

2019 WLIP Report

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OVERVIEW

The Wisconsin Land Information Program (WLIP), administered by the Division of Intergovernmental Relations within the Wisconsin Department of Administration (DOA), provides public funding to Wisconsin counties for the modernization of local land records. This funding takes the form of register of deeds real estate document recording fees retained at the county level and grants awarded by DOA.

This annual report discusses the year in review for WLIP program activities and how WLIP funding was invested in county geospatial technology and infrastructure in the previous reporting year (2018).

WLIP YEAR IN REVIEW

COUNTY DATA ACCESS & OPEN DATA

Consistent with the WLIP goal of facilitating access to WLIP-funded data elaborated in the WLIP Program Plan 2016-2021, DOA and several partners have worked to make a significant amount of new GIS data available.

County lidar datasets were made more accessible in 2019, through a WisconsinView FTP site, <ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar>. To date, over 60 counties have lidar datasets posted here. The FTP site offers a one-stop shop for data that can be downloaded in bulk, offering a practical advantage for users. The growth of this portal and the discoverability of more data help the program continue on the path to enabling access to county GIS data.

In addition to providing the public free access to large elevation data sets, for Version 5 of the Statewide Parcel Map Database Project, the data request was coordinated with the UW-Madison Robinson Map Library (RML). RML collects and archives annual snapshots of several framework vector layers which are available for download via GeoData@Wisconsin, a geospatial data portal developed in partnership with the State Cartographer's Office (SCO). In 2019, **382 new county GIS datasets were added to GeoData@Wisconsin** for public download, equaling a total of 492 feature classes. GeoData@Wisconsin also began indexing metadata records for those counties that provide access to open data online, further promoting discovery and access to this content. For the most current data, users can always consult county webpages, which are listed at doa.wi.gov/DIR/County_Contacts.pdf.

2020 GRANT APPLICATION RELEASE

The 2020 WLIP Grant Application was made available in September offering three types of WLIP grants totaling \$5.7 million. Land Information Fund revenue varies from year to year and in State Fiscal Year 2019, the number of real estate documents recorded sunk to its lowest point in the history of the WLIP. Even with this decline in revenue, each county is eligible to receive a \$40k Strategic Initiative grant for 2020. Strategic Initiative grants are prioritized to meet standards known as "benchmarks" for parcel dataset development, which includes the annual parcel/tax roll data submission. Every county is also eligible for a \$1k Training & Education grant, and the 53 counties that retained less than \$100k in recording fees during the previous fiscal year are eligible for Base Budget grants.

V5 STATEWIDE PARCEL MAP DATABASE PROJECT



The Version 5 Statewide Parcel Map Database Project (V5) is part of the larger Statewide Digital Parcel Map Initiative, a multi-year DOA initiative that resulted from Act 20 of 2013. The Parcel Initiative is important for improving the quality of Wisconsin's real estate information, economic development, emergency planning and response, and other citizen services. Like V1-V4, the V5 Project was a collaboration between DOA and SCO. Counties submit data according to the Searchable Format, a set of standards detailed in the Submission Documentation that followed from the statutory directives in Act 20. To assist in data formatting, SCO created geoprocessing tools and a tool called the Validation Tool. On July 1, **the V5 statewide parcel database was released**—the fifth version of the state's publicly available statewide digital parcel map, featuring 3.5 million parcel records. Visit the statewide parcel map webpage for statewide downloads, individual county downloads, schema documentation, and more.

V5 Observation Reports

The V1-V5 Projects have made it a point to provide feedback designed to aid counties in achieving the Searchable Format, which they must do each year no later than March 31st. With an eye toward accountability and in an effort to assess county progress, each county received an individual observation report on its V5 data submission. These V5 Observation Reports document progress in meeting the Searchable Format and describe steps still necessary to meet the standard. This is intended to help counties design WLIP grant projects to ensure that they meet the Searchable Format standard. On a statewide level, overall, the reports indicated that progress has been made, but there is work yet to do in order to achieve and maintain the Searchable Format statewide.

Parcel Initiative Lessons Learned

The incremental approach toward the Parcel Initiative—improving the statewide parcel map with each annual iteration—has brought with it great advances in data quality and improved efficiency. Some of the most telling success stories come from users of the statewide database, who represent private sector businesses, government agencies, non-profit organizations, and private citizens. Along with an evaluation of the V5 project, the V5 Final Report provides detailed user feedback and testimonials on business use cases. Alongside these accomplishments, there are also some potential opportunities for growth and areas for improvement which have emerged over the years.

Areas for Improvement in Aggregation of Local GIS Data to the State Level

- ▶ **GIS gaps to fill.** The V5 parcel layer released in 2019 contains gaps in geographic coverage in 4 counties—Buffalo, Burnett, Crawford, and Vernon—which is down from 12 counties in 2014 but points to a remaining need to fill GIS gaps in coverage.
- ▶ **Geospatial accuracy work and adjustments are ongoing.** Public Land Survey System work is far from complete, with 65% of counties still working on PLSS completion and integration of PLSS data into the county digital parcel fabric.
- ▶ **Only 20% of counties meet all Searchable Format standard requirements on first attempt.** For V5, about 80% of counties either required follow-up for their data submission to be considered complete or additional processing in order to meet all Searchable Format standard requirements.
- ▶ **Data collection time is about 5 months.** For V5, data was requested in January, but incomplete submissions and submissions requiring either follow-up and/or resubmission extended the data collection time into June, which itself is an improvement over the even lengthier data collection periods of previous years.
- ▶ **Data validation and error reporting require several passes.** To validate the data and ensure it matches the schema, several steps are taken, but due to vast differences in local data, only some steps can be automated. The Validation Tool is automated, but true quality control also requires project staff to perform manual intake and assessment observations and then translate these recorded observations into feedback reports.
- ▶ **Local government capabilities are vastly different.** Counties vary greatly in terms of resources, from staff to software, hardware, land information system design, and overall technological capabilities. Diversity in resources, capabilities, and third-party vendors result in myriad local data conditions, presenting ongoing challenges.
- ▶ **Unique local data situations can create exceptions to a standard data model.** Many counties have “standard exceptions”—issues where legitimate data deviates from or presents an exception to the logic of the statewide schema. After several years of parcel data aggregation, many standard exceptions have been documented and programmed around, but as long as these unique data conditions exist, accommodating for them requires extra time and labor.
- ▶ **Independent municipal data stewards present challenges.** Some municipalities do their own parcel mapping and/or property tax listing. It is the responsibility of the county to integrate all available datasets into their data submission, which can require extra attention to acquire and format data. In some cases, the tax roll data submitted for independent municipalities lags a year behind.
- ▶ **Automated server-side aggregation may be a long way off.** For V1-V5, the state has played the role of aggregator of local data. The aforementioned challenges currently stand in the way of aggregation that occurs on a server through an automated process, though authoritative automated asynchronous aggregation remains a long-term goal.

Statewide PLSS Layer Update

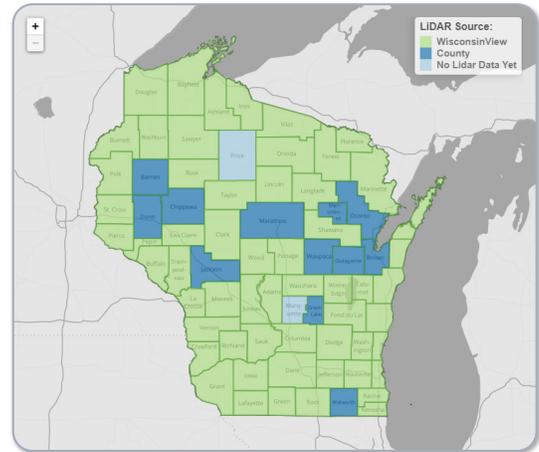
Proportionally, the largest segment of WLIP funds counties devote to land records modernization is dedicated to PLSS completion and integration. In 2019 DOA and SCO expanded the Parcel Initiative to add value through the creation of a statewide PLSS layer, constructed from local PLSS corner data collected as part of the V5 Project. Learn more about PLSS data in Wisconsin at www.sco.wisc.edu/surveying.

Also notable for 2019, the WLIP was honored to be the recipient of the year's "**Friend of Wisconsin Land Surveying Award**" from the Wisconsin County Surveyors Association at the 70th Annual Wisconsin Society of Land Surveyors' Institute.

FEDERAL FUNDING FOR LIDAR

With the Fiscal Year 2019 cycle, lidar coverage for the state was completed for the first time. All 72 Wisconsin counties now have pending or existing lidar coverage, including 44 federally-funded counties meeting the Quality Level 2 (QL2) lidar standard or better. The Geographic Information Officer (GIO), Jim Giglierano, helped coordinate 2019 grant applications for QL2 lidar data through the federal USGS 3D Elevation Program (3DEP). County land information programs that directly participate in the lidar acquisitions mostly do so through the Wisconsin Regional Orthophoto Consortium (WROC).

- All five of the Wisconsin FY19 3DEP lidar projects submitted through DOA were funded—Adams, Jefferson, Lafayette, Monroe, and Pepin Counties—for a total of \$350,385.00 in federal funding. Counties contribute an equal amount towards the data acquisition and processing.
- 3DEP applications were coordinated on behalf of eight counties for 2020 grants as well (Chippewa, Columbia, Eau Claire, Grant, Menominee, Rock, Sauk, and Vernon Counties).
- 3DEP data as well as WLIP-funded lidar data have been made available via the WisconsinView FTP site at <ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar>.
- The status of the statewide elevation effort can be viewed at www.sco.wisc.edu/data/elevationlidar.



This totals **\$2,575,396 of federal funding netted for lidar** in 2015-2019 applications coordinated by the GIO. Regarding a state elevation layer, planning efforts will revolve around working with the several Wisconsin counties who have older, non-QL2 standard lidar to work toward the national goal of finishing statewide QL2 coverage by 2023.

CULVERT MAPPING PROJECT

In an effort to organize a community of practice out of the mapping and policy communities of northern Wisconsin, the GIO worked with the Wisconsin Coastal Management Data Infrastructure project, a collaboration between the Wisconsin Coastal Management Program at the Department of Administration, the State Cartographer's Office, and the National Oceanic and Atmospheric Administration. To develop a coastal hazard community of practice with the end goal of improving coastal hazard planning and policy development, a culvert mapping workshop with 31 participants took place on October 3rd at Northland College in Ashland and a second workshop for 2020 is planned. The objectives of the project are to develop tools and methods to jointly collect and manage culvert information in order to assess vulnerability to extreme weather events and ultimately improve culvert maintenance workflows that enhance hazard resiliency.

WISCONSIN LAND INFORMATION COUNCIL ACTIVITIES

The Wisconsin Land Information Council (WLIC) serves in an advisory role to DOA on matters relating to the WLIP. The WLIC met three times during 2019, providing a channel for stakeholder organizations to voice their opinions on matters relating to land information records modernization.

FUNDING

Since the Program’s earliest days, from 1990 through July 1, 2019, Wisconsin counties have retained a total of \$197 million for land information activities and received a total of \$62 million in land information grants. In order to retain fees for land information and be eligible for WLIP grants, county land information offices must meet several **requirements for accountability and transparency**:

- Update the county’s land information plan at least every three years
- Meet with the county land information council to review expenditures, policies, and priorities of the land information office at least once per year
- Report on expenditure activities each year
- Submit detailed applications for WLIP grants
- Complete the annual WLIP survey
- Subscribe to DOA’s land information listserv
- Submit parcel data in the Searchable Format to DOA
- Submit other WLIP-funded GIS layers to DOA as requested

WLIP REVENUE AND GRANTS

As of January 1, 2015, counties are required to submit \$7 per document recorded to the state Land Information Fund. The \$7 contribution to the state Land Information Fund amounted to program revenue of \$6.1 million in FY2019, which is the source of funding for WLIP grants and administration of the program.

| ROD Document Recording Fee After Jan 1, 2015 | |
|--|--------------------------------------|
| \$15 | County Undesignated |
| \$ 8 | County Retained for Land Information |
| <u>\$ 7</u> | State Land Information Fund |
| \$30 | |

Because counties with modest real estate market activity do not generate substantial land information office revenue, WLIP Base Budget grants are provided in order to enable eligible counties to develop, maintain, and operate a basic land information system. Counties that retain less than \$100k in retained fees for land information are eligible for a Base Budget grant according to the formula at right.

WLIP Base Budget Grant Eligibility Formula

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

Example: County records 5,000 documents
 $\$100k - (5,000 \times \$8)$
 $\$100k - (\$40k)$
 $\$ 60k = \text{Base Budget grant eligibility}$

Base Budget grants totaled \$2.65 million statewide and were awarded to 50 counties in 2019. Counties are projected to retain fees and receive grants that combined total \$13.5 million for 2019.

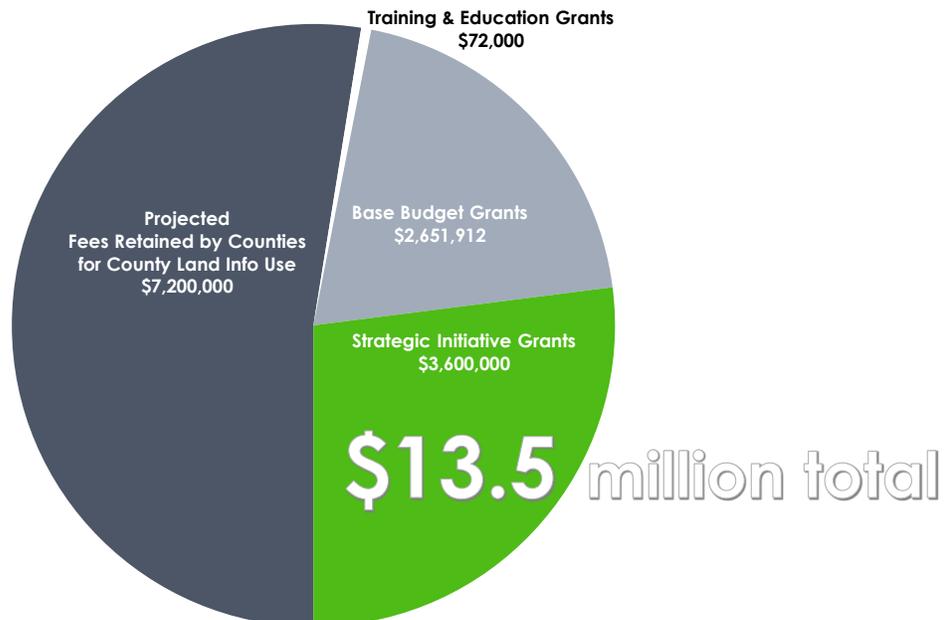


Figure 1. Projected 2019 County Land Information Funding – Fees Retained and WLIP Grants

EXPENDITURE OF RETAINED FEES AND GRANTS IN 2018

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 2018, counties retained fees and received grants for land information totaling \$13.4 million. The dollars spent on land information in 2018 were devoted to the areas depicted in Figure 2.

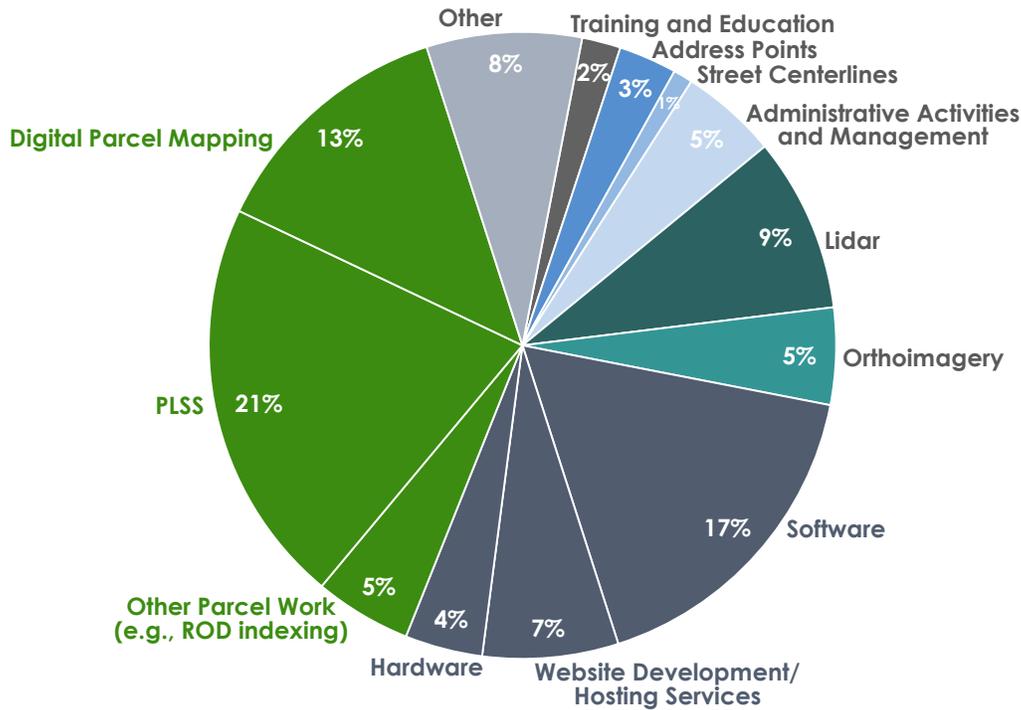


Figure 2. County 2018 Expenditures Reported

Roughly consistent with previous years, Figure 2 illustrates that a little over a 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.

About a quarter of the 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 orthoimagery, as well as the development of address points and street centerlines. A portion of funding goes to administrative activities and management, a category that is primarily associated with counties that have large land information office budgets and thus employ multiple staff persons.

FUTURE GRANT PROJECTIONS

Figure 3 shows grants already awarded and the projected Land Information Program budget for the next few years.

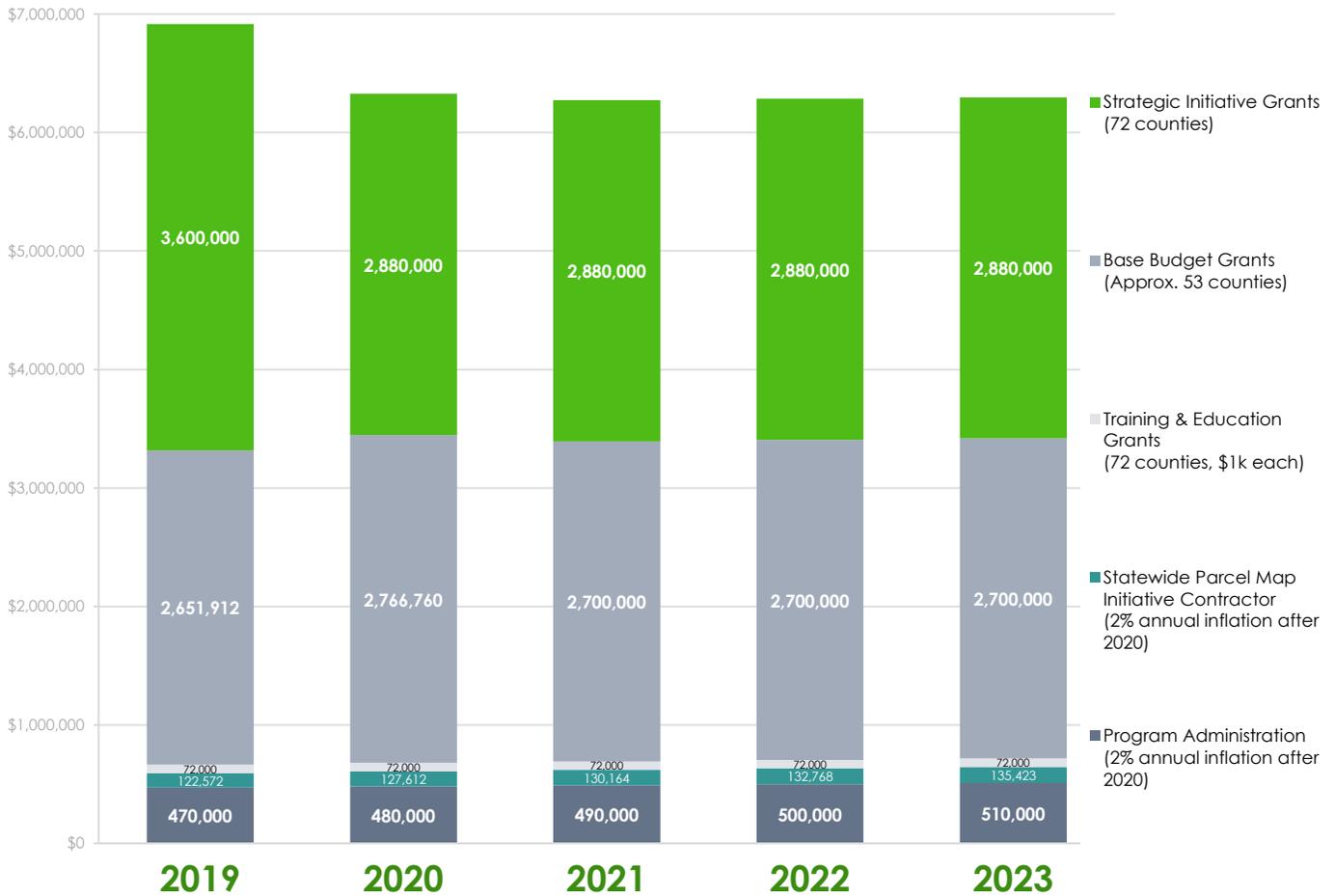


Figure 3. Projected Land Information Program Budget

If implemented as depicted in Figure 3, in 2020 all counties would receive at least \$141,000 in WLIP funding, made up of retained fees, Base Budget grants where applicable, a \$1k Training & Education grant, and a \$40k Strategic Initiative grant.

Projected WLIP Funding to Counties

- ≥ \$100k Base Budget grant + Retained fees
- \$ 1k Training & Education grant
- \$ 40k Strategic Initiative grant
- ≥ \$141k per county**

Such a scenario would mean that about **90% of Land Information Fund revenue will be invested in grants to counties** for local land records modernization.

DOA is mindful that utilization of Land Information Fund revenue must be consistent with statutory spending authority as described by state statutes 16.967, 20.505(1)(ub-ud), and schedule under s.20.005(3), and should be for well-defined activities with statewide benefits.