Township and Range numbers that will be alphanumeric to show that the area is not part of the Public Land Survey System. For present purposes however, parcels not covered by the Public Land Survey System may be flagged by using the number 0 for the code for the area east or west of the 4th Principal Meridian.

This numbering system is comprised of 13 numbers that are in a mandatory format and 5 optionally formatted numbers and characters. All components are mandatory, but there is some flexibility built into the system as described below. This numbering system does not use any delimiters, e.g., dashes, spaces or commas, when parcel information is exchanged. This numbering system is divided into three distinct components. Two components have a mandatory format and the other has an optional format. The components that have a mandatory format are identified as Part I and Part II respectively and are explained below. Optionally formatted components are described in Part III. When parcel information is formally shared, parcel numbers shall adopt a standard field format which is composed of 13 mandatory numbers and characters and 4 or 5 optionally formatted numbers and characters. All mandatory fields must be used. The following provides a description of this numbering system and gives an example of its use. This field format should be organized and sequenced as follows:

#### PARCEL IDENTIFICATION NUMBERS WITH A MANDATORY FORMAT

**PART I.** Part I codes identify both the county and minor civil division in which the parcel lies. These codes may be associated or related to the parcel in several ways. For example, the codes may appear as part of other relational tables, at the top of headers to ranges of parcel numbers, as prefixes or suffixes to parcel identifiers, or as geo-processing relationships using geographic information system software.

2 Digits	<b>County Code.</b> This County Code is defined by the 1990 Department of Revenue, <i>Property Assessment Manual</i> .
3 Digits	<b>Municipal Code.</b> This Municipal Code is defined by the 1990 Department of Revenue, <i>Property Assessment Manual</i> .

**PART II.** Part II is a parcel location identification system that utilizes the Public Land Survey System to ascertain the position of the parcel within a specific Quarter Section. Some areas of the State are not part of the Public Land Survey System. For those parcels not covered by the Public Land Survey System, the Board will provide specific codes at a later date to define Part II parcel location identifiers.

- |          |   |
|----------|---|
| 1 Digit  | <b>Area East or West of the 4th Principal Meridian.</b> Those parcels that lie east of the 4th Principal Meridian are denoted by the number 4. Those west of the 4th Principal Meridian are denoted by the number 2. Those parcels not covered by the Public Land Survey System may be denoted by the number 0. |
| 2 Digits | <b>Township.</b> These numbers define the Township north of the base line. For parcels not covered by the Public Land Survey System, the content of these two digits may be alphanumeric to indicate the lack of coverage.  |
| 2 Digits | <b>Range.</b> These numbers define the Range in which the parcel lies. For parcels not covered by the Public Land Survey System, the content of these two digits may be alphanumeric to indicate the lack of coverage.  |
| 2 Digits | <b>Section Number.</b> These numbers define the Section.  |
| 1 Digit  | <b>Quarter Section.</b> This Digit defines the Quarter Section by Northeast = 1, Northwest = 2, Southwest = 3, and Southeast = 4. If the Quarter Section is unknown or otherwise unavailable, it shall be denoted by the number 0.  |

#### **PARCEL IDENTIFICATION NUMBERS WITH AN OPTIONAL FORMAT**

**PART III.** The following 4 or 5 digits are numbers that may adopt an optional format in the parcel identification numbering system. These optionally formatted numbers may be arranged as follows:

- |               |  |
|---------------|--|
| 1 Digit       | <b>Quarter-Quarter Section.</b> This Digit defines the Quarter-Quarter Section by Northeast = 1, Northwest = 2, Southwest = 3, and Southeast = 4. If the Quarter-Quarter Section is unknown or otherwise unavailable, it shall be denoted by the number 0.   |
| 3 or 4 Digits | <b>Parcel Identifier.</b> The final three or four optional digits may be used to define a specific parcel identifier within this parcel identification numbering system. Whether three or four digits are used is also optional. If these optional numbers are used, the Quarter-Quarter Section code must also be used to maintain a standard format. |

## AN EXAMPLE OF THE PARCEL NUMBERING SYSTEM

The following is an example of the parcel numbering system for a parcel located in Calumet County, Town of New Holstein, Section 13, T17N, R20E, SE1/4 of the NE1/4 is numbered as follows:

08012 These codes, i.e., County and Municipal Codes, must be associated or related to the parcel identifier through relational tables, headers, prefixes, suffixes or other devices.

08 = County Code

012 = Municipal Code

4172013140000

4 = East of the 4th Principal Meridian

17 = Township north of base line

20 = Range Number

13 = Section Number

1 = Quarter Section

4 = Optional Quarter-Quarter Section Number

0000 = Optional Parcel Identifier

January, 1991  
(4.18.91)



## WISCONSIN LAND INFORMATION PROGRAM

### AID TO COUNTIES

#### Procedures, Standards and Criteria for Grants-In-Aid to Local Government

September 9, 1991

#### I. INTRODUCTION

##### A. Statutory Overview of the Wisconsin Land Information Program

The Wisconsin Land Information Program ("Program") was created as part of 1989 Wisconsin Act 31. Although the issue of funding the Program was left open in Act 31, this legislation established the mechanism for the implementation of a grant program for local governments. This legislation also established the Wisconsin Land Information Board ("Board") and gave it the authority and the responsibility to implement the Program. The Program has four separate components:

1. The County-Wide Plan for Land Records Modernization;
2. State Agency Integration;
3. The State Clearinghouse for Access to Land Information and Land Information Systems; and
4. Grants-In-Aid to Local Government.

Although these areas are quite distinct, they are bound and interrelated by the objectives of the Program. In short, the objective of the Program is to facilitate the development of land information systems in the State of Wisconsin that are integrated vertically and horizontally. This is not to suggest the creation of a single, centralized land information system. Rather, the intent is the development of a decentralized confederation of systems where those with existing land records responsibilities will continue to collect, maintain and keep custody of land information. Through "Systems Integration" this confederation of systems will be tied by formal and/or informal data sharing arrangements.

Wisconsin statutes provide that a county board that has established a land information office may apply to the Board on behalf of any local government unit located wholly or partially within the county for a grant for the following:

1. The Design, Development and Implementation of an Integrated Land Information System;
2. The Preparation of Accurate Parcel Maps Tied to the Public Land Survey System;
3. The Preparation of Planning Maps. Sec. 16.967 (7) (a).

Grants may not exceed \$100,000. The Board may award more than one grant to a county Board. Sec. 16.967 (7) (b).

The Wisconsin Land Information Board has been charged by statute to prepare guidelines to coordinate the modernization of land records and land information systems. Sec. 16.967 (3) (c). In addition, the Board is required to review project applications for grants and determine which projects are approved. Sec. 16.967 (3) (d). Finally, the Board has been given the responsibility to direct and supervise the Program. Sec. 16.967 (3) (a). These provisions require the Board to

implement the Program, including the grants component. The grants component is one means for the Board to achieve the policy objectives of the Program.

## **B. Overview of the Grants Process**

Although the statutes define the types of activities for which a grant application may be made, they are silent as to specific criteria by which various applications will be evaluated. The purpose of this document is to set out the standards and criteria the Board will use in the evaluating of Grant applications. In the formulation of these grant criteria, the Board has utilized certain themes:

1. The Grant process should advance the objectives of the Program;
2. The award of grants should be neutral and equitable, i.e., based on the substance of the project or activity proposed in the grant application;
3. The evaluation of each application is based on consistent and objective criteria;
4. The projects undertaken should result in tangible and useful products and services;
5. The expenditure of public funds is made in an economically sensible and efficient fashion;
6. Grants should not be awarded for activities or projects that are of an ongoing nature such as those that are part of the normal, day to day course of business;
7. The projects that are funded should be innovative from a technological and/or institutional perspective.

The activities prescribed in statutes for the grants component are distinct, yet fully interrelated. Arguably, the preparation of accurate parcel maps and the preparation of planning maps could be part of an integrated land information system. Moreover, any grant project should be consistent with not only the objectives of the Program, but also the County-Wide Plan for Land Records Modernization. In developing these standards the focus is, therefore, on those projects and activities that will carry forward the vision of the Program, namely, the development of integrated land information systems across the State. This focus together with the interrelation of statutory projects underlie the criteria used to evaluate grant applications.

There are two primary concepts in legislative framework giving rise to the Program, Land Records Modernization and Integration. Land Records Modernization, has been defined as the undertaking and process by which Land Information can ultimately be shared and integrated through the implementation of automated Land Information Systems. The concept of Integration is one where information that is developed by one department or jurisdiction can ultimately be shared with other departments and jurisdictions at every level of government, utilities and the private sector. Another important concept is that of Systems Integration. Systems Integration can be defined as the coordination of land records modernization at all levels of government to ensure that information can be shared, distributed and used by all participants, including state and local government, the private sector and taxpayers. This concept also includes the ability to assist governments to coordinate projects to reduce redundant activities.

## **II. GRANT PROCEDURE**

### **A. Eligible Grant Applicants**

Wisconsin Land Information Program statutes orient the grants process toward local government. However, county government serves as the focal point for Program operations at the local government level. County government takes the lead role in grant applications for three reasons. First, the county must participate in the Program in order to be eligible to apply for grants from the Board. To accomplish this, the county must have established a Land Information Office. Secs. 16.967 (7) (a) and 59.88 (4). Second, under its statutory authority for grant approval, the Board will not award any grant to a local government unless its representative county has an approved County-Wide Plan for Land Records Modernization. Finally, the county, through its Land Information Office, must review and recommend projects from local units of government for grant requests to the Board. Secs. 16.967 (7) (a) and 59.88 (4). Local units of government, other than counties, may not directly apply for grants from the Board.

In addition to counties, the roster of eligible local governmental units is somewhat expansive. For the purposes of this grant program, local governmental unit means a city, village, town, regional planning commission, special purpose district or local governmental association, authority, board, commission, department, independent agency, institution or office. Sec. 59.88 (1) (c). Virtually any public entity with land records or land information responsibilities could be eligible to apply for a grant through a county if located wholly or partially within the county. Secs. 16.967 (7) (a) and 59.88 (1) (c).

### **B. Eligible Projects and Activities**

Wisconsin Statute Section 16.967 (7) (a) provides that a county may apply to the Board for a grant for any of the following projects:

1. 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 System; tax and assessment information; soil surveys, if available; wetlands identified by the Department of Natural Resources; a modern geodetic reference system; current zoning restrictions; and restrictive covenants;
2. The preparation of parcel maps that refer to the Public Land Survey System and are suitable for use by local governmental units for accurate land title boundary line or survey line information;
3. The preparation of maps that include a statement documenting accuracy if the maps do not refer boundaries to the Public Land Survey System that are suitable for use by local governmental units for planning purposes. Sec. 16.967 (7) (a).

### **C. Grant Application Periods**

There shall be two grant application periods in each calendar year. During the application periods, the Board shall accept applications from counties on their own behalf and on the behalf of other local units of government located within the borders of the county. These grant periods shall be open from June 1 to June 30 and from December 1 to December 31 of each year. These grant periods may be subject to change at the option of the Board.

#### **D. Grant Evaluation Procedure**

Each individual grant request will be analyzed on the basis of the Evaluation Criteria set forth in Section III. Grant requests will be reviewed by a committee comprised of Board members and other invited evaluators. Grant requests will be categorized by subject area for evaluation with similar grant proposals. All evaluators will be chosen on the basis of their individual technical expertise in the selected categories of subject areas. The identities of evaluators will be kept confidential. Evaluators will not make grant awards. Rather, evaluators will review each grant request on the basis of technical merit and will give each request a score on that basis. Scored grant requests will be grouped with all other categories for consideration by the full Board. All grant awards will be made on the basis of a majority vote of the Wisconsin Land Information Board. Grant awards are subject to and contingent upon the execution of a Grant Agreement. Grant Agreements are more fully described in sub-section E.

#### **E. Grant Agreement**

Grants shall be administered as contract between the grantee and the Board. Failure of a grantee to execute the Grant Agreement shall result in withdrawal of the offer of award. A draft of the Grant Agreement will be provided with grant application materials. The terms and conditions will include, but are not limited to, the scope of work, timetable, budget, payment schedules and methods, financial and project auditing procedures, and other administrative details. Grant payments will be limited to a maximum of \$100,000 in "Eligible Costs incurred by the grantee as evidenced on documented invoices submitted to the Board. Eligible Costs are auditable costs which are directly attributable to the grant activities. Only expenses for activities identified and approved in the application are considered Eligible Costs. The grantee's contribution to Eligible Costs, i.e., the grantee's match requirement under Sec. 16.967 (b), may be met by "in kind" products or services. Expenses incurred before the Grant Agreement is entered into are not Eligible Costs. Any costs that are not Eligible Costs will not be reimbursed under the grants component of the Wisconsin Land Information Program. All facets of the grant process both at the state and local level shall be governed by Wisconsin Statutes and Administrative Rules, including ethics and procurement laws.

### **III. EVALUATION CRITERIA**

The Board shall award grants on the basis of the statutory requirements and the priorities explained below. All applications received during a given application period shall be compared, reviewed and rated by the Board based on the application's adherence to the statutes and its responsiveness to the following evaluation criteria. These criteria are ranked in priority of importance:

- A. Integration and Cooperation.** The focus of this criteria is the extent to which an application demonstrates coordination and cooperation within and between jurisdictions and the private sector. This criteria also embraces integration of data and systems. Grants requests that involve several jurisdictions within a county are preferable to applications made only by one local governmental unit. Similarly, multi-county proposals are more desirable to single county efforts. Although grants may not be awarded to the private sector, public to private partnerships are strongly encouraged.
- B. Foundational Element Focus.** Foundational Elements are defined by the Board's *Recommendations and Requirements for County-wide Plans for Land Records Modernization*. These elements have been derived, in large measure, from specific activities detailed in Sec. 16.967 (7). For the purposes of grants, the following Foundational Elements serve as priority projects:

1. Geographic Frameworks, Including Base And Image Mapping.
  - a. Geodetic Reference Frameworks
  - b. Public Land Survey System Corner Monumentation And Remonumentation, Including The Determination Of Coordinates For Monuments.
  - c. Geographic Control Data
2. Parcels
  - a. Parcel Mapping
  - b. Parcel Identification
  - c. Parcel Administration
3. Wetlands Mapping
4. Soils Mapping
5. Zoning Mapping

Projects based on a Foundational Elements focus must meet or exceed all relevant statutory requirements and standards set forth in the *Recommendations and Requirements for County Wide Plans for Land Records Modernization*.

- C. **Consistency with the County-Wide Plan for Land Records Modernization.** All applications must be consistent with, complementary or supplementary to the County-Wide Plan.
- D. **First-Time Grants.** Grants should be dispersed throughout the State. As a result, first-time grants shall have preference to second and subsequent grant requests.
- E. **Likelihood of Success.** Applications will be evaluated on the likelihood of the success of the proposed project or activity. This criteria is measured on the economic viability of the project, that the project can be completed on time and within budget, and the sufficiency and competency of the personnel devoted to the project, and other factors that demonstrate the likelihood of success. Specific factors that demonstrate a Likelihood of Success include the track record of the grant applicant in the completion and success of other, but similar, projects or activities. Another factor is the extent of the commitment of the applicant. This can be measured by financial participation in the project, the devotion of other resources to the project such as personnel, and the extent that necessary preliminary work has been undertaken.
- F. **Completed Projects.** Priority should be given to those applications that propose the completion of specific projects with tangible products.



#### IV. TECHNICAL REVIEW AND APPLICATION SCORING

Each grant application will be subjected to technical review and scoring by a panel of confidential evaluators. Grant applications will be graded and evaluated by the following scoring mechanism:

##### TECHNICAL SCORING

<u>Evaluation Criteria</u>	<u>Score Range</u>
Integration and Cooperation	0 to 30 Points
Foundational Element Focus	0 to 25 Points
Consistency with County-Wide Plan For Land Records Modernization	0 to 15 Points
Likelihood of Success	0 to 15 Points
<u>Completed Projects</u>	<u>0 to 15 Points</u>
Total Potential Technical Scores	0 to 100 Points

"First-Time Grants" will receive 15 points in addition to the Technical Score. A First-Time Grant Application is a grant request that comes from a county that has not received a previous grant award. The total potential score for grant applications is 115 points.

## **WISCONSIN LAND INFORMATION PROGRAM**

### **POLICY OBJECTIVES AND PROGRAM IMPLEMENTATION IN LIGHT OF THE ENABLING LEGISLATION, 1989 WISCONSIN ACTS 31 AND 339**

The Wisconsin Land Information Board, via 1989 Wisconsin Acts 31 and 339, has been given the responsibility to implement the Wisconsin Land Information Program. These statutes both empower and constrain the Board in this endeavor. This document is an interpretation of Act 31 and Act 339 for use by the Board to enable it to define its objectives and to guide operation of the Wisconsin Land Information Program. The interpretation is meant to be both literal and contextual in light of legislative and gubernatorial intent.

#### **I. Background to Wisconsin Land Information Program**

##### **A. Historical Context**

The governmental effort toward land records modernization in Wisconsin has transcended three gubernatorial administrations, including administrations of both major political parties. In 1985, the Wisconsin Land Records Committee was created. This Committee was given the charge of examining land records in Wisconsin and to make policy recommendations to improve land information systems in the State. The Wisconsin Land Records Committee spent several years analyzing the condition of land records in the state. This Committee developed the model that served as the basis for the legislative initiative giving rise to the Wisconsin Land Information Program. This Committee's work provides much of the theoretical underpinning to policies embodied in 1989 Wisconsin Acts 31 and 339.

##### **B. Status of Land Records**

The Wisconsin Land Record Committee and other studies have found that the status of land records in Wisconsin can be summarized as follows. Current land records are generated and maintained independently, often in incompatible formats, at all levels of government and the private sector. In Wisconsin alone, more than 600 statutes contain references to land information collection, maintenance and use. At least 2592 units of government have land records responsibility. There are more than 2,000,000 parcels of land that require information processing. It costs more than \$140,000,000 every year to maintain these records by the public sector and utilities, not including other private sector expenditures. Most land records are manually kept in archaic formats or are otherwise difficult to access. Much of the information collected by all governments is redundant, but cannot be shared because it is kept at different scales, forms or formats. These redundant efforts are very inefficient and increase handling and processing costs for government, the private sector and taxpayers.

#### **II. Policy Objectives of the Wisconsin Land Information Program**

##### **A. Overview**

The statutes do not provide a single formulation of the objective of this Program. Nonetheless, the goals of this legislation are explicit. The purpose of the Program is well defined in the overall statutory language as well as the legislative history underpinning these statutes.

Simply, the objective of the Wisconsin Land Information Program is to facilitate the development of land information systems in the State of Wisconsin that are integrated, vertically and horizontally. This is not to suggest the creation of a single, centralized land information system. Rather, the intent is the development of a decentralized confederation of systems where those with existing land records responsibilities would continue to collect, maintain and keep custody of land

information. Through integration, this confederation of systems will be tied by formal and/or informal data sharing arrangements.

### B. Modernization and Integration

Perhaps the most significant language of the statutes is the phrase "land records modernization". However, the statutes do not provide an exact definition of this phrase. Given the tenor of the statute and the legislative history, land records modernization means the undertaking and process by which Land Information (Sec. 16.967 (1) (b)) can ultimately be shared and integrated through the implementation of automated Land Information Systems (Sec. 16.967 (1) (c)). Within this context, "Land Information" is the particular *Characteristic* concerning land that is described and/or displayed. "Land Records" are simply the *Medium* in which Land Information is stored. In turn, "Land Information Systems" are the *Means* by which Land Information and Records are organized and managed in an orderly fashion. Sec. 16.967 (1).

The significance of the definition of Land Records Modernization is the core of the Program's overt policy objective, i.e., the organization and orchestration of Land Information in a way that yields greater utility and usefulness across jurisdictions and the private sector. Modernization embraces, over time, the capture of technology to invigorate and update Land Information, Land Records and Land Information Systems. Land Records Modernization serves as the script for Program participants.

The concept of "integration" is one where information that is developed by one department or jurisdiction can ultimately be shared with other departments and jurisdictions at every level of government, utilities, and the private sector. The funding mechanism of the Land Information Program is designed to create an incentive to encourage integration and modernization.

Integration and modernization are devices to update and revitalize public and private expenditures in land records management and land information systems. Similarly, integration and modernization drive greater utility and productivity in these ongoing investments. These benefits derive from reduction of duplication and increased efficiency and effectiveness in the performance of ongoing operations. A third significant, though somewhat less quantifiable, benefit is increased utility resulting from expanded capabilities.

Act 339 specifically empowered the Land Information Board to utilize program revenue for "Systems Integration". Sec. 20.505 (4) (im). A definition of "Systems Integration" was requested by the Legislature and was provided both to it and the Governor. As a point of legislative history, systems integration was defined as follows:

"... the coordination of land records modernization at all levels of government to ensure that the information can be shared, distributed and used by all participants, including state and local government, the private sector and taxpayers. This concept also includes the ability to assist governments to coordinate activities to reduce redundant activities. Systems integration does not dictate how a specific governmental unit handles or identifies information internally. Rather, systems integration is merely intended to ensure that information that is to be shared by governmental units, citizens, and the private sector is in compatible and standardized formats for exchange. Information that does not conform to data interchange standards internally, need only conform to or be translated into these standards when shared."

The statutory mandate for integration is reinforced by the requirement of the state agencies to file plans to integrate land information to enable such information to be readily translatable, retrievable and geographically referenced for use by any state, local governmental unit or utility. Sec. 16.967 (6). The spirit of this section also embraces integration and data sharing with the private sector.

The concept for integration is not limited to state government. Counties participating in the Program must submit a "County-Wide" plan for land records modernization to the Land Information Board. Sec. 59.88 (3) (a). The land information office within a participating county must coordinate land information projects within the county, between the county and local governmental units between the state and local governmental units, among local governmental units, the federal government and the private sector. Id at subparagraph (a).

Throughout the statute and the legislative history, the policy objective of developing modern land information systems that are integrated is clear and unambiguous. Both the Board and participating counties have the same statutory charge; to coordinate and to develop modern, integrated land information systems. Legally, county participation is purely voluntary. However, those counties that assume the responsibility to establish Land Information Offices and develop approved *County-Wide Plans* for land records modernization are entitled to funding from the Program. This funding must be used exclusively by the county to develop, implement and maintain the County-Wide Plan. Again, the policies of integration and modernization are manifest.

### III. Statutory Analysis

#### A. Definitions

Sec. 16.967 (1) sets forth the operative definitions for the Wisconsin Land Information Program. These definitions are, generally, inclusive rather than exclusive. For example sec. 16.967 (1) (b) defines land information as "... any physical, legal, economic or environmental information or characteristics concerning land, water, groundwater, subsurface resources or air in this state". These are *Characteristics* which in some way describe land. The use the term "*any*" is expansive and limitless within the context of those words that follow. This section goes on to provide specific examples of what land information might be. This is not an exhaustive list of characteristics, but rather is a specific enumeration as follows:

"Land Information" includes 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. Id.

Sec 16.967 (1) (c) defines land information systems as the orderly method of organizing and managing land information and land records.

Subparagraph (d) explains the meaning of Land Records as maps, documents, computer files and any other information storage medium in which land information is recorded. Again these definitions are inclusive versus exclusive.

Another pertinent definition is found in sec. 59.88 which defines local governmental unit as a city, village, town, regional planning commission, special purpose district or local governmental association, authority, board, commission, department, independent agency, institution or office. This is a broad definition which, when used in context, underscores the policy objectives of integration and modernization.

#### B. Program Operation and the Wisconsin Land Information Board

##### 1. Duties of the Wisconsin Land Information Board

Governor Thompson's veto message in response to the creation of the Land Information Board articulated the Board's overall responsibility, "... the Board is *empowered* to coordinate Wisconsin's efforts to modernize its land records". More specifically, the duties of this empowerment are described in sec. 16.967 (3), Stats.:

**Board Duties.** The Board *shall* direct and supervise the land information program and serve as the *state* clearing house for access to land information. In addition, the Board shall:

- (a) Provide Technical assistance and advice to state agencies and local governmental units with land information responsibilities;
- (b) Maintain and distribute an inventory of land information available in this state and land information systems;
- (c) Prepare guidelines to coordinate the modernization of land records and land information systems;
- (d) review project applications (for grants-in-aid to local government) and *determine* which projects are approved;
- (e) Review for approval of a County Wide plan for land records modernization. Id (emphasis added).

This means that the Board is *mandated* to develop and implement the Land Information Program. In addition the Board is required to become the focal point for knowledge about land information in the state. Simply stated, the Board is responsible and empowered to coordinate and facilitate the development of land information systems throughout the state. The Board is constrained however in that endeavor in that the Program is voluntary for county government. As a result, the Board must rely on incentives to county governments for participation, because it has not been vested with rule making authority.

Within the context of these incentives, the Board has very specific authority to ensure that land information systems are integrated throughout those participating counties. The Board's charge to prepare standards and guidelines to coordinate the modernization of land records and land information systems is an instrumental component in meeting the objectives of the Program. The legislative intent and the Governor's charge is to create integrated, compatible systems state-wide.

The duties defined in sec. 16.967 (3) (d) and (e), reviewing and approving grant applications and County-Wide plans, provide the means to direct the implementation of standards and guidelines to achieve systems integration. The Board has direct oversight on the expenditure of funds derived from the Program, whether those funds are directly retained or come in the form of a grant. It was the intention of legislators sponsoring Act 339 that the Land Information Board maintain control over *all* Program revenue as a means to achieve the legislative intent. Specifically, this funding was meant to be incentive in nature for definitive purposes under the direction of the Wisconsin Land Information Board.

The Board has the responsibility to develop the capacity and a system to offer technical assistance and advice to state agencies and local governments. A related but separate charge is that the Board must maintain and distribute an inventory of land information and land information systems. Therefore the Board is *mandated* to develop techniques for conducting and maintaining such an inventory as well as to design a system to distribute the information in the inventory. The process of inventorying land information at all levels of government within the state, provides the setting from which integration can flow. Taken in concert, the inventory process and the provision of technical assistance are powerful implements to achieve integration. This is because the Board will be aware of



the status of land records and can fashion systems, standards and devices to coordinate integration and modernization to meet the needs revealed by the inventorying process.

The Board's tasks go beyond strictly implementation of the Program. Sec. 16.967 (4) requires the Board to identify and study possible program or other revenue sources for the purpose of funding operations of the Board including Grants-In-Aid to counties. This provision was part of the initial enabling legislation. It was in response to this mandate that the Board proposed the funding legislation embodied in Act 339. This mandate is ongoing. The Board must continue to study and identify possible revenue sources to fund this Program. The Board is not limited to traditional funding alternatives in this pursuit. For example, the Board may try to persuade vendors to offer discounts to local governments. Given the potential costs of this Program, over time, the cultivation of other funding sources is an important function of the Board.

## 2. Relationship of the Wisconsin Land Information Board to Other Entities

At the state agency level, the Board has additional duties, powers and responsibilities that enable it to implement the Program. For example, all state agencies are obligated to cooperate with the Board in the coordination of land information. Sec. 16.967 (8). This broad mandate is buttressed by more specific agency responsibility. The following details the specific references:

1. The Department of Natural Resources is required to conduct a natural heritage inventory. Sec. 23.27 (3) (a), Stats. This inventory is to be conducted with the cooperation of the Board. Id.
2. Similarly, the Department of Natural Resources is required to cooperate with the Board in wetland mapping and any related land information collection activities. Sec. 23.32 (2) (d), Stats.
3. The Department of Agriculture, Trade and Consumer Protection must develop a systematic method of collecting and organizing data related to soil erosion. In carrying out this mission, the Department is mandated to cooperate with the Board in developing that methodology as well as any other activities related to land information collection. Sec. 92.10 (4).
4. The Board of Regents for the University of Wisconsin System appoints the State Cartographer. In choosing the State Cartographer, the Board of Regents must seek the advice of the Land Information Board. Sec. 36.089 (1) (e).
5. The State Cartographer is required to work in coordination and consultation with the Board in carrying out all of that office's statutory duties. These duties include the following:
  - a. Establish and maintain a union catalog of current and historical reference and thematic maps of all scales available in municipal, county, state and federal agencies relating to this state;
  - b. Promote liaison among the municipal, county, state and federal mapping agencies and surveyors to facilitate coordination and to exchange information on mapping and cartographic activities;
  - c. Keep abreast of the progress made by mapping agencies and their mapping developments;
  - d. Collect, maintain and disseminate information regarding innovation in cartographic techniques and mapping procedures, map and air photo indexes and control data,



map accuracy standards, legal aspects of map publication and such other matters as will facilitate an effective cartographic program for the state;

- e. Publish and distribute such special maps and map information as will promote the mapping of the state and preparation and use of maps by individuals, only to the extent, however, that such publication and distribution is not appropriately within the activities of any other state commercial agency, and
- f. Assist the Department of Natural Resources in its work as the state representative of the U.S. Geographic Board and its other functions under sec. 23.25. Sec. 36.25 (12m) et seq.

Given the nature of the charge of the State Cartographer and the Board, the mandates of the Cartographer are a subset of that of the Board. The relationship between the Board and the State Cartographer must be very close and coordinated. This is for two reasons. First, the State Cartographer is obligated to consult with the Board in pursuit of its mission. Id. Second, there is a significant amount of overlap between the mission of the Board and the State Cartographer.

### C. Program Operation at the County Level

The Wisconsin Land Information Program has a distinct local government orientation. At the core, this Program seeks to develop modern, integrated land information systems from the "bottom up". The design and intent of this legislation is to provide flexibility and discretion for local governments in developing their own land information programs. For example, a county can determine what land records modernization projects it will undertake in order to qualify for Program participation. There are two requirements. First the project must fit within the definition of land records modernization. Secondly, the information that is generated must be in a format so that it can be shared. The Land Information Board has defined Land Records Modernization and will develop a list of acceptable undertakings that, *prima facie*, fit the definition. Activities not included on this list may still qualify if the Board approves them. A county has the ability to structure its own land information program to meet its needs, priorities and constraints.

The bulk of information that is included in a multipurpose land information system is collected, maintained and kept in the custody of county and other local governments. Utilities also collect, maintain and keep an enormous amount of land information. This "bottom up" orientation means that these systems will be built on the foundation of local government participation. County government, in particular, serves as the focal point for program operation at the local governmental level. This role is very much similar to that of the Land Information Board at the state level.

#### 1. Duties of County Land Information Offices

A county board may establish a Land Information Office. Sec. 59.88 (3). Establishment of such an office is one component of a county's participation in the Land Information Program. Sec. 59.88 (5) (b). County participation in the Program is voluntary. One concern of many legislators was the creation of new office or a new bureaucracy at the county level. The legislative intent, therefore, was to permit the county to establish its Land Information Office in its own fashion.

The establishment of a Land Information Office must be undertaken by act of the county board. Sec. 59.88 (3). This power cannot be exercised by any other office, executive, administrator or committee. The Office need not be a new office. It may be assigned to an existing office. Its duties and functions may be carried out by a committee of land records officers, an existing committee of a county board, or other structure. By formal resolution, the Wisconsin Land Information Board has required that, under whatever Office format, the Board must have the name, phone number and address of a contact person who is available, generally, during normal working hours. This contact

person serves not only for communications from outside the county, but also for communications within the county from other jurisdictions and the private sector.

The duties and functions of a county Land Information Office are significant. Sec. 59.88 (3) provides:

**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:

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

Subparagraph (a) of 59.88 (3) is quite clear. This section requires a county Land Information Office to serve as the focal point for the Land Information Program at the local level. Much as the Land Information Board serves the coordinating and facilitating role at the state level, so does a county Land Information Office at the local level. These responsibilities extend to a wide array of participants within the county. The definition of "local governmental unit" in Sec. 59.88 (1) (c) is sweeping. This definition includes every governmental or quasi-governmental unit within a county. Not only must a county Land Information Office coordinate with other governmental units, it must also coordinate with the private sector, including utilities. Sec. 59.88 (3) (a). In short, the Land Information Office is empowered to orchestrate land records modernization and land information integration at the local level. The Land Information Office must seek representation from local governmental units and the private sector in the planning process. The Office is required to coordinate and develop the *County-Wide Plan* for Land Records Modernization.

The Land Information Office also is charged to review and recommend projects, for itself and other local units of government, for grants in aid applications. Sec. 59.88 (3) (c). In this capacity, the Land Information Office is responsible to provide leadership to ensure the coordination of land records modernization. It also holds the power of persuasion, through the incentives it may offer other local units of government. The key policy instrument for these incentives is providing access to grants-in-aid through its project recommendation function. This mechanism gives this Office the ability to provide an incentive to other local units of government to participate in the Program at the local level.

Although not explicitly set forth, the Land Information Office is responsible for carrying out another indispensable function. The Office should monitor Program implementation at the local level to ensure that counties and other Local Units of Government comply with the statute. With flexibility and discretion comes responsibility and accountability. While Counties and Land Information Offices have been given latitude and discretion in the implementation of their own land information program, they must also bear the burden of compliance. The very nature of an incentive based policy instrument recognizes and relies on the trust-worthiness of participants. In this Program, more so than in many others, good faith and cooperation are crucial.

## 2. Duties of the County Register of Deeds

Registers of Deeds serve a vital role in the Wisconsin Land Information Program. It is through these offices that the funding is collected and transmitted to the Department of Administration and to County Treasurers if the county is participating in the Program. Sec. 59.88 (5). Moreover, Registers of Deeds must account for the amount of funds collected by the county, submitted to the Board and retained by the county. Id at Subparagraph (b). These duties are explicit. Sec. 59.88 (5) (a).

### 3. Funding Mechanism

The funding for the Wisconsin Land Information Program is derived from an increase in the first page recording and filing fees collected at county Register of Deeds offices. First page recording and filing fees increased from \$4 to \$8 on July 1, 1990. The first page recording fee will again increase effective July 1, 1991 when it goes from \$8 to \$10.

### 4. Funding Allocation

All fees collected under this Program are appropriated to the Department of Administration for the Land Information Board. Secs. 20.505 and 59.88 (5) (b). All fees collected are to be submitted to the Board on or before the 16th day of each month following collection. Sec. 59.88 (5). However, participating counties may retain \$2 of the \$4 increase effective July 1, 1990 and all of the \$2 increase effective July 1, 1991 if *all* of the following conditions have been met:

- a. The county board has established a Land Information Office;
- b. Within two years of July 1, 1990 or two years from the date a Land Information Office is established, whichever is later, the county has submitted to and received approval of its County-Wide Plan for land records modernization; and
- c. The county uses these retained fees to develop, implement and maintain the County-Wide Plan for land records modernization. Sec. 59.88 (5) (b).

These are *necessary conditions* that must be satisfied in order that a county may participate in the Program and retain a portion of the increased recording fees. The elements of paragraphs 1 and 2 above are objective and distinct. The requirements of paragraph 3 demand that funds directly retained by counties under this Program must be earmarked for land records modernization projects that are consistent with the County-Wide Plan and the objectives of the Program.

### 5. Sunset Provision

The funding mechanism adopted in Act 339 is set to expire on July 1, 1996. The balance of this legislation will continue after that date, unless the statutes are amended. The sponsoring legislators demanded the inclusion of a sunset provision in Act 339 to ensure that the Program has a legislative review and evaluation. Many other participants in the development of this legislation also encouraged the use of a sunset. This measure accomplishes two objectives. It forces an evaluation. Secondly and perhaps more importantly, the sunset will spur the Board and state and local governments to go about this Program carefully, thoughtfully and with dispatch. Without such care, the Program would effectively lapse in six years even though most observers believe that meeting all of the Program objectives would take ten or more years.

**REFERENCE TO THE GRANT-IN-AID PROGRAM HAS BEEN INTENTIONALLY OMITTED.**

### III. Conclusion

The enabling legislation for the Wisconsin Land Information Program as embodied in Acts 31 and 339 was supported by a strong bipartisan group of legislators. This legislation is unique and pioneering. Wisconsin has taken a local governmental orientated approach. Many believe the Wisconsin Land Information Program is at the forefront in its technological and institutional approach. This novelty forces many challenges and opportunities on the State. As Governor Thompson observed:

"These are exciting times, I believe, in the development of information systems. If we choose, Wisconsin has the opportunity to seize the future. Our opportunity is at hand to fundamentally change how we handle information in the age of information. Let us set our course in the most thoughtful and sensible way". Wisconsin Governor Tommy G. Thompson, February 19, 1990, at the Wisconsin Land Information Association Annual Conference at Stevens Point, Wisconsin.