ROCK COUNTY

LAND INFORMATION COUNCIL

MONDAY MAY 9, 2016 - 9:00 A.M.

COURTHOUSE CONFERENCE ROOM (NOTE MEETING LOCATION) ROCK COUNTY COURTHOUSE – 2nd FLOOR

AGENDA

- 1) Call to order.
- 2) Approval of Agenda.
- 3) Approval of Minutes December 15, 2016
- 4) Communications and Announcements
- 5) Action Item: Election of Chair
- 6) Action Item: Election of Vice-Chair
- 7) Action Item: Amendment to Land Information Plan 2016-2019
- 8) Action Item: 2017 Budget Requests
- 9) Information Item: Update on Wisconsin Land Information Program
 - a) Statewide Parcel Map Update
 - b) 2016 Strategic Initiatives Grant Application
 - c) AB371 and SB266
 - d) Wisconsin Land Information Program Plan
- 10) Information Item: Current Projects
 - a) 2015 Orthoimagery Flight
 - b) Historical Scanning Planning
- 11) Information Item: Updates on web apps and maps
- 12) Information Item: Status of the County Surveyor position
- 13) Future Agenda Items
- 14) Next Meeting Date and Time
- 15) Adjournment

Project #13: Address Ordinance Modernization and Sign Inventory

Project Description/Goal

Rock County Planning, Economic and Community and Development is the addressing authority for unincorportated areas of the County. This Project will look at the existing ordinance to update it to allow for current and future best practices of address sign assignment and maintenance of digital data and physical signs. Intern(s) will be tasked with driving the roads of unincorporated municipalities and conducting a physical inventory. The goal is a new ordinance and layer or set of layers which the County can use to determine if further courses of action are required.

Business Drivers

The current Address Ordinance describes the use an outdated hardcopy method of assigning and maintaining addresses. Amending the Address Ordinance allows for digital assigning of addresses and maintaining a database. This will increase accuracy and efficiency of assigning the addresses. The current ordinance also specifies sign installation and visibility that are not currently best practices. Amending the address ordinance will correct that. Some of the current signs are unreadable due to age. Having an inventory of the signs will help determine how widespread this issue is and what type of action (if any) is required.

Objectives/Measure of Success

This project will be considered complete when the address inventory is complete and when the address ordinance has been amended.

Project Timeframes

Milestone Durati	on Date
Project Start	2016
Amend Address Ordinance	End 2016
Address Inventory (Digital)	1st & 2nd quarter 2016
Address Inventory (Physical)	2 nd & 3 rd quarter 2017
Address Inventory Report	End 2017
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Responsible Parties

Rock County Planning, Economic and Community Development, Real Property Lister and 9-1-1 Communications.

Estimated Budget Information

IS Manager IS Intern lanner III -1-1 Geoapplications	15% of \$163,000 75% of \$33,000 4% of \$195,000	\$24,450 \$24,750	
lanner III	4% of \$195,000		
		\$7,800	
-1-1 Generalications		1	
pecialist.	20% of \$140,040	\$28,080	
eal Property Lister	10% of \$163,000	\$16,300	
lileage	1,123 miles at \$0.54/mile	\$606	
e	eal Property Lister	eal Property Lister 10% of \$163,000	eal Property Lister 10% of \$163,000 \$16,300

Draft 2 WLIP Program Plan: 2016-2020

Updated April 26, 2016

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1 INTRODUCTION

1.1 Purpose

Since it was created in 1989, the Wisconsin Land Information Program (WLIP), now administered by the Division of Intergovernmental Relations within the Wisconsin Department of Administration (DOA), has provided public funding to Wisconsin counties for the modernization of local land records. The purpose of this document is to give strategic direction for the Wisconsin Land Information Program for 2016-2020, in a manner similar to the county land information plans mandated by state statute 59.72(3)(b).¹

Conservatively assuming that the last two-year revenue trend will continue, annual revenue for the Land Information Fund would equal \$6.3 million. This plan proposes continuing to fund county Base Budget, Training & Education, and Strategic Initiative grants, such that 90% of revenue from the Land Information Fund would be awarded to local governments. The remaining 10% is for Program administration, contracting for the Statewide Parcel Initiative, and facilitation of access to WLIP-funded data.

Note that the key proposals comprising this plan could be implemented within the bounds of the current statutory and administrative authority of the Program. In other words, this plan was designed such that the state legislature would not need to give additional authorization for DOA to implement this program plan.

1.2 Key Proposals

- Every county that retains less than \$100k in a year will continue to be eligible for an annual Base Budget grant to reach the \$100k threshold.
- Every county will continue to be eligible for an annual \$1,000 Training & Education grant.
- Strategic Initiative grant funding will continue to be allocated equally among all 72 counties for 2018-2020, to work toward Benchmark Sets I, II, and III.
- In 2018, counties would be eligible for Strategic Initiative grant funding to complete Benchmark Set I (Parcels).
- Beginning in 2018, each county would be eligible for Strategic Initiative grant funding to work on the new Benchmark Set II (Open Data, Parcels, and PLSS).
- Beginning in 2018, after achieving Benchmark Set I and Set II, counties would be eligible for Strategic Initiative grant funding to achieve Benchmark Set III for lidar and aerial imagery, and then could apply any remaining grant funds to a project of the county's choice.
- DOA will continue to carry out the duties of the department under s. 16.967(3), including administering county grants and statewide projects.
- DOA will continue to develop the statewide parcel map by contracting with an outside agency.
- DOA will work with counties toward greater access for parcels and other county GIS data.

1.3 Timeline

Date	Milestone
2/10/2016	Draft 1 plan reviewed and discussed by WLIC
3/24/2016	Draft 1 plan public comments reviewed and discussed by WLIC
4/12/2016	Draft 2 plan concepts discussed by WLIC
4/27/2016	Draft 2 plan distributed with public comments deadline of May 27
6/08/2016	Draft 2 WLIC discusses public comments
7/15/2016	Plan finalized and distributed

¹ See disclaimers located in Chapter 5.

1.4 Program Background

The WLIP dates back to the Wisconsin Land Records Committee, created in 1985 and charged with making policy recommendations to improve land information in the state. Based on the work of that committee, the WLIP was created through 1989 Wisconsin Acts 31 and 339. That legislation also created the Wisconsin Land Information Board and gave it the authority to implement the Program. In addition, the original legislation contained a provision that required each county to establish a land information office in order to participate in the Program.

A core activity of the WLIP is planning for land records modernization. In 1991, the first instructions for completing plans for county-wide land records modernization were released, highlighting the Program's focus:

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 The primary objective of the program is the organization and sharing of Land Information.²

The 1991 document went on to explain other components of the Program, including the grant process and the retained recording fees funding mechanism that provides funding to both counties and the state.

Furthermore, the instructions listed the original eight Foundational Elements (geographic frameworks, parcels, wetlands mapping, soils mapping, zoning mapping, institutional arrangements, communications, education and training, and public access arrangements). The Foundational Elements incorporate nationally-recognized "Framework Data" elements, the major map data themes that serve as the backbone required by users to conduct most mapping and geospatial analysis. Since the Foundational

PLSS
Parcel Mapping
LiDAR and Other Elevation Data
Orthoimagery
Address Points and Street Centerlines
Land Use
Zoning
Administrative Boundaries
Other Layers

Elements were initially defined, they have evolved over the years, to their most recent expression in the 2015 *Uniform Instructions for County Land Information Plans*.

County land information plans are intended to give strategic direction for counties, as mandated by s. 59.72(3)(b). This is similar to the annual land information integration and modernization plans submitted annually by state agencies in accordance with section 16.967(6), Wis. Stats. The statute requires some agencies to submit to DOA a land information modernization and integration plan. Eleven agencies are named in the statute, but all state agencies using geospatial data or land information systems are encouraged to create and submit a land information report.

In 2000s, the state agency plans followed a narrative format addressing the architecture of applications, information, technology, organization, and security. In most recent years, they have taken the form of an inventory of geospatial data holdings, available on the WLIP webpage.

² Wisconsin Land Information Board, Recommendations and Requirements for County-Wide Plans for Land Records Modernization, January 1991.

1.4.1 Act 20 and the Statewide Parcel Map Initiative

In a 2012 report on statewide deer herd management, Deer Trustee Dr. James Kroll wrote, "It is our opinion, Wisconsin once was viewed as an innovator for geospatial information services, but has fallen behind" (p. 17). The Deer Report identified Wisconsin's GIS deficiencies for deer herd management, and other purposes like economic development and forestry. This in turn led to recommendations to adequately fund the development of geographic information systems (GIS) in Wisconsin.

In order to implement the Deer Trustee's recommendations, in the 2013-15 biennial budget the Governor included an initiative to create a statewide digital parcel map, increase revenue for the Wisconsin Land Information Program, and update the state's land cover map through the Department of Natural Resources. As part of Omnibus Motion #249, the Joint Committee on Finance added the directive to target the new Land Information Fund revenue primarily towards county land information systems, a guiding factor in the design of this program plan.

As enacted on July 1, 2013, Act 20 had significant implications for the WLIP and counties:

- It created the Land Information Fund, a segregated appropriation for state program revenue with statutory direction not to lapse funds from the appropriation
- Added a statutory directive to fund WLIP Base Budget grant eligibility up to the \$100k threshold
- Increased WLIP Training & Education grant eligibility from \$300 to \$1,000 per county
- Directed DOA to create a statewide digital parcel map in coordination with counties
- Directed counties to meet a searchable format standard for parcel information

The Statewide Parcel Map Initiative was born from Act 20, a land information initiative important for improving the quality of real estate information, economic development, emergency planning and response, and other necessary citizen services, and central to current Program activities.

1.4.2 The WLIC

The Wisconsin Land Information Council (WLIC) was created by DOA through administrative action in June of 2015. The purpose of the council is to advise DOA on matters relating to the WLIP, such as the allocation of grant funds, efficacy of grant projects, guidelines to coordinate land records modernization, legislative changes, and new sources of funding to pursue. The 12-member council is made up of private sector, local government, and state government stakeholder group representatives appointed by the DOA Secretary for three-year terms.

WLIC Member	Organization/Trade Association
Don Dittmar – Chair	Land Information Officers Network
Adam Derringer – Vice Chair	Wisconsin Land Information Association
Al Brokmeier	Wisconsin Real Property Listers Association
Daniel Frick	Wisconsin County Surveyors Association
Maria Holl	Wisconsin Emergency Management Association
Cori Lamont	Wisconsin Realtors Association
Mark Paulat	Wisconsin Department of Revenue
Kris Pelot	Wisconsin Land Title Association
Tim Statz	Wisconsin Utility Association
Nathan Vaughn	Wisconsin Society of Land Surveyors
Howard Veregin	State Cartographer
Cindy Wisinski	Wisconsin Register of Deeds Association

2 PROGRAM FUNDING

WLIP funding for county land records modernization takes the form of register of deeds document recording fees retained at the county level and WLIP grants awarded. Counties may retain \$8 of the \$30 fee for land information and must submit \$7 of every \$30 fee to the Land Information Fund, which subsidizes WLIP grants. In order to be eligible to retain fees or receive grants, counties must meet program requirements, including utilizing funding consistent with a county land information plan approved by a county land information plan appr

ROD Document Recording Fee

- \$15 County Undesignated
- \$8 County Retained for Land Information
- _\$7 State Land Information Fund
- \$30

information plan approved by a county land information council and submitting annual reports on expenditures.

2.1 Distribution of Funding to Counties

DOA has awarded a total of \$6.4 million in WLIP grants for 2016. Fees retained by counties for land information are projected to total \$7.2 million statewide, based on recent document recording levels.

Figure 1 shows the approximate amount of WLIP funding to counties statewide by funding category—retained fees, and three types of grants (Training & Education, Base Budget, and Strategic Initiative).

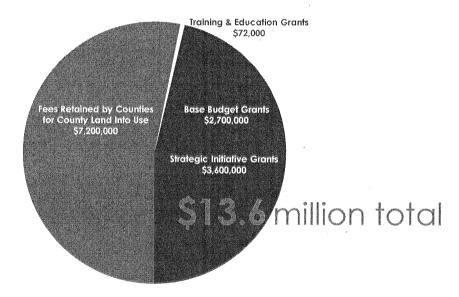


Figure 1. 2016 County land information funding - Retained fees and grants

Training & Education grants provide funding to enable county staff to stay current with innovations in land records and GIS technology. Strategic Initiative grants are employed to meet statewide objectives for land information, specifically, the four benchmarks laid out in the 2016 WLIP grant application. Base Budget mitigate large disparities in retained fee funding by ensuring that every county has at least \$151k in land information funding.

Figure 2 on the following page shows the current distribution of WLIP funding to counties.

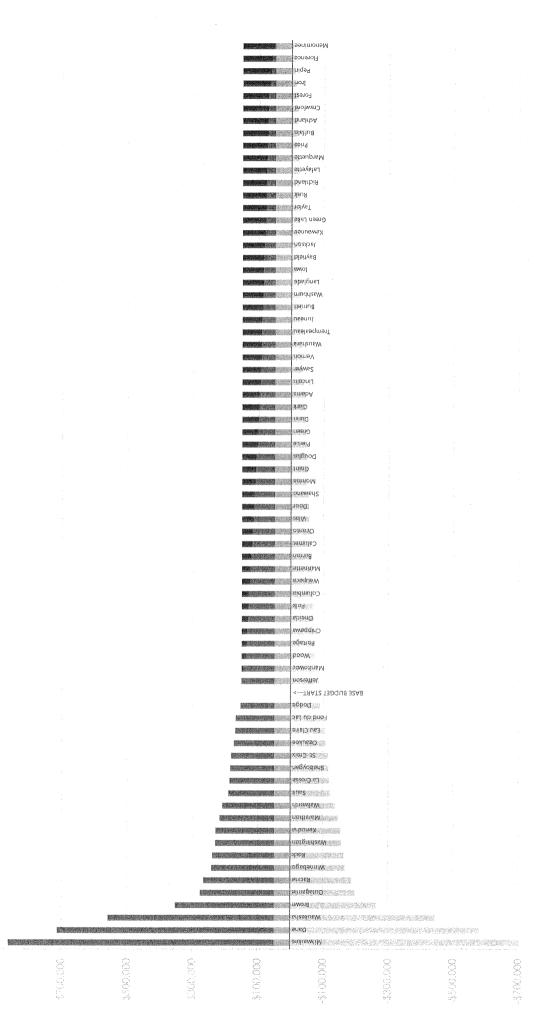


Figure 2. Distribution of all funding to counties for 2016

2.2 Expenditure of County Retained Fees and Grants

Counties submit annual expenditure reports on how WLIP retained fees and grants were utilized in the previous year and categorize their expenditures in a *Retained Fee/Grant Report*, in keeping with s. 59.72(2)(b). In 2014 (the most recent year for which there is reported expenditures), WLIP retained fees and grants—totaling \$8.0 million—were devoted to the areas depicted in Figure 3.

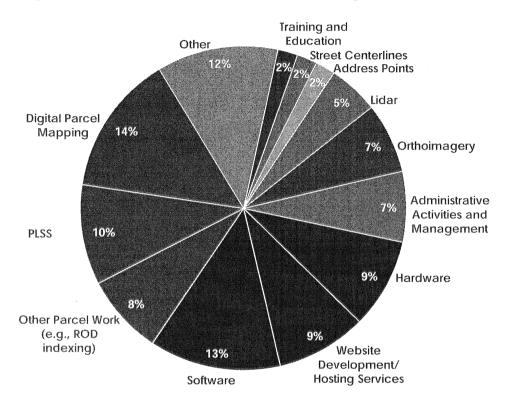


Figure 3. County 2014 expenditures reported of \$8 million total

As is consistent with previous years, Figure 3 illustrates that about one-third of WLIP funding was used for the development and maintenance of county parcel datasets, including Public Land Survey System remonumentation and other parcel work. (PLSS expenditures for 2016 are summarized in Figure 5.) About another third of funding was used for computer hardware, software, and website development and hosting. These expenditures help to provide convenient access to land records through searchable databases, online interactive maps, and various types of mapping applications. The remaining third of funding supported a diverse range of activities, including the acquisition of lidar and aerial imagery, as well as the development of address points and street centerlines.

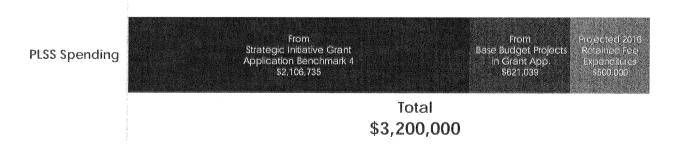


Figure 4. Total PLSS Spending for 2016

2.3 Revenue Trend

The number of documents recorded and thus Land Information fund revenue varies from year to year. For each of the last two years, the annual total has equaled about 900,000 documents. However, the last two-year average is well below historic averages, as represented in Figure 5.

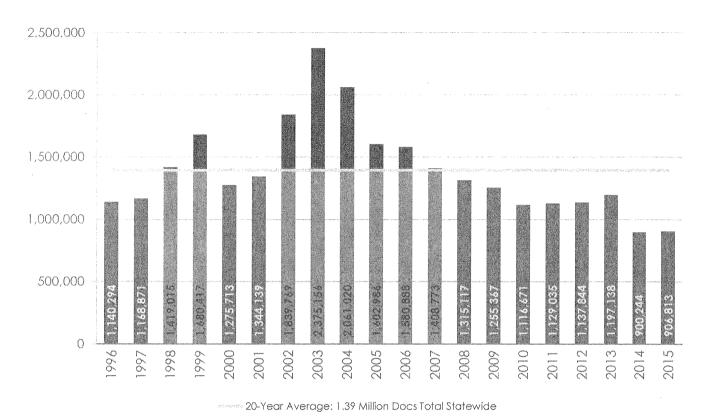


Figure 5. Number of register of deeds documents recorded statewide under s. 59,43(2)(ag)1 or e

The last five-year average is 1,054,215 documents recorded, which would correspond to \$7.4 million in Land Information Fund revenue (at \$7 submitted per document recorded). Again, this program plan is built around the \$6.3 million revenue projection, based on the last two-year average of 900,000 documents recorded statewide.

3 CURRENT PROJECTS

The Land Information Fund is divided so that the overwhelming majority of funds—more than 90%—goes to local governments for county land information projects. Currently, less than 10% goes to contracting for the Statewide Parcel Initiative and Program administration. This chapter describes the county projects funded by the WLIP, Statewide Parcel Map Initiative projects for 2016-2017, and administration of the Program.

3.1 County Grants

With regard to the WLIP, county land information projects can be funded by retained fees and the three types of grants—Base Budget, Training & Education, and Strategic Initiative.

Current county projects are detailed in individual county land information plans, available at www.doa.state.wi.us/WLIP. These plans were last updated in 2015, with county land information council approval and finalization by March 31, 2016. The three-year plans detail the status of county Foundational Element completion and maintenance, the process of integration of land records into a county land information system, and current and future county projects.

3.1.1 Retained Fees

The WLIP enables a portion of the register of deeds document recording fees to be retained by the county for land information use. Specifically, counties may retain \$8 of the \$30 recording fee under s. 59.43(2)(ag)1 or (e). Retained fees totaled \$7.2 million statewide for 2015. This funding must be spent to implement a county land information plan, according to s. 59.72(5).

3.1.2 Base Budget Grants

The WLIP will award Base Budget grants to a sum of \$2.7 million in 2016. Every county that retains less than \$100k in a year is eligible for a Base Budget grant to reach the \$100k threshold. Because counties with modest real estate market activity do not generate substantial land information office revenue, Base Budget grants are provided in order to enable eligible counties to develop, maintain, and operate a basic land information system, as well as develop and maintain Foundational Element data layers.

Counties that retain less than \$100k in retained fees for land information are eligible for a Base Budget grant according to the formula below.

WLIP Base Budget Grant Eligibility Formula

\$100k - ROD document recording fees @ \$8 per document recorded

Example: 0

County records 5,000 documents

\$100k - (5,000 x \$8)

\$100k - (\$40k)

\$ 60k = Base Budget grant eligibility

In 2015 and 2016, the first two years in which Base Budget grants were fully funded to the \$100k threshold, they totaled about \$2.7 million statewide per year.

For program planning purposes, it is worth noting that if in the future the number of documents recorded returns to the historical average and county retained fee revenue increases, the total amount of Base Budget funding distributed to counties would decline, as fewer counties require a grant to reach the \$100k threshold.

3.1.3 Training & Education Grants

The WLIP funds \$1,000 Training & Education grants, totaling \$72k million per year. Training & Education grants may be used for the training and education of county employees for the design, development, and implementation of a land information system.

3.2 Strategic Initiative Grants 2016-2017

Every county is eligible for a \$50k Strategic Initiative grant in both 2016 and 2017, for the purposes of working toward benchmarks for parcel data formatting, completeness, and accuracy.

The WLIP funds Strategic Initiative grants amounting to \$3.6 million total statewide for 2016. Strategic Initiative grants awarded in 2016 and 2017 are designed to aid county achievement of the four benchmarks laid out in the 2016 WLIP grant application, focused on goals of parcel quality, completeness, and data standardization.

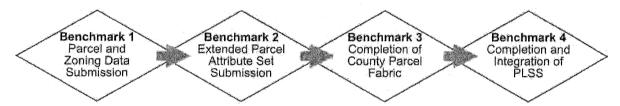


Figure 6. The four benchmarks for parcel dataset development from the 2016 WLIP grant application

Counties must prioritize their Strategic Initiative grant activities toward achieving the benchmarks in numerical order, beginning with Benchmark 1, proceeding to Benchmark 2, and so forth. Note that there is a waiver on Benchmark 4 to allow counties to use Strategic Initiative grant funding to acquire lidar data. This exception to the benchmark was instituted so that counties would not forgo federal funding opportunities requiring a county match, such as the United States Geological Survey (USGS) 3DEP Program.

If a county meets all of the benchmarks, it may use the remaining balance of the Strategic Initiative grant to fund county-level strategic initiatives. Also note that Strategic Initiative grants are funded at a significant level for 2016-2017 because Land Information Fund Revenue was increased beginning on January 1, 2015, and Strategic Initiative grants were not first awarded until 2016. Therefore, the accrual of revenue allowed Strategic Initiative grants to be larger than they might be in future years.

3.3 Statewide Projects

3.3.1 Program Administration

Services provided by the Program and administration costs total \$400k for 2016. With respect to staff budget, WLIP staff within the Division of Intergovernmental Relations in the Department of Administration presently include 3.35 total positions: program manager (0.35 position), geographic information officer, grant administrator, and project coordinator.

2016 WLIP Staff Budget	
Salaries	\$242,536
Benefits	\$ 92,746
Supplies and Overhead	\$ 55,000
Travel	\$ 10,000
Total	\$400,282

WLIP staff currently carry out the duties of the department under s. 16.967(3) for administration of the Program by engaging in activities including but not limited to the following:

- Awarding and administering WLIP grants to counties, with development of the annual grant application and attendant benchmarks and standards
- Logging monthly county retained fee revenues and number of documents recorded
- Recording annual county retained fee and grant expenditures, and reporting summary statewide statistics in an annual Program report
- Producing project reports and other documentation of Program activities
- Creating, administering, and reporting on the annual WLIP survey of counties
- Reviewing and approving three-year county land information plans and amendments

- Preparing guidelines to coordinate the modernization of land records, currently by instituting benchmarks for county parcel datasets and via the updated instructions for three-year county land information plans
- Maintaining and distributing an inventory of land information available for the state, through the provision of county and state land information plans online, which inventory land information resources and access points
- Making Program materials available to the public online
- Identifying additional sources of funding (e.g., coordinating county applications for lidar through the USGS 3DEP Program)
- Coordinating and staffing the Wisconsin Land Information Council
- Maintaining statewide land information officer list and regularly communicating with land information officers on matters relating to the Program
- Meeting, communicating, and coordinating with county land information officers, register of deeds, surveyors, real property listers, treasurers, public safety officials, realtors, state agency GIS personnel, Department of Revenue staff, vendors of land records software, and other stakeholders
- Engaging in program planning and budgeting, including the engagement of stakeholders in participatory planning process and other strategic planning and implementation tasks
- Through the geographic information officer, providing technical assistance and advice to state agencies with land information responsibilities
- Coordinating with the GIS units of Wisconsin's state agencies, primarily through the State Agency Geospatial Information Council
- Coordinating with SCO to maximize efficiencies between the statutory duties of SCO and DOA
- Striving to meet the Governor's "Lean Government" initiative to make state government operate more efficiently by engaging in coordination, not only among counties and state agencies, but also between state agencies and local governments
- Coordinating with Department of Revenue on collection of tax roll data
- Analysis of legislation and drafting of fiscal impact statements relating to land information
- Researching best practices, current technology, industry developments, and standards
- Managing the Statewide Parcel Map Initiative
 - Devising the V1 and V2 parcel, tax roll, and zoning submission documentation with SCO
 - Data request, data acquisition oversight, data sharing logistics
 - Tracking of benchmark achievement with SCO
 - Arranging for technology for statewide dataset distribution and access to the statewide database with SCO
 - Collection of user feedback for Program assessment purposes with SCO
 - Outreach and community engagement

3.3.2 Statewide Parcel Map Initiative

The Statewide Parcel Map Initiative is a central focus of Program efforts, where DOA acts as a coordinator and aggregator, bringing together locally-produced data into a seamless statewide product consumed by a vast variety of users. Municipalities and counties create and maintain parcel and tax roll data, but the utility of this data extends well beyond county boundaries, thus demonstrating the need for statewide aggregation.

Once Act 20 directed DOA to create a statewide digital parcel map in coordination with counties and to author a searchable format standard for parcel information, the WLIP had to make this ambitious statewide project a reality. Building off of the success of the LinkWISCONSIN Address Point and Parcel Mapping Project, DOA has partnered with the State Cartographer' Office (SCO) as a contractor to carry out data standardization and aggregation efforts. The WLIP currently funds SCO on the Parcel Initiative for approximately \$115k per year, which includes the cost of software.

In order to define the DOA/SCO collaboration, an MOU has been signed for each phase of the project through the end of 2018. The MOUs define the scope of work and SCO responsibilities in creating each iteration of the statewide parcel layer and can be found on the WLIP webpage.

MOU	Duration	Years	Amount	Annual Cost
V1	July 1, 2014–September 30, 2015	1.25	\$121,765	\$ 97,412
V2	October 1, 2015–December 31, 2016	1.25	\$136,951	\$109,561

The primary project objectives successfully achieved by the Version 1 Statewide Parcel Map Database Project (V1 Project) were:

- Establishing a statewide parcel GIS map layer by integrating county-level parcels and property tax roll datasets
- Recommending a searchable format for parcel attributes for the V2 Project and beyond
- Making recommendations on WLIP Strategic Initiative grants for parcel mapping activities in the form of benchmarks for parcel dataset development

The SCO-DOA project team is currently working on the V2 Statewide Parcel Map Database Project. As with V1, SCO is going well beyond aggregating county parcel datasets. SCO activities include but are not limited to:

- Preparation and ingest of 72 county parcel and tax roll datasets
 - Data/metadata assessment
 - Parcel gap assessment
 - Staging data for processing
 - Attribute schema development
 - Field mapping documentation
- Local-level processing
 - Processing and joining auxiliary tables
 - Parsing, concatenating, and transposing
 - Other processing as needed
- Aggregation
 - Configuring and mapping fields
 - Aggregating datasets
- State-level processing
 - Aggregating state-level data
 - QA/QC
 - Standardization
- Creating geoprocessing and other tools to assist counties in standardizing and formatting data to meet parcel Benchmarks 1 and 2
- Developing and prototyping a process to update the statewide parcel layer to facilitate asynchronous updates on a county-bycounty basis

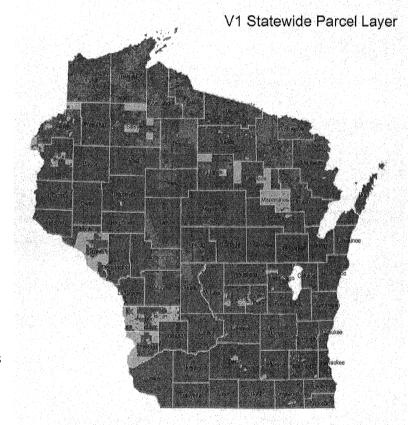


Figure 7. Version 1 statewide parcel layer completed in June 2015

- Developing a prototype solution to display county-maintained zoning data
- Evaluating county progress in meeting parcel benchmarks
- Preparing a report to the legislature by January 1, 2017 on progress in developing the statewide digital parcel map as required by s. 16.967(6)(b)

4 FUTURE PROJECTS: 2016-2020

The Wisconsin Land Information Program is governed by s. 16.967 and s. 59.72, as well as Administrative Rule Adm 47. While these statutes direct and enable DOA to accomplish much in the realm of land information, they also limit DOA's authority and discretion. More exactly, DOA cannot spend Land Information Fund dollars on land information outside of what is enabled by s. 16.967. Titled "Aid to Counties," subsection 7 specifically limits grant awards to counties.³

Future WLIP projects will focus on two major emphases of the land information duties of the department as listed by s. 16.967:

1) County Grants & Standards

The main tool for carrying out DOA's duties are grants awarded to counties. Therefore, most of the program administration is in a broad sense administration of county grants, which extends well beyond clerical tasks to the creation and implementation of grant requirements and more. For example, county grant administration involves reviewing and approving individual county land information plans, which provide an inventory of land information and guide WLIP grant and retained fee spending. Since Act 20 of 2013, grant requirements have grown to include detailed standards for sharing parcel data in the form of benchmarks to be achieved with the support of Strategic Initiative grants. The development and implementation of benchmarks and standards will be a main focus of future Program activities.

2) Statewide Parcel Map Initiative

The creation of a single statewide digital parcel map with geometric and tax roll information from 72 disparate information sources is an immensely complex task. While the Version 1 Statewide Parcel Map has been successful in a number of ways, work related to the Parcel Initiative is nowhere near complete. Again, the implementation of standards through the grant program is necessary for further innovation and efficacy of future iterations of the statewide parcel map.

Concentrating program activities on these two areas is necessary to achieve real, concrete, significant progress with land records modernization at the county-level and in the Parcel Initiative. In other words, it is necessary to focus efforts in order to ensure success and meet the statutory mandates of the Parcel Initiative. Only by moving forward one step at a time to achieve measurable objectives in the near-term can DOA and the stakeholder community achieve grand goals in the long-term.

Step-by-step, the Program will focus on county grants and the Statewide Parcel Map Initiative to institute standards and work towards open and accessible data.

³ With the qualification that counties may pass through funding to another local governmental unit.

This plan proposes future projects assuming that the last two-year revenue trend will continue, which equals \$6.3 million in Land Information Fund revenue per year. Ninety percent of Land Information Funding would continue to be devoted to county grants.

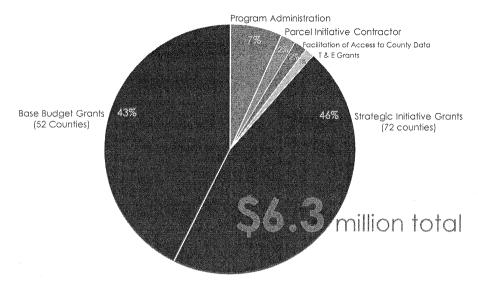
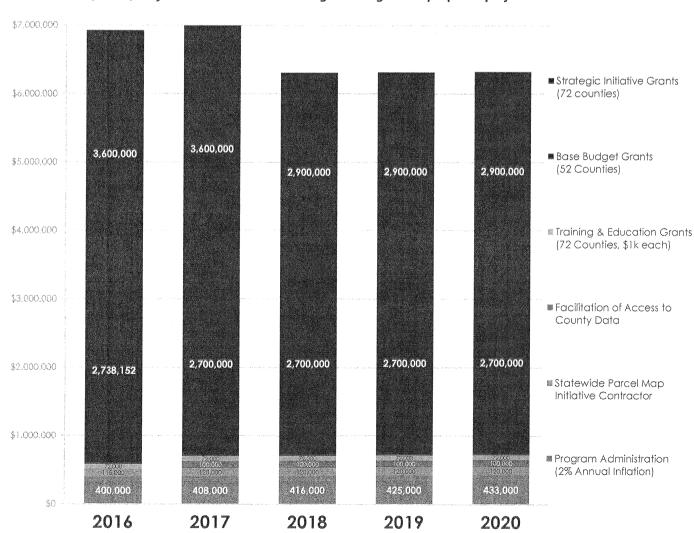


Figure 8. (Above) Projected average annual Program budget with proposed projects for 2018-2020 (Below) Projected Land Information Program budget with proposed projects for 2016-2020



4.1 County Grants

4.1.1 Future Retained Fees

Counties may continue to retain \$8 of the \$30 of the register of deeds document recording fee under s. 59.43(2)(ag)1.or (e). This funding must be used to implement a county land information plan, per s. 59.72(5).

4.1.2 Future Base Budget Grants

Every county that retains less than \$100k in a year will continue to be eligible for an annual Base Budget grant to reach the \$100k threshold.

4.1.3 Future Training & Education Grants

Every county will continue to be eligible for an annual \$1,000 Training & Education grant.

4.2 Strategic Initiative Grants 2018-2020

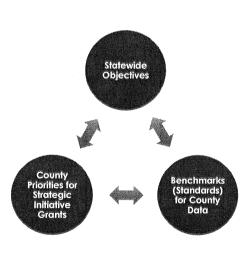
Strategic Initiative grant funding will continue to be allocated equally among all 72 counties for 2018-2020, to work toward Benchmark Sets I, II, and III.

On account of current revenue levels, Strategic Initiative grants would be \$40,000 per county beginning in 2018. If document recording levels return to the previous five-year average, grants could again total \$50k per county or more.

Strategic Initiative Grant Formula:

(Land Info Fund revenue of 6.3 million x 90%) – 2.7 million Base Budget grants – 72,000 Training & Education grants = 2.9 million 7.2 = 40,000 per county

Beginning in 2018, Strategic Initiative grants could be used to achieve a new assortment of benchmarks. In WLIP parlance, a "benchmark" is a standard or achievement level on a specific measure of data quality or completeness, which is tied to Strategic Initiative grants through the WLIP grant application. In other words, Benchmarks are standards—determined by statewide objectives—that guide the development of WLIP-funded data.

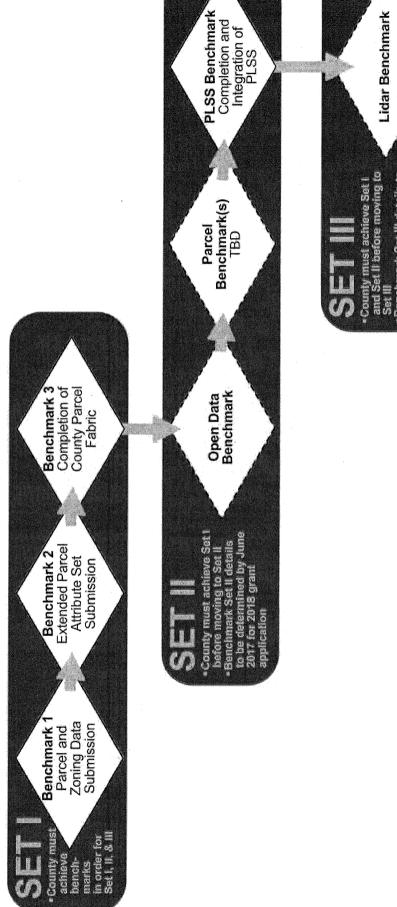


Standards for the collection, maintenance, and representation of land data are essential because they enable the sharing and efficient transfer of data between producers and users. As the key to interoperability, standards allow organizations to more effectively use geospatial data and technology, and thus have been a part of the Version 1 Statewide Parcel Map Database Project and will continue to be a central part of Strategic Initiative grant priorities.

At the same time, it has always been the intention of the WLIP to offer counties the greatest flexibility possible in utilizing WLIP funding, while balancing the need to address statewide objectives. As an early document on WLIP policy objectives emphasized the Program's distinct local government orientation, "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."

Figure 9 on the following page depicts the proposed benchmarks, broken down into sets. Set I and Set II are focused on parcels and open data access, while Set III requires counties to meet benchmarks for lidar and aerial imagery before applying the funding to other county projects.

⁴ Wisconsin Land Information Board, *Policy Objectives and Program Implementation in Light of the Enabling Legislation,* 1989 Wisconsin Acts 31 and 339, October 1991.



County must achieve Set I and Set II before moving to Set III and Set III details to be determined by June 2017 for 2018 grant application Imagery Benchmark

Imagery Benchmark

Other County

Land Info Projects

Figure 9. Proposed Strategic Initiative Benchmarks for 2018-2020

4.3 Benchmark Set I – Parcels

In 2018, counties would be eligible for Strategic Initiative grant funding to complete Benchmark Set I (Parcels).

In order to achieve the objectives of the Parcel Initiative for a complete statewide parcel map comprised of standardized and integrated local parcel datasets, it is necessary that counties first meet the parcel benchmarks originally laid out in the 2016 grant application and the V2 call for data submission documentation. Three of the four original benchmarks for parcel data will become Benchmark Set I for 2018-2020 grants:

- Set I Benchmark 1 − Parcel and Zoning Data Submission
- Set I Benchmark 2 Extended Parcel Attribute Set Submission
- Set I Benchmark 3 Completion of County Parcel Fabric

Utilizing 2016 and 2017 Strategic Initiative grants, all counties are scheduled to be complete with Benchmark Set I by March 31, 2018, with the exception of Vernon and Burnett counties, who will likely need more time to achieve the digital parcel fabric completion required by Benchmark 3. This means that Set I benchmark objectives will be largely complete by 2018. The majority of counties will continue progress on PLSS completion and integration in 2018. As such, counties will continue to have the option of applying Strategic Initiative grant funding towards PLSS in 2018, an option that falls under Benchmark Set II below.

4.4 Benchmark Set II - Open Data, Parcels, and PLSS

Beginning in 2018, each county would be eligible for Strategic Initiative grant funding to work on the new Benchmark Set II (Open Data, Parcels, and PLSS).

4.4.1 Set II Benchmark 1 - Open Data

Following the trend of government transparency and open government, the WLIP recommends that counties make public geospatial data freely and openly available, which is important to maximizing the return on public funds invested in county land information data through the WLIP and to achieving Program objectives. Including open data as an option for Strategic Initiative grant funding will enable counties to work toward a benchmark for data access.

The state statute (s. 16.967(7)) governing the Program's distribution of grants actually prioritizes parcel mapping and making public records in the county's land information system accessible on the Internet before other grant expenditure activities. Furthermore, s. 59.72 (3)(b) directs counties to include within their land information plans a goal to provide access to public land records on the Internet.

Counties are already required to share non-sensitive, WLIP-funded data—whether by retained fees or grants—upon request, consistent with the Public Records Law and the WLIP Strategic Initiative grant agreement. The open data benchmark is a vehicle for ensuring this while also making data access more efficient.

- Set II Benchmark 1 Open Data In order to satisfy benchmark, counties would need to:
 - Make a specific selection of commonly requested Foundational Element layers with basic metadata available to the public online, as a service and/or with download capability, without charge or licensure. (The selection of layers and other details are to be determined by DOA in collaboration with WLIC and stakeholder community by June 30, 2017). Existing state and federal laws regarding non-public or sensitive data would apply.
 - Possible means of data access at the county level:
 - County provides dataset downloads by website/FTP/cloud
 - County provides a web feature service, such as static or live REST endpoints
 - County provides linked open data via other technical means
 - County provides data to DOA, who—in coordination with a third-party or state agency—makes data available in the public domain on behalf of county. Examples would be contributing to the

Legislative Technical Services Bureau (LTSB), UW-Madison Robinson Map Library (RML), SCO, and/or WisconsinView.⁵

• It is permissible for counties to include appropriate legal disclaimers on their website and in their metadata when providing open data (e.g., accuracy disclaimers, map is not a survey disclaimer).

Data collected by DOA to meet this benchmark and made available by a state entity would be available online with a disclaimer directing the user to the county for the most current and comprehensive datasets.

As of April 2016, only fourteen counties supply their GIS datasets online for download and likely meet the open data benchmark, while an assortment of others indirectly make data available online through WisconsinView and RML. The goal is to make all WLIP-funded data with basic metadata available to the public online, as a service and/or with download capability, without charge or licensure, so that all WLIP-funded data is open data by 2020. Presumably the open data benchmark will not be tremendously expensive for counties to meet and therefore will leave funds remaining to achieve other benchmarks.

4.4.2 Set II Benchmark 2 - Additional Parcel Benchmarks To Be Determined

As the Parcel Initiative evolves, there will continue to be a need for Strategic Initiative grant funding to address additional priorities for parcel completion and standardization, beyond Benchmark Set I. Additional benchmarks for parcel data development would be defined and finalized as part of the V2-V4 Parcel Projects. The following list includes possible Set II parcel examples, but they are tentative and listed in no particular order.

- Set II Benchmark 2 Parcel Benchmarks To Be Determined Examples:
 - Public lands classification for parcels
 - Right of ways tied to parcels
 - Department of Revenue's tax roll standards and data submittal requirements
 - Land use mapping tied to parcels
 - Municipal zoning and other key land use regulations tied to parcels

4.4.3 Set II Benchmark 3 – PLSS Completion and Integration

The Benchmark for PLSS completion and integration and associated requirements are not expected to change from the 2016 WLIP grant application.

- Set II Benchmark 3 PLSS Completion and Integration In order to satisfy benchmark, counties would need to:
 - Achieve satisfactory completion and integration of the county PLSS framework, as defined by the county in its "Project Plan for Achieving Benchmark 4 PLSS Completion and Integration" within its land information plan

Progressing to a maintenance phase of a complete and integrated county PLSS framework is important to the geospatial integrity of parcel mapping. All legal descriptions of property ownership are tied to PLSS corners. This means that corner monuments of the PLSS anchor the legally recognized parcel ownership boundaries to specific locations. The accuracy of parcel boundary lines as publically displayed is dependent on the accuracy of a county's PLSS.

Eligible grant activities include remonumenting, rediscovering, and establishing survey-grade coordinates for PLSS corners, and integrating corner GPS coordinates into the parcel fabric. Due to cost, accessibility, or land ownership, lower-quality coordinates may be substituted. However, lower grade coordinates should be the exception, rather than the rule.

This benchmark requires submittal of a digital copy of all county PLSS corner coordinates values for inclusion in the State Cartographer's Office online PLSSFinder upon project completion. With this data submittal, accuracy class indication is required. Accuracy classes include survey-grade, sub-meter, and approximate.

⁵ See Chapter 4 for more information on DOA facilitation of data access through these organizations.

- Survey-grade: Coordinates collected under the direction of a professional land surveyor, in a coordinate system allowed by s. 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision.
- Sub-meter: Accuracies of 1 meter or better
- Approximate: Accuracies of within 5 meters or to coordinates derived from public records and other relevant information.

As of 2015, only nine counties reported to be complete, integrated, and in maintenance phase of their PLSS.⁶ (This figure does not include SEWRPC counties that may be "complete," but are upgrading from NAD 27 to a more current datum.) Forty-seven counties estimate that they will be complete and in maintenance phase of their PLSS by 2020.

It is estimated that it would take about \$30 million to complete the PLSS framework statewide, ⁷ so that all 72 counties have reached the maintenance and monument perpetuation stage. At the 2016 rate of grant and retained fee spending on PLSS and non-WLIP sources of funding (2016 rate proposed to continue under this plan), it is estimated that PLSS will be completed and in maintenance phase statewide in about ten years. However, there would likely be some individual county exceptions, as currently ten counties estimate a completion timeline extending beyond 2025. Also note, the option to apply Strategic Initiative funds to PLSS is an important source of funding, however, other funding sources must continue to play a strong role to cover the significant costs of PLSS work.

4.5 Benchmark Set III – Lidar and Aerial Imagery

Beginning in 2018, after achieving Benchmark Set I and Set II, counties would be eligible for Strategic Initiative grant funding to achieve Benchmark Set III for lidar and aerial imagery, and then could apply any remaining grant funds to a project of the county's choice.

Counties would need to prioritize Strategic Initiative grant funds in order, beginning with lidar and proceeding to aerial imagery. Whereas all counties have some vintage and type of aerial imagery, six counties still lack lidar altogether. Both lidar and imagery were prioritized by land information officers in the 2014 WLIP Survey, as reported in the 2014 WLIP Program Plan. Support was also expressed for aerial imagery and lidar in a survey conducted by Adam Derringer, WLIC Vice-Chair, in response to Draft 1 of this program plan.

It is not mandated that counties keep their lidar or aerial imagery within a certain age limit. Rather, they are eligible to use Strategic Initiative grant funding to acquire or update lidar and aerial imagery. The requirements that make up each benchmark listed below would be grant requirements if a county were to apply Strategic Initiative grant funding toward achieving them.

4.5.1 Set III Benchmark 1 – Acquisition of Lidar Base Product Set

- Set III Benchmark 1 Acquisition of Lidar Base Product Set In order to satisfy benchmark, counties would need to:
 - Acquire a lidar product set that includes Quality Level II point cloud, digital elevation model, breaklines, and contour mapping
 - Is current to within eight years old
 - Is made available online, as a service and/or with download capability
 - Meets basic metadata requirements

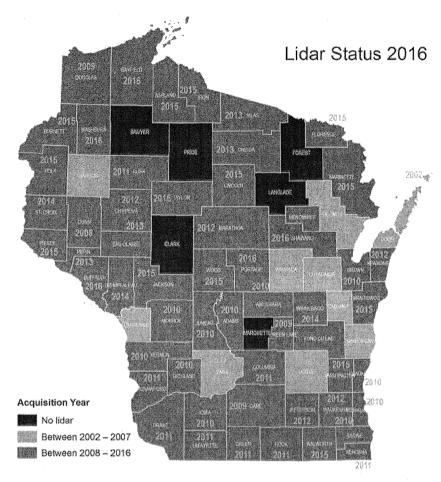
Under this benchmark counties would be eligible to use Strategic Initiative grant funds to acquire lidar (as six counties lack lidar data) or update an original lidar dataset. Although the vintages, specifications, and product packages differ, at the current rate of acquisition, every county should have a lidar dataset by 2020.

It is also important to update lidar datasets, complete product suites, and take advantages of advances in technology. By 2020, 24 county lidar datasets will be at least eight years old. These counties would be eligible to use Strategic Initiative grant funding to update their lidar datasets.

⁶Data source: 2016 WLIP grant applications ⁷Data source: 2016 county land Information plans

Wood County offers one example of a county solution for the provision of lidar (and aerial imagery) datasets online. Users have the ability to download tiles with data from woodwi.maps.arcgis.com, the county data distribution application.

Federal USGS 3DEP grants have been important to achieving lidar coverage statewide. DOA coordinated successful multicounty grant applications in both 2015 and 2016 and intends to continue to work with counties to capture federal funding for lidar. A county may prioritize Strategic Initiative grant funding for lidar over completion and integration of PLSS required in Set II, if necessary to fund the match of a USGS 3DEP grant or other non-WLIP funding source. For added accommodation, DOA can also work with counties to extend the typical grant deadline to allow counties the flexibility to make payments over the course of two years. Counties would also be able to accrue Strategic Initiative grant funding over the course of at least two years to meet the expense of lidar.



Map 1. County lidar status for 2016

4.5.2 Set III Benchmark 2 – Acquisition of Aerial Imagery Base Product Set

- Set III Benchmark 2 Acquisition of Aerial Imagery Base Product Set In order to satisfy, counties would need to:
 - Acquire imagery that is spring leaf-off collection, at least 12" spatial resolution, ASPRS Class II
 accuracy or better
 - Is less than six years old
 - Is made available online, as a service and/or with download capability
 - Meets basic metadata requirements

Including aerial imagery under Benchmark Set III will assist counties to keep aerial imagery current with specifications that meet governmental and private business user needs.

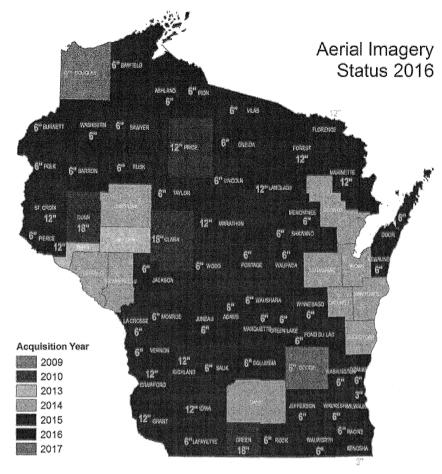
As of April 2016, four counties did not meet the aerial imagery benchmark of a 12-inch product that is not more than five years old (Clark, Dunn, Green, and Price). All other counties will need to update their imagery by 2021 to continue to meet the benchmark for aerial imagery.

As with PLSS and lidar, it is not intended that Strategic Initiative grant funding cover all of county orthoimagery costs. Retained fees, Base Budget grants, other county funding sources, as well as contributions from private and governmental entities could help the county pay for imagery.

In utilizing Strategic Initiative grant funds to acquire aerial imagery, counties would still have the ability to buy up to a higher level of resolution or to purchase additional products, such as oblique imagery, lidar, and planimetrics. Counties would also have the ability to purchase aerial imagery on a more frequent basis, such as every three years. The grants are intended to help counties afford at least the 12" base product at least every five years.

4.5.3 Other County-Specific Strategic Initiatives

Once a county has met all of the Set I, Set II, and Set III benchmarks, it may spend Strategic Initiative funds on a project listed in the "Current & Future Projects" section of the county land information plan. Given the list of benchmarks, with additional parcel benchmarks to be determined, it is unlikely that more than a small number of counties would achieve all of the benchmarks by 2020.



Map 2. County aerial imagery status for 2016

4.5.4 Determination of Benchmark Details and Grant Requirements

Strategic Initiative grant eligibility requirements need to be specified by June 30, 2017, in order to be included in the 2018 WLIP grant application (to be released by October 1, 2017). In determining the grant benchmark details, DOA will seek input from community stakeholders and the Wisconsin Land Information Council.

WLIP grants are awarded on an annual cycle based on the fiscal year, so decisions regarding funding prioritization, standards, and data access requirements must be approved on this cycle by DOA management. The annual grant application communicates the amount of grant funding each county will be eligible to receive, how it can use the funding, and what requirements accompany the grants. The completed county grant application becomes the scope of work that the county is required to complete during the grant period, as per the executed grant agreement.

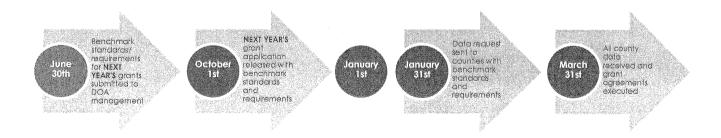


Figure 10. Determination of Benchmarks and Grant Requirements – Annual Cycle

DOA has established a schedule of releasing the grant application for the upcoming year by October 1st. In order to meet this deadline, all grant funding criteria must be ready for DOA management's review by June 30th. Because the parcel benchmarks and standards have essentially been determined for 2017 grants (as the original four parcel benchmarks defined in the 2016 grant application), the next major milestone will be for 2018 grants. Therefore, the new benchmark standards must be ready for DOA management review by June 30, 2017.

4.6 Statewide Projects

DOA will continue to carry out the duties of the department under s. 16.967(3), including administering county grants and statewide projects.

WLIP staff will seek to accomplish the tasks listed in the previous chapter (on page 12), as well as further tasks related to program administration and the Statewide Parcel Map Initiative, including facilitation of access to WLIP-funded data.

4.6.1 Future Program Administration

Program administration encompasses tasks related to administering county grants and attendant standards, the Statewide Parcel Map Initiative, and facilitation of access to data. For 2018-2020, WLIP staff within the Division of Intergovernmental Relations in the Department of Administration are projected to include 3.35 total positions: program manager (0.35 position), geographic information officer, grant administrator, and project coordinator.

Future WLIP Staff Budget	
Salaries	\$242,536
Benefits -	\$ 92,746
Supplies and Overhead	\$ 55,000
Travel	\$ 10,000
Total	\$400,282

In calculating future staff expenses, note that the numbers for these projections are in 2016 dollars. It is assumed that the nominal dollar amount will rise with inflation, at a rate consistent with the CPI Index, but the real dollar amount for DOA staff expenses is not expected to increase. However, costs are estimated and subject to change.

4.6.2 Future Statewide Parcel Map Initiative DOA will continue to develop the statewide parcel map by contracting with an outside agency.

V3 and V4 will be created in 2017 and 2018. By 2018, the goal is to make statewide parcel aggregation more efficient by implementing the "Four As"—authoritative, automated, asynchronous aggregation—which would allow counties to continually update their parcels in the statewide layer. Part of DOA's role in the V1/V2 project is to collect, translate, standardize, and aggregate data from local contributors—what is considered an "aggregator" role. The aggregator role is relatively expensive and time-consuming when compared to its alternative, the "steward" role. The Parcel Initiative was designed to phase out the aggregator role over successive cycles of development, with DOA moving to the role of a steward, which will be less costly and time consuming.

In order to achieve the goals of automated asynchronous aggregation of parcel data into a statewide parcel database, an additional MOU with SCO for the V3 and V4 parcel projects has been executed. This gives a framework for the development of the Parcel Initiative through 2018 (minus some foreseeable small additional costs for project software and hardware).

MOU	Duration	Years	Amount	Annual Cost
V3-V4	January 1, 2017–December 31, 2018	2	\$234,244	\$117,122

After V4 is completed in 2018, there exists the possibility of a request for proposals (RFP) or other means of selecting a contractor for the statewide parcel layer. SCO's role may or may not continue as is. It is expected that the costs for actual aggregation of common parcel attributes listed in the schema for parcel Benchmarks 1 and 2 will decline because the process of creating a statewide parcel map will be more automated. However, there will still be costs associated with maintenance and updates to the statewide parcel map, including the need for oversight, troubleshooting the parcel map aggregator, and providing technical assistance to counties.

While the V2-V4 projects will set a course for the Parcel Initiative to address other aspects of GIS parcel and tax roll dataset completion and standardization, it will take additional coordinating work to implement and achieve these additional Set II benchmarks statewide. Such work could enable statewide derivative layers to be created by DOA and it's contractor from these parcel attributes or descriptors.

One example of a potential project to be conducted by a Parcel Initiative contractor is the creation of a statewide PLSS layer. An aggregated statewide PLSS layer could enhance and maximize the investment of the statewide parcel layer. It would benefit the statewide parcel map by displaying parcel fabric areas in need of improvement to positional line accuracy. This is of particular importance along county and state boundaries and for the development of a seamless statewide parcel map.

The creation of a statewide PLSS layer would especially benefit state agencies as a new and improved version of DNR's Landnet, which is a statewide PLSS layer developed in the mid-1990s and still in use today. DNR relies on statewide PLSS data to manage over 48,000 parcels scattered throughout Wisconsin. Since the 1990s, millions of WLIP dollars have gone into updating county PLSS. In order to track progress and judge the efficacy of this major category of WLIP expenditure activity, a statewide PLSS layer may be necessary.

4.6.3 Facilitation of Access to Data DOA will work with counties toward greater access for parcels and other county GIS data.

DOA's main role in facilitating access to data is to remove institutional barriers to data. As stated at the outset of this chapter, because the WLIP funds the creation and maintenance of *county* datasets, WLIP-funded *county* data is the domain in which DOA can directly enhance access to GIS data. For both the LinkWISCONSIN Address Point and Parcel Mapping Project and the V1 Project, 100% of counties and cities participated by sharing their address point and parcel datasets. The Program seeks to encourage and facilitate this data sharing trend, and provide support for open data practices.

Facilitation of Access to County Parcel Data

For public access to parcels and tax roll data in V1, DOA is utilizing ArcGIS Online, with hosting by the Legislative Technology Services Bureau. Subsequent versions of the parcel map have the potential to remain the same or be migrated to another platform.

The implementation of parcel standards through Benchmarks Sets I and II is important to the facilitation of data sharing. The original Benchmark Set I from the 2016 grant application implemented detailed parcel data standards for a core set of 41 attributes. DOA and SCO will be working with counties through March 2018 to implement these parcel and tax roll data standards in all 72 counties, before moving on to implementation of additional parcel standards for 2018 grants. In addition to Strategic Initiative grants, continuing to provide support solutions, such as tools to aid counties in data standardization, will assist counties to meet the benchmark standards.

Facilitation of Access to Other County Data

The Program seeks to build on its success with parcels by first working to make other WLIP-funded county datasets available in the public domain. One way of accomplishing this is by making open data a Strategic Initiative grant benchmark, as Benchmark Set II does. Another way is to assist other state agencies and organizations to enhance their existing repositories of county data.

Unlike with the statewide parcel map, DOA does not have the statutory authority or staff resources to integrate other Foundational Element datasets into statewide layers. Leadership from other state agencies and organizations is needed to define business needs for other integrated statewide layers and marshal the staff or monetary resources to add value to county datasets in this way.

An expanded request for county data made by DOA is a means to facilitate access and create efficiencies. By requesting common Foundational Element county datasets on behalf of and in concert with other state agencies, DOA can assist to enhance existing portal and/or repositories of county data.

DOA plans to work with other organizations to make an expanded call for data in early 2017. These organizations include the Legislative Technical Services Bureau (LTSB), UW-Madison Robinson Map Library (RML), the State Cartographer's Office (SCO), and the UW-Madison Space Science & Engineering Center (SSEC).

For vector datasets, DOA will request data and share it with RML for public distribution. The RML map librarian has identified a selection of datasets to be requested based on actual requests received and usage statistics. Data is organized, labeled, and made discoverable online. RML also archives historic copies of the county data it receives.

The LTSB technical team has created an upload application called WISE-Decade as a collection and access point for county data, already in use for collecting parcels for the Parcel Initiative and school district boundaries for the Department of Public Instruction, as well as administrative boundaries required for LTSB's own statutory responsibilities.

Data Access and Expande Organization	Upload Mechanism	Access Mechanism	Data Requested
Legislative Technical Services	WISE-Decade application	Wisconsin State Legislature	County parcels
Bureau		Open GIS Data (ArcGIS Open	County zoning Administrative boundaries
		Data)	School districts
UW-Madison Robinson Map	WISE-Decade application	GeoData@UW-Madison	Vector Data
Library/SCO	vvioc-execute application	(Open Geoportal)	* Roads
			* Land use
			Zoning
			Building footprints
			Hydrography
		An indicate in a contract of the contract of t	 Parks, open space, recreational data
		TOTAL A MANAGEMENT AND	 Address points
E SETT OF MICHAEL STREET, THE LAST OF MICHAEL AND MICHAEL AND MICHAEL AND			(beginning in 2017)
UW-Madison Space Science	SSEC upload or other	WisconsinView	Raster Data
& Engineering Center, LTSB,		(RealEarth/ArcGIS Online) or	* Lidar
or other		other	Aerial imagery
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SCO	SCO upload or other, e.g.,	PLSSFinder or other	 County PLSS – for Strategic Initiative
	WISE-Decade application		funded corners
	(beginning in 2017)	To approximate to	(beginning in 2017)
		Y	 County PLSS – all existing corners
		A constant	(beginning in 2018)

The provision of raster datasets, namely aerial imagery and lidar, is more complex and costly due to the sheer volume of data—about one terabyte of raster data per county for an original aerial imagery or lidar dataset. However, the Program seeks to facilitate access to all publically-funded county imagery and lidar datasets. At a minimum, WLIP-funded data should be made available upon request, as is consistent with the Public Records Law, which may mean sharing a copy on external hard drive at the expense of the requestor.

More ambitious but worthwhile would be the provision of this data online. DOA will continue to investigate the possibility of another state agency offering county aerial imagery and lidar datasets online, particularly SSEC's WisconsinView. WisconsinView currently hosts some aerial imagery and lidar DEM datasets, and should be considered with WLIC and land information community stakeholder input.

One potential arrangement for data access is illustrated in Figure 11. It depicts a network coordinator in which counties retain stewardship of their land records and share data. DOA has the role of facilitating access to data, firstly by requesting data from counties on behalf of other agencies for their public portal/repositories. Such an arrangement would make the data easier to access, easier to use, and thus capable of serving many more purposes than in the past.

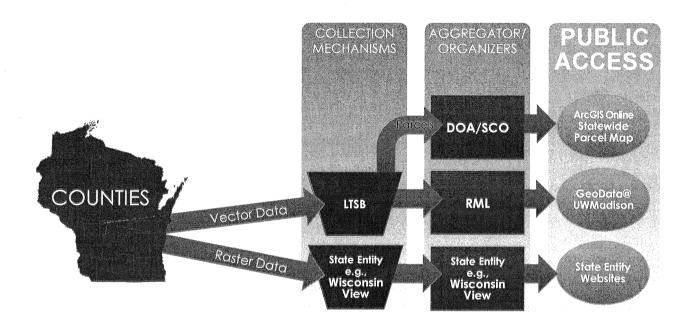


Figure 11. One potential DOA-facilitated option for county data access (in conjunction with county open data)

5 SCOPE

5.1 Disclaimers

It is intended that this plan guide the WLIP through 2020, while at the same time neither guaranteeing nor restricting any particular course of action. The figures in this plan do not indicate a pre-commitment to spending. This document includes a budget scenario that may change. The Program is mindful that utilization of Land Information Fund revenue must be consistent with statutory spending authority, as described by s. 16.967, and should be for well-defined activities with statewide benefits. As always, any funding decisions will need to be approved by DOA management.

There is a need to move the Program forward on the ground one step at a time. This plan intentionally excludes some tasks and is limited in scope, as the Program seeks to follow a realistic strategy for what is achievable by 2020. However, this plan does not seek to not limit what the WLIP can accomplish by 2020. If objectives in the plan can be achieved earlier than scheduled, the plan can be updated to include more objectives.

This plan is intended to give strategic direction for only the WLIP, with the implication that more detailed planning is to follow, and some uncertainly is inevitable. As such, much more detailed planning, research, and testing are required for most of the action items in this plan. Therefore, this plan should mainly serve as a framework and guidelines for more detailed planning. In this sense, program planning does not end with the adoption of this plan, rather it continues in more detail.

It should be noted that the approach of the Parcel Initiative from the LinkWISCONSIN Address Point and Parcel Mapping Project to V1 and V2—incremental progress and an iterative model—is an approach that allows for flexibility and well-informed decision making. The implementation of future projects is expected to follow this model.

Although this plan has a vision five years into the future, it is intended that this plan be updated at least every three years. The Wisconsin Land Information Council should also review progress in implementation of the plan on an annual basis.

5.2 Out of Scope

To keep a realistic and manageable scope of work that is within the bounds of DOA authority for the WLIP as described by s. 16.967, the current plan document does not address several points:

5.2.1 Geospatial Strategic Plan for Everything GIS in Wisconsin

The Wisconsin Land Information Program is a big player in Wisconsin's efforts to modernize land records and develop GIS, but there are many other public and private agencies hard at work on similar efforts. It is beyond the scope of this document to plan for anything beyond what can be funded with the Land Information Fund. This 2016-2020 plan is not meant to be a plan for everything GIS in Wisconsin.

5.2.2 Master Central Repository and/or Portal for GIS Data

A frequent topic of discussion has been the desire for a central geoportal or master repository of GIS data. The discussion typically includes data produced by all levels of government, from municipalities to federal agencies. Because there are limited WLIP staff resources and the Program is bound by existing statutory authority, this Program does not seek to engineer a new master geoportal/repository in the foreseeable future. However, by assisting counties to build or acquire Foundational Element GIS datasets and making sure that those datasets are publically available, the WLIP would address the two primary obstacles to obtaining GIS data. Thereby, DOA could assist in enhancing other existing agency geoportals/repositories.

5.2.3 Expanding Spending Authority

According to s. 20.505(1)(ub), DOA is enabled to spend Land Information Fund revenue on the WLIP as governed by s. 16.967 up to a limit of \$7,673,300. Legislative changes could expand or limit duties of the department for the WLIP described by s. 16.967. For example, a new statutory directive could hypothetically authorize the Program to expand purchasing power on a statewide level, on behalf of counties. Another

example would be expanding statutory authority to award grants to state agencies, which current statutory authority does not allow. This program plan intentionally avoids the need for legislative changes, in order to focus WLIC attention, staff efforts, and land information community engagement on goals and objectives that could be accomplished within the existing structure put in place by statute and administrative rule.

5.2.4 Use of Land Information Fund Revenue for Other Activities

According to s. 20.505(1)(ub) and (ud), Land Information Fund revenue could be used to fund comprehensive planning grants or DOA review of municipal incorporations and annexations. However, comprehensive planning grants have not been funded since 2010 and are not likely to occur in the future. Also, Land Information Revenue has not been used to fund municipal incorporations and annexations in recent years. Both comprehensive planning grants and review of municipal incorporations and annexations are considered outside the scope of this plan and WLIP budget.

5.2.5 Budgeting for Other Possible Funding Sources

While DOA seeks to leverage additional sources of funding to achieve land information goals, whether it be from federal agencies, other state agencies, local governments, or the private sector, this plan does not count on or budget for funding other than the recording fees collected through the Land Information Fund. Political strategizing to capture additional funding is not within the scope of this plan and is left to other entities, such as organizations representing sector interests. An example of another source of potential county land information funding is the cell phone fee for police and fire, which amounts to about \$20 million in annual revenue. This revenue was in part previously used for E911 address point and other sorts of mapping, but is beyond the scope of this plan to address.