

MILWAUKEE COUNTY LAND INFORMATION COUNCIL
December 2017 Council Meeting

AGENDA

Date: December 5th 2017
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD, Commission Room
260 W Seeboth St.
Milwaukee, WI. 53204

- I. Roll Call
- II. Minutes from the Council meeting held June 6th, 2017
- III. 2017 LIO Workplan Update
- IV. 2018 Land Information Office Workplan
- V. 2018 Land Information Office Budget
- VI. 2018 Organizational Structure
- VII. **Reports\Activities**
 - 1. Educational Outreach
 - 2. 2018 Strategic Initiative Grant Request
 - 3. SEWRPC Datum Update Report
 - 4. Asset Management Update
 - 5. Raster Transformation Update
 - 6. 1910 Sanborn
- VIII. **New Business**
 - 1. Renew Appointments to Land Information Council – 2 Year
- IX. **Date, time, and place of next meeting**
- X. **Adjournment**

MILWAUKEE COUNTY LAND INFORMATION COUNCIL
Third Council Meeting Minutes

AGENDA

Date: June 6, 2017
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD, Commission Room
260 W Seeboth St.
Milwaukee, WI 53204

Members Present

Greg High	Director, Architecture, Engineering and Environmental Services Division
Rob Merry	Milwaukee County Surveyor
Emily Champagne	GIS Supervisor, Milwaukee Metropolitan Sewerage District
Dawn Neuy	Manager of EDAM Support, We Energies
Christine Westrich	Director, Office of Emergency Management
Jason Haas	Milwaukee County Supervisor
Kevin Bruhn	Manager - LIO, Milwaukee County DAS/ECD-LIO
Kathy Bach	GIS Analyst, Milwaukee County Register of Deeds, on behalf of John LaFave

Guest and Staff Present

LaCricia McSwain	Accountant, Milwaukee County DAS
Nicole Grams	GIS Analyst, Milwaukee County LIO
Pamela Booth	GIS Project Leader, City of Milwaukee

- I. Vice Chair High called the second meeting of the Land Information Council (LIC) to order at 9:00 a.m. Roll Call was taken by circulating an attendance signature sheet.
- II. Minutes from the 1st Council meeting held December 7th, 2016 were approved without amendment
- III. **2017 Land Information Office Workplan – Update**
 - A. Champagne move to approve, Neuy second
 - B. Workplan updates:
 1. High asks if vertical datum is a bigger issue than the horizontal. Merry arrives and answers that converting vertical NGVD29 -> NAVD88 is more straightforward/less costly due to Wisconsin Height Modernization
 2. Horizontal update: “selective approach” –take existing measurements/angles/distances as primary input into least-squares adjustment between two different control values (27 vs 83/2011). Observing 10% of corners will be basis of control, the rest will be mathematically computed. Expecting 3/10ths of a foot accuracy. On schedule for completion by the end of the summer. Racine, Kenosha completed.

3. Property records: Developed a process to bring Fidlar and RoD recordings datasets in automatically so that updates are made each quarter. First update using this method done in May.
4. Cadastral Mapping: took on updates for Milwaukee County as a whole. Up-to-date on this year, plus previous years.
5. Educational update: provided an EagleView/Pictometry training (one with a public-safety focus) in March. Next steps are to host a user group regarding datum changes and Milwaukee County map service changes
6. Asset management: CityWorks has made great progress implementing 7 departments so far, all ~500 buildings in the county have been mapped, going through inventory process at this time. 15,000 rooms in county; 25,000 points collected so far (roughly 25% of our assets). By-product of this is an Enterprise GIS system. Champagne asks how datum change will impact this; Bruhn answers we will need to transform the data just like all of our other datasets. Westrich asks if a call-in number could be considered for service issues; Bruhn says Facilities is considering this much like the IT Service Desk. Westrich says this would essentially form the beginning of a 311 (non-emergency) system like Chicago has. Showcased Parks pilot to have inter-Parks utilities mapped (Brown Deer Golf Course) based on historical documents. Haas would like to show at the Parks committee meetings.
7. Project Management software – haven't found the best solution to replace meeting packets
8. NG911 – low priority at this point. Champagne asks if relative priority within the workplan will not encourage financial support of the initiative, maintenance. LIO plans to support as needed, and OEM is going to have a full-time GIS person added that will focus on NG911. Champagne concerned that state requirements will be more strict than the counties' – how are the counties going to be able to respond? Westrich thinks this will encourage consolidation of municipalities PCAPs, CAD systems. Champagne thinks it is important for Milwaukee County to be a leader in this area since we're such a large portion of state.
9. Orthophoto flight 2018 – looking for consistent quality control measure
10. Datum Transformation – Transforming raster imagery (2010, 2013, 2015) and 2015 is 75% done
11. Sanborn Fire Insurance Maps – LIO has georeferenced highly detailed, historical, scanned images and created a seamless image. Anything before 1923 is considered public domain, about 75% done with 1910. Bach and Champagne have both used with great success for verifying historical addresses.
12. Parcel fabric – pilot not needed at this time – not enough value in changing the way we maintain parcels
13. OnBase – not ready to implement this at this time

IV. 2017 Land Information Office Budget – Update

- A. 2017 LIO YTD budget presented by McSwain. So far, on track. High mentions that the list of vendors is quite smaller than he is used to. Bruhn responds that many initiatives have been handled in-house; cheaper and more efficient with our current expertise.

V. 2018 Budget and Organizational Request

- A. Bruhn shows proposal for future organization of county LIO office, to be funded externally of recording fees, to be under the Facilities Management Division. Will be voted on in the first week of November. Westrich asks for clarification on, supports secondary funding mechanism which LIO is requesting in order to become a best in class GIS provider.

VI. Reports\Activities

- A. Report on 2016 SEWRPC Activities: Re-establishing 9 corners in Milwaukee with a DBE firm.
- B. 2017 USGS Grant award for 2015 LiDAR Data – SEWRPC: The 5 counties originally did not request assistance from USGS, but Rob was able to attain with under circumstances that LiDAR data is transformed to the new datum to meet USGS requirements. Rob currently transforming/reclassifying the data per USGS standards.
- C. 2016 Retained Fees Report: Bruhn/LIO has to submit to State by June 30 total dollars retained/received as well as projects accomplished on the work plan
- D. 2017 Strategic Grant Initiative: grant awarded by the state according to accomplished benchmarks. Submitted latest application
- E. Submission of Version 3 of Statewide Parcel Initiative: high level of detail that the LIO has to submit to the state by March 31. The state can penalize by taking recording fees if data standards are not met. LTSB serves statewide data, Champagne verifies that it is consistent and important to their business. Bach mentions that appraisers were unsure about GIS acres versus tax roll acres as per the data structure.
- F. 2020 Census Update: workshops/webinars to help prepare. Between Feb-Apr will have 120 days to validate an address list from Census. County also participating in Local Update of Census Addresses (LUCA)

- VII. Date, time, and place of next meeting:** Bruhn proposes after the budget cycle – Tuesday Dec 5. No objections. MMSD will again host.

VIII. Adjournment

LIO 2017 Workplan

TASK	STATUS	PREVIOUS % COMPLETE	CURRENT % COMPLETE	LAST UPDATE	ASSIGNED TO	START DATE	END DATE	BUDGET	SPENT TO DATE	REMAINING FUNDS	SOURCE
1.) Datum Modernization - Horizontal	Complete	20	100	12/5/17	LIO/SEWRPC	1/1/2017	6/30/2017	\$ 63,000	\$ 33,396	\$ 29,604	2016/17 Grant
2.) Data Currency	Complete	0	100	6/1/17	LIO	1/1/2017	6/1/2017	\$ -	\$ -	\$ -	
3.) GIS Training Program	Postponed	10	10	6/6/17	LIO	1/1/2017		\$ 5,000		\$ 5,000	Recording Fees
4.) Cityworks - Enterprise Asset Management	In Progress	60	90	12/5/17	LIO/IMSD	1/1/2017	6/30/2018	\$ 145,000	\$ 108,000	\$ 37,000	County Capital
5.) Project Reporting Software	Postponed	0	0	6/6/17	LIO	1/1/2017		\$ 5,000		\$ 5,000	Recording Fees
6.) Migration to Cloud Based GIS - OneNeck	In Progress	10	50	12/5/17	LIO/IMSD	3/1/2017	6/30/2018	\$ 20,000		\$ 20,000	Cross Charge with IMSD
7.) Emergency Management - NG911	In Progress	0	10	12/5/17	LIO-Emergency Mgmt	6/1/2017	12/31/2018			\$ -	
8.) Orthophoto RFP	Complete	0	100	6/6/17	LIO	7/1/2017	11/30/2017	\$ 150,000	\$ 137,286	\$ 12,714	Recording Fees
9.) Data Transformation to New Datum - Rasters	In Progress	30	85	12/5/17	LIO	8/1/2017	11/30/2017	\$ 37,600	\$ 449	\$ 37,151	2016/17 Grant
10.) Parcel Fabric Pilot	Postponed	0	0	6/6/17	LIO/Consultant	9/1/2017		\$ 20,000		\$ 20,000	Recording Fees
11.) Document Management System - OnBase	Postponed	0	0	6/6/17	LIO/IMSD	9/1/2017		\$ 5,000		\$ 5,000	Cross Charge with IMSD
12.) Sanbron Fire Map (1910) Georectification	Complete	50	100	12/5/17	LIO	5/1/2017	10/31/2017	\$ 12,000	\$ 4,817	\$ 7,183	Recording Fees

LIO 2018 Workplan

TASK	STATUS	PREVIOUS % COMPLETE	CURRENT % COMPLETE	LAST UPDATE	ASSIGNED TO	START DATE	END DATE	BUDGET	SPENT TO DATE	REMAINING FUNDS	SOURCE
1.) New website Implementation - Titan	Not Started	0	0		LIO/IMSD	1/1/2018	6/30/2018	\$ -		\$ -	
2.) Migration to Cloud Based GIS - One Neck	In Progress	0	50	12/5/17	LIO/IMSD	3/1/2017	6/30/2018	\$ 40,000	\$ -	\$ 40,000	Cross Charge with IMSD
3.) Cityworks - Enterprise Asset Management	In Progress	60	90	12/5/17	LIO/IMSD/FMD	1/1/2017	11/30/2018	\$ 45,500		\$ 45,500	County Capital
4.) Emergency Management - NG911	In Progress	10	10	12/5/17	LIO/EOM	1/1/2017	12/31/2018	\$ -		\$ -	
5.) Cadastral Improvements	Not Started	0	0		LIO	1/1/2018	12/31/2019	\$ 150,000		\$ 150,000	Recording Fees
6.) Local Update Census Address (LUCA)	Not Started	0	0		LIO	2/1/2018	5/31/2018	\$ -		\$ -	
7.) Milwaukee County Zoning Data Compilation	Not Started	0	0		LIO	3/1/2018	12/31/2018			\$ -	
8.) Non-Map GIS	Not Started	0	0		LIO	6/1/2018	12/31/2018	\$ -	\$ -	\$ -	
9.) Data Transformation to New Datum - Vectors	In Progress	0	30		LIO	1/1/2018	12/31/2018	\$ -	\$ -	\$ -	
10.) Datum Modernization - Vertical	Not Started	0	0		LIO/SEWRPC	6/1/2018	6/30/2019	\$ 50,000		\$ 50,000	2017 SI Grant
11.) 2018 Orthophotography Processing	Not Started	0	0		LIO	1/1/2018	6/30/2019	\$ 150,000	\$ 137,286	\$ 12,714	Recording Fees
12.) Sanbron Fire Map (1894) Georectification	Not Started	0	0		LIO	10/1/2017	3/31/2019	\$ 5,000	\$ -	\$ 5,000	Recording Fees
13.) Update Land Information Plan 2018 - 2021	Not Started	0	0		LIO	10/1/2018	12/31/2018	\$ -	\$ -	\$ -	Recording Fees

2018 Workplan Narratives

1. New Website Implementation - Titan

A new County website will be implemented in the beginning of 2018. The LIO will take this opportunity to redesign the Land Information Office page. The intent is to organize the content to make it easier to find data and to consolidate the multiple data download sites into one. As open data efforts continued to grow, the number of entry points has also. The County has released the framework for the overall website. The LIO will create its pages to reflect the updated design. The Land Information Office will have an entry point on the main page of the new County website. The will give the LIO greater exposure for public access.

<http://creative.northwoodsoft.com/milwaukeecounty/MilwaukeeCountyPublicFinal.html>

2. Migration to Cloud Based GIS – One Neck

Milwaukee County is currently migrating the entire County-wide IT infrastructure to an offsite location. As part of this migration, the LIO has some GIS dependencies that will need to be upgraded, i.e. website coding and server development. It is anticipated that there will be some additional charges for items like storage fees, processing servers, load-balancing, and redundancy, etc.

3. Cityworks – Enterprise Asset Management

A Milwaukee County-wide effort is underway to manage all assets from County-owned buildings and land to the internal assets in the House of Correction, Facilities, Parks, Fleet, Transit, Economic Development, and the Zoo. In a supporting role to the County-wide implementation of Cityworks, the Land Information Office is creating the GIS inventory and structure for the asset management program to utilize. Current funding for staff time to support this effort is secured from the capital project that is supporting the overall program through the County's IMSD.

4. Emergency Management – Next Generation 911 (NG911)

The need for a reliable NG911 GIS dataset is a growing necessity that will support the public-safety answering points, PSAP, and other emergency services. The current project is to stay informed and participate in meetings and learning sessions as these efforts move into more of a task oriented process. This initiative is very early in the planning stages of what is needed or direction. The LIO has supplied OEM an updated dataset of valid County address to support the CAD software, ProPhoenix. Scope of work to support NG911 may be identified by late 2017.

5. Cadastral Improvements

In 2017, the LIO started to perform the cadastral updates for the entire County, including the City of Milwaukee. The LIO took this time to gauge the amount of additional work that is needed to maintain the cadastral dataset. For 2018, the LIO will make improvements to this data. The goal for this project is to make the data consistent throughout the County. The improvements include adding documents to the CSM's, Subdivisions, and Condos that are missing; verifying line work and attributes; cleaning annotation; adding original plat and cartographic data to generalized lands; research errors in platted lands and producing a Countywide plat\tax book for publication.

A pilot was conducted to gauge the time and resources that are needed to complete the needed improvements. Five quarter sections were completed for the following cleanup: annotation, line work and platted polygons.

- Annotation: Identify problems with annotation, missing data and layout
- Line work: identify problems with parcel lines, cartographic lines, platted lines etc.
- Platted Polygons: identify problems with polygon features

Based on the pilot, we found that general edits and cleanup would take about 8 hours per quarter section. There are approximately 480 quarter sections for a total of almost 4,000 hours to complete. This will be the first phase of a 2 phase project. The second phase will be to complete the identified errors and discrepancies from the first phase of cleanup. This is estimated to take about the same amount of time to complete. This cleanup will be part of the duties for the newly created GIS technician in the Land Information Office.

The final product will include a consistent cadastral map product for the entirety of Milwaukee County. A printable and downloadable plat index map book will be developed for the City of Milwaukee. This will be consistent with the product for the suburban municipalities.

6. Local Update Census Address (LUCA)

Milwaukee County is participating in the LUCA program for the 2020 census as we did for the 2010 census. The LIO will validate the address list provided by the census department against the LIO maintained address list. Any discrepancies will be sent to the census for possible additions or subtractions. The LIO will have 120 days from delivery of the census data to complete the analysis. The LIO will utilize temporary staff to complete this project.

7. Milwaukee County Zoning Data

The Land Information Office will consolidate the parcel zoning data from the municipalities within Milwaukee County. The zoning codes and descriptions vary from municipality and will need to be accounted for to bring this information together. An initial inventory will be done to evaluate the level of effort that it will take to aggregate and normalize the various datasets.

8. Non-Map GIS

The need for a light weight application to retrieve property information is apparent. The LIO will develop a simple search page that will retrieve all information about a property without using a map. This text based search will deliver a report with property information and links to property documents.

9. Data Transformation to New Datum – Vectors

This project is to move or migrate the GIS Vector data to the new datum. The Land Information Office currently has 600+ vector datasets. The LIO will host the transformed datasets in the new datum and reproject the services in the old and new datums until municipalities and other vendors have time to migrate to the new datasets.

“Data Transformation” is in support of the Land Information Office’s role in coordinating projects between the County and local governments, as described in Wis. Statute [59.72 \(3\)\(a\)](#).

10. Datum Modernization – Vertical

This project to convert the vertical survey control network from a National Geodetic Vertical Datum (NGVD 29) to the North American Vertical Datum of 1988 (NAVD 88). The survey monuments are the positions that all property (parcel) changes are controlled from. The vertical control will be completed as a 7 County, (SEWRPC area), after the horizontal is completed. SEWRPC will be performing the work in house and will supply Milwaukee County with updated data and documentation of the work performed. It is estimate that the contract for this work will be ready by June of 2018.

A datum is the position on the earth that measurements are taken from in surveying. It is important that these measurements are highly accurate to limit the amount of error that surveyors experience when they record these measurements that affect property ownership.

All published datum migration documents can be found at: <http://county.milwaukee.gov/mclio/about/Datum-Modernization.htm>

“Datum Modernization” is in support of the Land Information Office’s Land Records Modernization plan as required by Wis. Statute [59.72 \(3\)\(b\)](#). This project is also required as part of the [2016 Wisconsin Land Information Program Strategic Initiative – Benchmark 4](#) (Completion and Integration of the Public Survey System, PLSS).

11. 2018 Aerial Photography Processing

The LIO is contracting with Eagleview\Pictometry for a 2018 imagery capture. The 3” resolution will be the same as the 2015 flight. LIO was also able to negotiate the same cost as the 2015 flight along with no additional annual license charge for 3 years.

The LIO has been granted a waiver to utilize the annual Strategic Initiative (SI) grant for the 2018 aerial imagery capture. The LIO will submit the 2018 SI grant request to include the imagery capture.

The coordination for the 2020 regional flight has also begun. The LIO is planning on acquiring a 2020 or 2021 imagery capture.

12. 1894 Sanborn Fire Insurance Map Georectification

The LIO will continue to build out the collection of historical Sanborn fire maps. The georectification of the 1910 maps were received very positively. The LIO has one more set of high resolution scanned maps. This will be a lower priority but will be initiated when time and resources are available.

13. Land Information Plan Update 2019-2021

The LIO must update the 3 year Land Information Plan. The last plan was for years 2016-2018. This plan must be drafted and accepted by the Land Information Council by March of 2019. The goal is to have this document updated and voted upon for the December 2018 LIC meeting. This mandated plan includes the current state of the Land Information Office as well as the goals and initiatives for the next 3 years.

The current plan is available on the Wisconsin Department of Administration Intergovernmental website at:

ftp://doafpt1380.wi.gov/doadocs/WLIP/CountyLandInfoPlans/Milwaukee_Co_Land_Info_Plan_2016_Final.pdf

According to s.59.72 (5) (b) (3), Wis. Stats., and Adm. Rule 47.06(3), county must spend Wisconsin Land Information Program funding (both fees retained and grants received) consistent with its county land information plan.

2017 YTD Fiscal Report - LIO - As of October 31, 2017

2017 LIO YTD

		YTD	YE Projected
REVENUES - 2017 YTD			
2017 Record & Filing Fees		\$711,600	\$854,388.16
2016 Encumbrances Carried Over		\$63,374	\$63,374
2017 Grants		\$51,000	\$51,000
2017 Misc Revenue		\$0	\$0
	TOTAL	<u>\$825,974</u>	<u>\$968,762</u>
OPERATING EXPENSES - 2017 YTD			
2017 Actual Expenditures		\$456,407	\$547,988.50
2017 Encumbrances		\$46,867	\$46,867
2017 ROD GIS Analyst		\$53,227	\$65,666
	TOTAL	<u>\$556,501</u>	<u>\$660,521</u>
2017 Est. Net Income (Loss)		<u>\$269,473</u>	<u>\$308,241</u>

Fund Balance:		YTD	YE Projected
2016 Year-End Fund Balance*		\$1,464,236	\$1,464,236
2017 Operating Revenues (Shown Above)	+	\$825,974	\$968,762
2017 Exp + Enc for \$8 Fee Projects	-	\$556,501	\$660,521
2017 Est Fund Balance**		\$1,733,709	\$1,772,477
2016 Reserve Revenue @ 10%		\$0	\$0
2017 Est Fund Balance YTD - Unrestricted		\$1,733,709	\$1,772,477
2017 Est Fund Balance YTD - Restricted		\$0	(\$0)

*2016 YE Fund Balance represents the current amount in reserve as of 2016 YE close.

**2017 Est YTD Fund Balance represents the 2016 YE reserve netted against the actual 2016 expenditures and revenues. This figure will change throughout the year as additional 2017 expenditures and revenues are realized.

NOTE: 2017 expenditures, revenues, and resulting fund balance are year-to-date ONLY. The figures represented in this report are not intended to project a year-end balance for the LIO budget. The purpose of the report is to provide committee members a "financial snapshot" of LIO activities within a specific point in time.

2017 YTD Fiscal Report - LIO (\$8) - as of 10/31/2017

Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	Amount Encumbered	Amount Paid 2017 YTD	Canceled Encumbrance	Total Amount Paid (Encumbrances + Actual)	Remaining Unpaid Balance
SOUTHEASTERN WI REGIONAL	County Surveyor	82,916.00	-	-	82,916.00	-	82,916.00	-
	<u>2017 Authorized Projects</u>							
GRW	2016 Planimetric Update Project: Consulting	17,424.00	-	-	17,416.40	(7.60)	17,416.40	(0.00)
SEWRPC	Datum Modernization	33,396.00	-	33,396.00	-	-	33,396.00	-
	TOTAL	\$ 133,736.00	\$ -	\$ 33,396.00	\$ 100,332.40	\$ (7.60)	\$ 133,728.40	\$ (0.00)

Milwaukee County - Land Information Office Budget						
	2014	2015	2016	2017	2018	2017-2018
	ACTUAL	ACTUAL	ACTUAL	ADOPTED	ADOPTED	
	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	VARIANCE
REVENUES						
Retained Fees-\$8 Portion	744,858	840,531	864,219	840,000	840,000	0
Other Misc Revenue	2,449	130	2,300	1,000		(1,000)
State Grants			26,000	51,000	51,000	0
Total Revenues	747,307	840,661	892,519	892,000	891,000	(1,000)
EXPENSES						
Personal Services						
Direct Labor Charged	159,376	138,946	165,057			0
Offtime Charged	30,823	26,872	31,922			0
Fringe Benefits Charged	176,382	153,772	182,668			0
Indirect Overhead Charged		60				0
Direct Labor Applied	(159,376)	(137,848)	(165,057)			0
Offtime Applied	(30,823)	(26,660)	(31,922)			0
Fringe Benefits Applied	(176,382)	(152,557)	(182,668)			0
Potential Sal Adj-Budget						0
Salaries-Wages Budget	188,622	165,476	192,364	192,946	256,612	63,666
Overtime	100	154				0
Social Security Taxes	13,694	12,074	14,003	14,748	19,628	4,880
Adjustment -Social Security Taxes						0
Unemployment Compensation						0
Employee Merit Awards						0
Tool Allowance	29					0
Employee Health Care	42,498	29,642	28,443	35,059	71,335	36,276
Employee Pension	18,850	21,534	17,281	28,061	33,446	5,385
Legacy Healthcare	29,641	41,174	38,199	36,140	41,938	5,798
Legacy Pension	25,300	41,471	54,516	53,669	52,652	(1,017)
Adjustment - Legacy Healthcare						0
Personal Services	318,733	314,110	344,806	360,623	475,611	114,988
Commodities/Services						
Membership Dues		52	350	200	200	0
Contract Pers Serv-Short	28,222	4,050		5,000	5,000	0
Postage	16	38	9	100	100	0
Prof. Serv-Recurring Oper	147,554	512,341	174,696	176,000	82,916	(93,084)
Prof. Serv.-Nonrecur Oper	87,348	134,547	167,908	160,301	260,476	100,175
Internet Expenses	374	99		1,000	1,000	0
Printing and Stationery	288	373	765	1,000	1,000	0
R/M Computer Equip	46,669					0
Auto Allowance			355	500	500	0
Meetings Other Auth Travl	6,236	7,549	4,347	6,000	6,000	0
Sundry Services	194	851	480			0
Office Supplies		1,289	97	1,130	1,130	0
Computer Software	3,180					0
DP Supplies	152					0
Computer Equip-New- (cap)			(862)			0
Commodities/Services	320,233	661,189	348,145	351,231	358,322	7,091
Crosscharges - Service Charges						
Technical Support & Infrastructure	2,571	2,938	3,913	3,426	3,642	216
Prof Serv Div Services			96,851	87,523		(87,523)
IT Security					1,063	1,063
Risk Management Services	314	209	560	422	337	(85)
Prof. Serv. -Data Process Charges		22,942		20,000		(20,000)
DP Software Lease/Lcn Charges			49,224	45,700		(45,700)
DAS Services	8,472					0
R/M Computer Equip Charges		14,425				0
HOC Graphics		75		75		(75)

Milwaukee County - Land Information Office Budget						
	2014	2015	2016	2017	2018	2017-2018
	ACTUAL	ACTUAL	ACTUAL	ADOPTED	ADOPTED	
	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	VARIANCE
Administrative Services #6					5,025	5,025
Application Chgs - Network	1,903	2,491	3,914	7,754	9,792	2,038
HRIS Allocation	1,481	1,813	1,436	1,484		(1,484)
Worker Comp Med and WC Pay	1,042	1,028	825	1,071	1,876	805
Bldg Space Rental Alloc					19,242	19,242
Insurance Services	264	404	111	377	389	12
Worker's Compensation Adm	125	135				0
Central Service Allocation	2,064	8,865	8,735	8,441	13,089	4,648
CH Complex Space Rental	50,647					0
IMSD Central Purchases			4,921	2,000		(2,000)
PC Charges	1,698	1,248	2,620	1,873	2,612	739
Crosscharges - Service Charges	70,581	56,573	173,110	180,146	57,067	(123,079)
						0
Total Expenditures	709,547	1,031,872	866,060	892,000	891,000	(1,000)
Reserve Contribution	(37,760)	191,211	(26,459)	0	0	(0)

Facilities Management Division Land Information Office

5700-5761
County GIS

Manager

5700-5760
LIO

GIS
Technician
(2018 County
Capital)

Sr GIS
Analyst

GIS
Analyst

GIS Tech

GIS Intern

GIS
Analyst
(ROD)

Surveyor
(SEWRPC
Contract)





**DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF ECONOMIC DEVELOPMENT
MILWAUKEE COUNTY LAND INFORMATION OFFICE**

633 West Wisconsin Avenue, Suite 903, Milwaukee, WI 53203 (414) 278-3927

MEMORANDUM

TO: Land Information Council
FROM: Kevin Bruhn, Land Information Officer
DATE: November 30, 2017
SUBJECT: Educational Outreach

BACKGROUND

The Land Information Office objectives include efforts develop and promote the Land Information Office products and services to local and regional partners and participants. The following describes LIO Staff activities under this objective for the preceding period:

ACTIVITIES THIS PERIOD – 6/17 – 12/17

1. Meetings and Presentations
 - [MMGUG 9/26/17 Presentations](#) included:
 - LIO Update
 - SEWRPC Datum migration methodology, critical phases and results
 - Pictometry new products and availability
 - Sanborn project update
 - Presented '*Georectified: The 1910 Milwaukee Sanborn Atlas*' at esri Wisconsin Users Group 10/27/17
 - Presented '*Georectified: The 1910 Milwaukee Sanborn Atlas*' at GIS Day located at the University of Wisconsin Milwaukee 11/17/17

NEXT

- WLIA annual conference presentations 3/7/2018:
 - '*Georectified: The 1910 Milwaukee Sanborn Atlas*'
- Continue to work with member participants to further their GIS goals



Wisconsin Land Information Program 2018 Base Budget, Training & Education, and Strategic Initiative Grant Application

Complete this application form in order to receive 2018 Wisconsin Land Information Program (WLIP) grants, pursuant to Wisconsin Statute Section 16.967(7) and Wisconsin Administrative Code, Chapter Adm. 47.

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. Each county is eligible for a \$1,000 grant.

Strategic Initiative Grants are for the purposes of addressing statutory directives to create a statewide digital parcel map and to post certain parcel information online in a standard Searchable Format. Strategic Initiative grant funding is to be prioritized to achieve “benchmarks” for parcel quality and completeness. Each county is eligible for \$50,000 in 2018 Strategic Initiative grant funding.

There are four benchmarks for parcel data:

- Benchmark 1 – Parcel and Zoning Data Submission
- Benchmark 2 – Extended Parcel Attribute Set Submission
- Benchmark 3 – Completion of County Parcel Fabric
- Benchmark 4 – Completion and Integration of PLSS

Counties must prioritize their Strategic Initiative grant activities toward achieving the benchmarks in numerical order. The benchmarks are designed to complement and dovetail with the county land information plan. A county may amend a plan with updates or revisions as appropriate. If amended, a copy of the amended plan and record of land information council approval should be sent to the WLIP.

Base Budget Grants enable a county to develop, maintain, and operate a basic land information system and may be used for the implementation of the county’s land information plan. Base Budget grants are only available to those counties with retained register of deeds document recording fees of less than \$100,000 in FY 2017 (July 1, 2016–June 30, 2017). See the grant eligibility table on page 7 to confirm your county’s eligibility.

Applications should be submitted by December 31, 2017 or earlier. Please Submit the application by emailing a digital PDF form that has been electronically filled-out (*not* a scanned image) to WLIP@wisconsin.gov. For questions, please contact the WLIP Grant Administrator at peter.herreid@wisconsin.gov or (608) 267-3369.

Grant application released	August 31, 2017
Grant application deadline	December 31, 2017
Grant activities eligible for reimbursement	Beginning January 1, 2018
Training & Education grants distributed	By January 31, 2018
Base Budget funds distributed	By March 31, 2018
First 50% of Strategic Initiative grant distributed (upon successful data submittal for V4)	By May 31, 2018
Second 50% of Strategic Initiative grant distributed	Upon project completion

How to Fill Out and Submit This Form:

- **DOWNLOAD THIS DOCUMENT & "FILE ► SAVE AS"** to save a local copy.
When saving, add your county name to the end, e.g.,
2018_WLIP_Grant_Application_StCroix.pdf
- **FILL OUT THE APPLICATION** – use Adobe Reader or Acrobat to fill in the application form electronically, by typing data into it. Do *not* fill out the form by hand. The instructions are numbered according to the question numbers on the application form and hyperlink to each corresponding question.
- **"FILE ► SAVE"** – to save as you go
- **ATTACH PAGES** – Attach addendum pages if applicable, or email as separate files
- **SUBMIT VIA EMAIL (WITH COUNTY NAME)** – Email a completed digital PDF form that has been electronically filled-out (*not* a scanned image) to WLIP@wisconsin.gov by December 31, 2017. Email subject line should include the name of your county, e.g.,
Subject: 2018 WLIP Grant Application – Sheboygan

Training & Education Grant Application Instructions

- TE_#1** County submitted an adopted 2016 land information plan to DOA? All counties updated their county land information plan in 2015-2016 to meet s. 59.72(3)(b). Wisconsin Administrative Code, Chapter Adm. 47.06(3) requires that projects must be consistent with an approved county land information plan (also referred to as a county-wide land records modernization plan).
- TE_#2** Enter date of last county land information council meeting. According to s. 59.72(3m)(b), the county land information council shall review the priorities, needs, policies, and expenditures of a land information office and advise the county on matters affecting the land information office. The land information council must have met within the last 12 months for the county to be eligible for a WLIP grant.
- TE_#3** LIO subscribed to the Land Information Officer's listserv? Applicants must subscribe to the WLIP's e-mail listserv, doa-landinfo@lists.wi.gov.
- TE_#4** County's Retained Fee/Grant Report for 2016 submitted? According to s. 59.72(2)(b), a county must submit an annual report to DOA on WLIP retained fee and grant spending. All counties submitted a *Retained Fee/Grant Report* for 2016.
- TE_#5** Training & Education Award Eligible. The amount of \$1,000 is available to each county for 2018 Training & Education grants.
- TE_#6** Training & Education Award Amount Requested. Enter the amount requested (up to \$1,000).
- TE_#7** Brief Description of Intended Expenditures for Training & Education Grant. Provide information on plans to utilize the Training & Education grant funding. Aim for less than 1,800 characters. The font size will shrink as you type, becoming smaller to accommodate more text.
- TE_#8** Statement and Authorization of Land Information Officer. Land information officer name (typed) and date are required. Do not sign and scan the form. Handwritten signatures are *not* required. Submit the application by emailing a digital PDF form that has been electronically filled-out (*not* a scanned image) to WLIP@wisconsin.gov.

Strategic Initiative Grant Application Instructions

- SI_#1** Strategic Initiative Award Eligible. The amount of \$50,000 is available to each county for 2018 Strategic Initiative grants.
- SI_#2** Strategic Initiative Award Amount Requested. Enter the amount requested (up to \$50,000).
- SI_#3** Will the county use 2018 Strategic Initiative Funding to work toward Benchmark 1 and 2 in the Searchable Format in the first quarter of 2018? Indicate whether the county will use grant funding to work toward Benchmark 1 and Benchmark 2 in the Searchable Format. The county must meet the Searchable Format standard for the Version 4 Statewide Parcel Map Database Project (V4) data submittal, using grant funds to do so if necessary. V4 data submittals will be due March 31, 2018
- Searchable Format.** In the Searchable Format, the county data submittal is ready for immediate aggregation into the statewide parcel layer. The county performs all data standardization and clean-up before submitting data. Data exactly matches the Searchable Format standard. The Searchable Format is defined in detail in the *V3 Submission Documentation*. Note that the submission documentation may be tweaked for V4, with an effort to build upon and be consistent with the *V3 Submission Documentation*.

Strategic Initiative Grant Application Instructions (Continued)

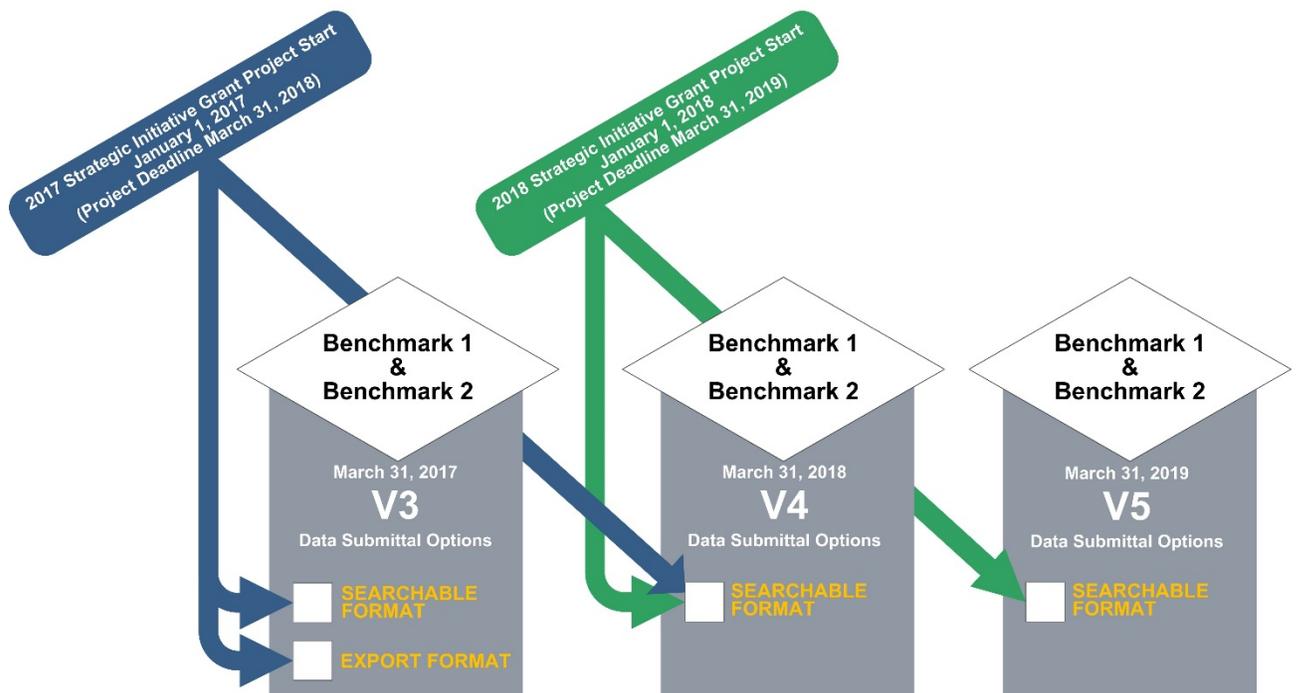


Figure 1. Strategic Initiative grant project timeline, where projects can span a calendar year plus one quarter

SI_#4 Will the county use 2018 Strategic Initiative Funding to work toward and/or maintain the Searchable Format for V5 in the first quarter of 2019? Figure 1 illustrates the timeline for Strategic Initiative projects. 2018 projects have a completion deadline of March 31, 2019—the projected V5 data submission deadline. For V5, the Searchable Format will be the required format for data submittal. Indicate whether the county will use 2018 Strategic Initiative grant funding to work toward and/or maintain the Searchable Format for V5 by March 31, 2019.

SI_#5 Benchmark 1 and 2 Land Information Plan Citations. Provide only if you answered “Yes” to SI_#3 and/or SI_#4 above. List the corresponding citation (section and page numbers) from the county’s land information plan for the *Project Plan to Achieve the Searchable Format for Benchmarks 1 & 2*.

LIO certification upon data submission. Land information officers will be required to certify that data meets the standards for Benchmark 1 and 2 upon submission of data for V4. Counties will certify their own level of attribute completeness relative to an *element occurrence standard*. This means that if an element (such as a property address, a total assessed value, total property tax value, etc.) actually occurs for a given parcel, then this element should be included in the submitted dataset. This also means that there may be justifiable omissions from the submitted dataset. Examples might be missing tax data for tax exempt properties, no address when no structure is present on a property, etc. Data elements must be included only if they actually occur.

SI_#6 Benchmark 1 and 2 Project Activities and Costs. For Benchmark 1, provide costs for the project to be paid with WLIP Strategic Initiative grant funds. Itemize costs where possible. Costs may be estimates determined through quotes received from vendors for specific activities. However, please do *not* include vendor estimates as attachments with the completed application you submit. Type a concise description for each itemized cost, beginning with row1, column1. Enter dollar amount in column2 of row1. Then proceed to row2. The font size will shrink as you type, becoming smaller to accommodate more text. Aim for less than 40 characters per line.

Note on staff funding. The county may either utilize the expertise of existing county staff or hire contractors from the private sector as part of Strategic Initiative grant expenses. As long as county staff activities funded by the Strategic Initiative grant are for the purposes specified in the grant application, it is acceptable to use grant funds to reimburse county or municipal staff. However, *staff time must be broken down* into specific project activities under one or more Strategic Initiative benchmark.

SI_#7 Benchmark 1 and 2 Total Costs. Maximum value is \$50,000. The “Total Costs” boxes are self-adding, which means they calculate the total automatically from the Itemized Costs boxes. Include *only* Strategic Initiative funds in total costs, which may not exceed \$50,000 on this application form.

- SI_#8** Will County perform all of the data cleanup and standardization tasks described in the *V3 Observation Report* in order to meet the Searchable Format standard before submitting data for the **V4** call for data by March 31, 2018? Indicate whether the county will perform the tasks described in the *V3 Observation Report* (which describes the steps that must be taken in order to meet the Searchable Format standard) before submitting data for V4 by March 31, 2018. Counties must meet the Searchable Format standard for the V4 data submittal and into the foreseeable future, using grant funds to do so if necessary. See SI_#3 above.
- SI_#9** If you answered “No” to SI_#8 above, briefly describe how you will address the deficiencies identified in the *V3 Observation Report* in order to meet the Searchable Format standard, explain why the deficiencies cannot be rectified by the V4 call for data, and how they will be addressed. Aim for less than 1,800 characters. The font size will shrink as you type more text.
- SI_#10** Is your county’s digital parcel fabric complete (including incorporated areas)? Give estimated year of completion if applicable. Note that there may exist within some county certain areas that do not require detailed parcel mapping, such as state forests. These areas can be treated as a single large parcel as long as they are designated as such in the submitted dataset (however, this exception does *not* apply to municipalities).
- SI_#11** Will county use 2018 Strategic Initiative funding to work toward Benchmark 3? If the county’s digital parcel fabric is incomplete, indicate whether county will use Strategic Initiative grant funds to work toward completion.
- SI_#12** **Benchmark 3 Land Information Plan Citations.** If a county has an incomplete digital parcel fabric, list the corresponding citation (section and page numbers) from the county’s land information plan for the *Project Plan for Parcel Completion*.
- PLSS first approach.** Some counties have a plan in place to complete PLSS remonumentation before completing the parcel fabric in a given area. Counties have the option of adopting a “PLSS first approach,” in which PLSS should be prioritized for areas not covered by the parcel fabric. If selecting a PLSS first approach, note this in the *Project Plan for PLSS*, described in SI_#18 below.
- SI_#13** **Benchmark 3 Project Activities and Costs.** For Benchmark 3, provide costs for the project to be paid with WLIP Strategic Initiative grant funds. Itemize costs where possible. Costs may be estimates determined through quotes received from vendors for specific activities. However, please do *not* include vendor estimates as attachments with the completed application you submit.
- SI_#14** **Benchmark 3 Total Costs.** Maximum value is \$50,000. The “Total Costs” boxes are self-adding, which means they calculate the total automatically from the Itemized Costs boxes. Include only Strategic Initiative funds in total costs, which may not exceed \$50,000 on this application form.
- SI_#15** Is your county’s PLSS network complete and integrated into digital parcel layer? This includes: rediscovery of PLSS corner monuments and physical remonumentation of corners without existing monuments; establishing accurate coordinates on these corners based on a modern datum; posting tie sheets online for these corners; and integrating all county PLSS corners into the county parcel fabric. Give estimated year of completion (YYYY) if applicable.
- SI_#16** **Benchmark 4 waiver request to acquire lidar and/or aerial imagery.** Strategic Initiative funds for 2018 are intended to be used for the purposes of parcel dataset development. However, it may be possible to use Strategic Initiative funds for LiDAR and/or aerial imagery, subject to the following conditions: First, a county would need to use the funds to meet parcel Benchmarks 1-3. Then, if a county has remaining Strategic Initiative grant funding, it may expend it on LiDAR and/or aerial imagery *before* Benchmark 4 (Completion and Integration of PLSS).
- SI_#17** Will county use 2018 Strategic Initiative funding to work toward Benchmark 4 (Completion and Integration of PLSS)? Indicate whether Strategic Initiative grant funds will be used to make progress toward Benchmark 4.
- PLSS data submission.** All counties may be required to submit a digital copy of all county PLSS corner coordinates values for inclusion in the State Cartographer’s Office online PLSSFinder, and any other DOA-sanctioned statewide effort to collect PLSS datasets. New or updated corners must be tagged with their appropriate accuracy class (survey-grade, sub-meter, or approximate). This submission must include an attribute flag, timestamp, or other mechanism in the data to identify PLSS records that have been added or modified since the last submission.
- SI_#18** **Benchmark 4 Land Information Plan Citations.** If a county has not achieved satisfactory completion and integration of its PLSS framework, list the corresponding citation (section and page numbers) from the county’s land information plan for the *Project Plan for PLSS*.

Project Plan for PLSS. If the county has not achieved a complete and integrated PLSS framework, the county must have a project *within the county land information plan* that outlines:

1. Planned approach for remonumenting, rediscovering, and establishing survey-grade coordinates for PLSS corners, and integrating corners 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. In addition, counties may, but are not required to, use Strategic Initiative grant funds to upgrade their PLSS from a NAD27 coordinate system to a more current datum.
2. Current status of PLSS data in the county including a tally of the total number of corners, their remonumentation status, and their coordinate status (accuracy class) if known. Accuracy classes include survey-grade, sub-meter, and approximate.
 - **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.
3. Goals for the funding period, including the number of corners to be remonumented and/or rediscovered, the number to have new coordinates established, the accuracy class for these new coordinates, and the way in which these points will be integrated into the parcel fabric.
4. Documentation for any missing corner data as discussed below.
5. Efforts to collaborate with neighboring counties.

SI_#19 Benchmark 4 Project Activities and Costs. For Benchmark 4, provide costs for the project to be paid with WLIP Strategic Initiative grant funds. Itemize costs where possible. Costs may be estimates determined through quotes received from vendors for specific activities. However, please do *not* include vendor estimates as attachments with the completed application you submit.

SI_#20 Benchmark 4 Total Costs. Maximum value is \$50,000. The “Total Costs” boxes are self-adding, which means they calculate the total automatically from the Itemized Costs boxes. Include only Strategic Initiative funds in total costs, which may not exceed \$50,000 on this application form.

SI_#21 Other County-Level Strategic Initiative Projects. Applies only to situations in which a county has already met Benchmarks 1, 2, 3, and 4 (or 1-3 with LiDAR/aerial imagery waiver). Specifically, this entails:

- Benchmarks 1 and 2 – Parcel and zoning data with extended parcel attributes will be submitted by March 31, 2018 for the V4 call for data exactly matching the Searchable Format standard
- Benchmark 3 – The county’s digital parcel fabric is complete
- Benchmark 4 – PLSS framework has reached a level of satisfactory completion and integration, which is documented in the “PLSS” Foundational Element layer status section of the county land information plan (with the exception of LiDAR/aerial imagery waiver counties described in SI_#16)

County-Level Strategic Initiative project plan(s). If a county has already met Benchmarks 1, 2, 3, and 4 (or 1-3 with LiDAR/aerial imagery waiver), it will still remain eligible for \$50k in 2018 Strategic Initiative grant funding. Such a county may use the Strategic Initiative funding for a project as listed *within the county land information plan*. For example, another Strategic Initiative project might be to complete or comprehensively update another Foundational Element layer, such as LiDAR, orthoimagery, address points, street centerlines, land use, zoning, or administrative boundaries. For the expanded list of Foundational Elements, see the *2015 Uniform Instructions for Preparing County Land Information Plans*.

Strategic Initiative funding exclusions. Strategic Initiative grant funding may *not* be used for renewing annual software vendor contracts, ongoing operational costs, or maintenance of existing layers. (However, WLIP Base Budget grant funds may be used for these expenses, as well as retained fees.)

SI_#22 Estimated amount of \$50,000 to be left after applying any costs to achieve Benchmarks 1-4 (or 1-3 for LiDAR/aerial imagery waiver counties). Enter zero or “More than zero” and dollar amount.

Addendum. If “More than zero” is selected, use the *2018 WLIP Grant Application Addendum* to document the projects the county will use the Strategic Initiative funding for. You may attach as many grant application addendum pages as necessary. Addendum pages are available at www.doa.state.wi.us/WLIP. LiDAR/aerial imagery waiver counties should also use the addendum to document the LiDAR/aerial imagery project you will use the Strategic Initiative funding for. Others should leave blank if not applicable.

SI_#23 TOTAL ALL STRATEGIC INITIATIVE GRANT PROJECTS. Total should *not* exceed \$50,000—the Strategic Initiative Award Eligible amount. Include costs for addendum projects in Strategic Initiative total if applicable. If the county anticipates spending more than \$50,000 of Strategic Initiative funds on a project, this can be noted elsewhere, such as the county land information plan.

SI_#24 Statement and Authorization of Land Information Officer. LIO name (typed) and date are required. Do *not* sign and scan the form. Handwritten signatures are *not* required. Submit the application by emailing a digital PDF form that has been electronically filled-out (*not* a scanned image) to WLIP@wisconsin.gov.

Base Budget Grant Application Instructions

- BB_#1** **Base Budget Award Eligible.** The amount your county is eligible for 2018 Base Budget grant. Refer to the grant eligibility table on page 7 for amount. If your county is not eligible, *leave blank* the Base Budget application pages.
- BB_#2** **Base Budget Award Amount Requested.** Enter the amount requested. The amount of funds requested/dispensed may not exceed your county's eligible amount from the grant eligibility table on page 7.
- BB_#3** **Base Budget Grant Project Title.** Provide a title for the Base Budget project your county plans to undertake that accurately but concisely describes the project.
- BB_#4** **Land Information Spending Category.** Select the project activity area (spending category) covered by the Base Budget project title. Refer to Chapter Adm. 47.03 for eligible projects and activities.

Projects must fall under one of the following categories:

- Digital parcel mapping
- PLSS remonumentation
- Other parcel work (e.g., ROD indexing)
- LiDAR
- Orthoimagery
- Address Points
- Street Centerlines
- Software
- Hardware
- Website Development/Hosting Services
- Administrative Activities and Management
- Training and Education
- Other (specify) – **Do not select "Other" as a Base Budget spending category unless the project genuinely does not fit into one of the categories above*

Note on staff funding. If the county intends to fund either in-house staff or third-party contractors with Base Budget grant funds, the work of these staff persons must be broken down into one or more of the categories above. In other words, while staff expenses or salary are eligible expenses, *it is not correct to list "staff expenses" or "salary" as a project activity area.* Instead, break down the staff expenses into one or more of the categories above.

Also note that state statute 59.72(2)(b) requires counties to report on grant expenditures (as well as retained fee expenditures) in each of the land information spending categories above in a *Retained Fee/Grant Report* at the end of the state fiscal year, which occurs on June 30th.

- BB_#5** **Land Information Plan Citations.** For each project, list the corresponding citation (section and page numbers) from the county's plan. All proposed grant activities must reflect goals and objectives contained in the county's land information plan.
- BB_#6** **Project Activities and Costs.** For each project, provide costs for the project to be paid with WLIP grant funds. Itemize costs where possible. Costs may be estimates determined through quotes received from vendors for specific activities. However, please do *not* include vendor estimates as attachments with the completed application you submit. Type a concise description for each itemized cost, beginning with row1, column1. Enter dollar amount in column2 of row1. Then proceed to row2. The font size will shrink as you type, becoming smaller to accommodate more text. Aim for less than 40 characters per line.
- BB_#7** **Base Budget Project Total.** The "Base Budget Project Total" boxes are self-adding, which means they calculate the total automatically from the Itemized Costs boxes.
- BB_#8-#22** Fill out questions 8-12, 13-17, and 18-22 only if your county has *multiple* Base Budget projects. Counties with more than four Base Budget projects should attach additional pages of the *WLIP 2018 Grant Application Addendum*. You may attach as many addendum pages as necessary or email them as separate files. Addendum pages are available at www.doa.state.wi.us/WLIP.
- BB_#23** **TOTAL ALL BASE BUDGET PROJECT COSTS.** Total should not exceed Base Budget Award Eligible amount shown in BB_#1. Include costs for Base Budget addendum projects in Base Budget total if applicable.
- BB_#24** **Statement and Authorization of Land Information Officer.** Land information officer name (typed) and date are required. Do not sign and scan the form. Handwritten signatures are *not* required. Submit the application by emailing a digital PDF form that has been electronically filled-out (*not* a scanned image) to WLIP@wisconsin.gov.

2018 Grant Eligibility Table

	FY17 Retained Fees (July 2016-June 2017)	BB Grant Eligibility (\$100k – FY17 Retained Fees)	Strategic Initiative Grant Eligibility	Training & Education Grant Eligibility	Total Grant Eligibility Amount
Adams	48,832	51,168	50,000	1,000	102,168
Ashland	23,704	76,296	50,000	1,000	127,296
Barron	73,120	26,880	50,000	1,000	77,880
Bayfield	38,160	61,840	50,000	1,000	112,840
Brown	334,576	NA	50,000	1,000	51,000
Buffalo	24,088	75,912	50,000	1,000	126,912
Burnett	42,296	57,704	50,000	1,000	108,704
Calumet	71,272	28,728	50,000	1,000	79,728
Chippewa	93,936	6,064	50,000	1,000	57,064
Clark	45,208	54,792	50,000	1,000	105,792
Columbia	91,448	8,552	50,000	1,000	59,552
Crawford	24,600	75,400	50,000	1,000	126,400
Dane	728,616	NA	50,000	1,000	51,000
Dodge	109,176	NA	50,000	1,000	51,000
Door	72,032	27,968	50,000	1,000	78,968
Douglas	62,800	37,200	50,000	1,000	88,200
Dunn	55,056	44,944	50,000	1,000	95,944
Eau Claire	124,528	NA	50,000	1,000	51,000
Florence	11,160	88,840	50,000	1,000	139,840
Fond du Lac	127,168	NA	50,000	1,000	51,000
Forest	21,784	78,216	50,000	1,000	129,216
Grant	65,960	34,040	50,000	1,000	85,040
Green	54,968	45,032	50,000	1,000	96,032
Green Lake	31,752	68,248	50,000	1,000	119,248
Iowa	40,800	59,200	50,000	1,000	110,200
Iron	14,048	85,952	50,000	1,000	136,952
Jackson	34,968	65,032	50,000	1,000	116,032
Jefferson	117,816	NA	50,000	1,000	51,000
Juneau	42,648	57,352	50,000	1,000	108,352
Kenosha	189,760	NA	50,000	1,000	51,000
Kewaunee	29,640	70,360	50,000	1,000	121,360
La Crosse	147,272	NA	50,000	1,000	51,000
Lafayette	29,240	70,760	50,000	1,000	121,760
Langlade	33,760	66,240	50,000	1,000	117,240
Lincoln	47,056	52,944	50,000	1,000	103,944
Manitowoc	103,072	NA	50,000	1,000	51,000
Marathon	182,096	NA	50,000	1,000	51,000
Marinette	80,232	19,768	50,000	1,000	70,768
Marquette	28,728	71,272	50,000	1,000	122,272
Menominee	4,176	95,824	50,000	1,000	146,824
Milwaukee	876,800	NA	50,000	1,000	51,000
Monroe	64,624	35,376	50,000	1,000	86,376
Oconto	75,552	24,448	50,000	1,000	75,448
Oneida	92,880	7,120	50,000	1,000	58,120
Outagamie	249,424	NA	50,000	1,000	51,000
Ozaukee	130,952	NA	50,000	1,000	51,000
Pepin	11,288	88,712	50,000	1,000	139,712
Pierce	58,480	41,520	50,000	1,000	92,520
Polk	92,512	7,488	50,000	1,000	58,488
Portage	91,112	8,888	50,000	1,000	59,888
Price	28,080	71,920	50,000	1,000	122,920
Racine	240,208	NA	50,000	1,000	51,000
Richland	26,848	73,152	50,000	1,000	124,152
Rock	210,232	NA	50,000	1,000	51,000
Rusk	26,864	73,136	50,000	1,000	124,136
Sauk	143,416	NA	50,000	1,000	51,000
Sawyer	45,088	54,912	50,000	1,000	105,912
Shawano	67,304	32,696	50,000	1,000	83,696
Sheboygan	146,360	NA	50,000	1,000	51,000
St. Croix	149,064	NA	50,000	1,000	51,000
Taylor	29,080	70,920	50,000	1,000	121,920
Trempealeau	42,656	57,344	50,000	1,000	108,344
Vernon	41,888	58,112	50,000	1,000	109,112
Vilas	66,896	33,104	50,000	1,000	84,104
Walworth	171,032	NA	50,000	1,000	51,000
Washburn	36,896	63,104	50,000	1,000	114,104
Washington	198,152	NA	50,000	1,000	51,000
Waukesha	560,168	NA	50,000	1,000	51,000
Waupaca	79,560	20,440	50,000	1,000	71,440
Waushara	44,208	55,792	50,000	1,000	106,792
Winnebago	211,552	NA	50,000	1,000	51,000
Wood	92,880	7,120	50,000	1,000	58,120
Total	7,903,608	2,547,832 (50 counties)	3,600,000	72,000	6,219,832



2018 WLIP Training & Education Grant Application

County:

- 1. County submitted an adopted 2016 land information plan to DOA Yes No
- 2. Enter date of last county land information council meeting (dd/mm/yyyy) ►
- 3. LIO subscribed to the Land Information Officer's listserv Yes No
- 4. County's *Retained Fee/Grant Report* for 2016 submitted Yes No
- 5. Training & Education Award Eligible **\$ 1,000.00**
- 6. Training & Education Award Amount Requested **\$**
- 7. Brief Description of Intended Expenditures for Training & Education Grant

8. Statement and Authorization of Land Information Officer

As the Land Information Officer for the above county, I am authorized to submit this application, as an eligible applicant, on the authority of the county board. I understand that application authority shall be obtained by specific action of the county board, and that the WLIP may request evidence of such authority. Project work shall meet all standards and conditions as set forth by the relevant Wisconsin State Statutes, Wisconsin Administrative Code, and policy adopted by the Wisconsin Land Information Program or the Wisconsin Department of Administration. To the best of my knowledge, the information contained in this application is accurate and complete. I understand that Training & Education grant projects must be completed by December 31, 2019.

LIO Name (typed)

Date(dd/mm/yyyy)



2018 WLIP Strategic Initiative Grant Application

County:

- | | |
|--|---|
| 1. Strategic Initiative Award Eligible | \$ 50,000.00 |
| 2. Strategic Initiative Award Amount Requested | \$ <input style="width: 150px; height: 25px;" type="text"/> |

BENCHMARK 1 & BENCHMARK 2

3. The county must meet Benchmark 1 and Benchmark 2 for the **V4** call for data by March 31, 2018 in the Searchable Format. Will the county use 2018 Strategic Initiative Funding to work toward the Searchable Format for V4 Benchmark 1 and 2 in the first quarter of 2018?
- Yes
 No
4. Will the county use 2018 Strategic Initiative Funding to work toward and/or maintain the Searchable Format for **V5** in the first quarter of 2019?
- Yes
 No

5. Benchmark 1 and 2 Land Information Plan Citations for *Project Plan to Achieve Searchable Format for Benchmarks 1 & 2* – Section and page numbers (If answered “No” to #3-4 above, skip down to #8 below.)

6. Benchmark 1 and 2 Project Activities ▼ Costs ▼

7. Benchmark 1 and 2 Total Costs ▶			

8. Will county perform all of the data cleanup and standardization tasks described in the *V3 Observation Report* in order to meet the Searchable Format standard before submitting data for the **V4** call for data by March 31, 2018?
- Yes ▶ Skip down to #10 below
 No

9. If you answered “No” to SI_#8 above, briefly describe how you will address the deficiencies identified in the *V3 Observation Report* in order to meet the Searchable Format standard, explain why the deficiencies cannot be rectified by the V4 call for data, and how they will be addressed:

BENCHMARK 3

10. Is your county's digital parcel fabric complete (including incorporated areas)?

Yes, parcel fabric complete

No, county needs to work toward Benchmark 3 ▶ Estimated year of completion ▶

11. Will county use 2018 Strategic Initiative funding to work toward Benchmark 3 (Completion of County Parcel Fabric)?

Yes

No ▶ Skip down to #15 below

12. Benchmark 3 Land Information Plan Citations for *Project Plan for Parcel Completion* – Section and page numbers

--

13. Benchmark 3 Project Activities ▼

Costs ▼

		14. Benchmark 3 Total Costs ▶	<input type="text"/>

BENCHMARK 4

15. Is your county's PLSS framework complete and integrated into digital parcel layer?

Yes, PLSS network complete and integrated

No, county needs to work toward Benchmark 4 ▶ Estimated year of completion ▶

16. Benchmark 4 waiver request – Check the waiver box below if you wish to request a waiver from Benchmark 4 in favor of LiDAR and/or Aerial Imagery costs

No / Not Applicable

Yes, waiver requested in favor of **LiDAR** project ▶ Fill out *2018 WLIP Grant Application Addendum*

Yes, waiver requested in favor of **Imagery** project ▶ Fill out *2018 WLIP Grant Application Addendum*

17. Will county use 2018 Strategic Initiative funding to work toward Benchmark 4 (Completion and Integration of PLSS)?

Yes

No ▶ Skip down to #21 below

18. Benchmark 4 Land Information Plan Citations for *Project Plan for PLSS* – Section and page numbers

--

19. Benchmark 4 Project Activities ▼

Costs ▼

		20. Benchmark 4 Total Costs ▶	<input type="text"/>

OTHER COUNTY-LEVEL STRATEGIC INITIATIVE PROJECTS

21. County anticipates meeting Benchmarks 1-4 (or 1-3 with LiDAR/aerial imagery waiver) **and** foresees having some of the 50k Strategic Initiative funding “leftover”?

- Yes
- No

22. Estimated amount of 50k to be left after applying any costs to achieve Benchmarks 1-4 (or 1-3 for LiDAR/aerial imagery waiver counties)

- Zero
- More than zero ▶ Specify amount ▶ \$

If “More than zero” is selected, use the *2018 WLIP Grant Application Addendum* to describe the projects you will use the Strategic Initiative funding for.

23. TOTAL ALL STRATEGIC INITIATIVE PROJECTS (should equal ≤ \$50,000.00) ▶ \$

24. Statement and Authorization of Land Information Officer

As the Land Information Officer for the above county, I am authorized to submit this application, as an eligible applicant, on the authority of the county board. I understand that application authority shall be obtained by specific action of the county board, and that the WLIP may request evidence of such authority. Project work shall meet all standards and conditions as set forth by the relevant Wisconsin State Statutes, Wisconsin Administrative Code, and policy adopted by the Wisconsin Land Information Program or the Wisconsin Department of Administration. To the best of my knowledge, the information contained in this application is accurate and complete. I understand that Strategic Initiative grant projects must be completed by March 31, 2019.

LIO Name (typed)

Date (dd/mm/yyyy)



2018 WLIP Base Budget Grant Application

County:

1. Base Budget Award Eligible (from grant eligibility table on page 7) \$

2. Base Budget Award Amount Requested \$

3. **Base Budget Grant Project Title 1**

4. Land Information Spending Category:

5. Land Information Plan Citations – Section and page numbers

6. <u>Project Activities</u> ▼		<u>Costs</u> ▼	
7. Base Budget Project 1 Total ▶			<input style="width: 80px; height: 25px;" type="text"/>

8. **Base Budget Grant Project Title 2**

9. Land Information Spending Category:

10. Land Information Plan Citations – Section and page numbers

11. <u>Project Activities</u> ▼		<u>Costs</u> ▼	
12. Base Budget Project 2 Total ▶			<input style="width: 80px; height: 25px;" type="text"/>

13. Base Budget Grant Project Title 3

14. Land Information Spending Category:

15. Land Information Plan Citations – Section and page numbers

16. Project Activities ▼

Costs ▼

		17. Base Budget Project 3 Total ▶	

18. Base Budget Grant Project Title 4

19. Land Information Spending Category:

20. Land Information Plan Citations – Section and page numbers

21. Project Activities ▼

Costs ▼

		22. Base Budget Project 4 Total ▶	

23. TOTAL ALL BASE BUDGET PROJECT COSTS (not to exceed BB_#1) ▶

\$

24. Statement and Authorization of Land Information Officer

As the Land Information Officer for the above county, I am authorized to submit this application, as an eligible applicant, on the authority of the county board. I understand that application authority shall be obtained by specific action of the county board, and that the WLIP may request evidence of such authority. Project work shall meet all standards and conditions as set forth by the relevant Wisconsin State Statutes, Wisconsin Administrative Code, and policy adopted by the Wisconsin Land Information Program or the Wisconsin Department of Administration. To the best of my knowledge, the information contained in this application is accurate and complete. I understand that Base Budget grant projects must be completed by December 31, 2019.

LIO Name (typed)

Date (dd/mm/yyyy)

2018 WLIP Grant Application Addendum

County:

Select Addendum Type:

- Base Budget Project(s)
- Other county Strategic Initiative Project(s)
- LiDAR project – enabled by waiver from Benchmark 4
- Aerial Imagery project – enabled by waiver from Benchmark 4

1. Project Title 1

2. Land Information Spending Category:

3. Land Information Plan Citations – Section and page numbers

4. Addendum Project 1 Activities ▼ Costs ▼

5. Addendum Project 1 Total ▶			

6. Project Title 2

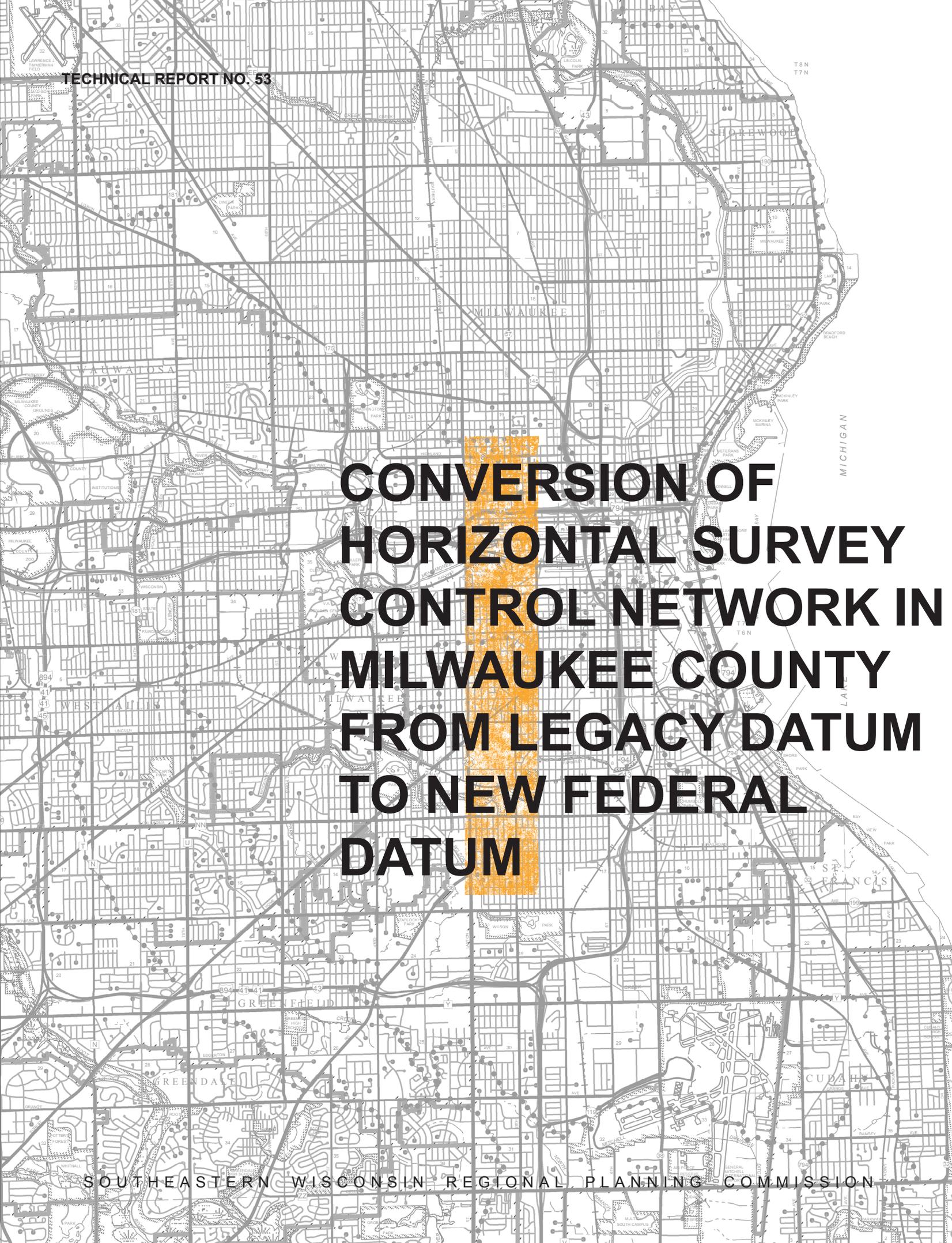
7. Land Information Spending Category:

8. Land Information Plan Citations – Section and page numbers

9. Addendum Project 2 Activities ▼ Costs ▼

10. Addendum Project 2 Total ▶			

TOTAL ALL PROJECTS – Please include total, including addendum project costs, on application itself



CONVERSION OF HORIZONTAL SURVEY CONTROL NETWORK IN MILWAUKEE COUNTY FROM LEGACY DATUM TO NEW FEDERAL DATUM

**SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION**

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Kathy BachGIS Analyst, Representing
Milwaukee County
Register of Deeds

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Information and Technology
Management Division,
City of Milwaukee

Dawn NeuyManager, EDAM Support, WE Energies

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Architecture, Engineering and
Environmental Services Division

Doug SeymourDirector of Community Development,
City of Oak Creek, Representing the
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Council of Milwaukee County

Supervisor, Jason HassMilwaukee County
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Christine WestrichOffice of Emergency
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David CullenMilwaukee County Treasurer

**SOUTHEASTERN WISCONSIN REGIONAL
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Kurt W. Bauer, PE, RLS, AICPExecutive Director
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Outreach Manager

Nancy M. Anderson, AICPChief Community
Assistance Planner

Christopher T. Hiebert, PEChief Transportation
Engineer

Laura L. Herrick, PE, CFMChief Environmental
Engineer

Elizabeth A. Larsen, SPHRAssistant Director-
Administration

Eric D. LyndeChief Special
Project Planner

Robert W. Merry, PLSChief Surveyor

David A. SchillingChief Land Use Planner

Dr. Thomas M. SlawskiChief Biologist

TASK FORCE

Kurt W. Bauer, PE, RLS, AICPExecutive Director
Emeritus, SEWRPC

Earl F. Burkholder, PS, PEConsulting Geodetic
Survey Engineer

Robert W. Merry, RLSChief Surveyor,
SEWRPC

TECHNICAL REPORT NUMBER 53

**CONVERSION OF HORIZONTAL SURVEY
CONTROL NETWORK IN MILWAUKEE COUNTY
FROM LEGACY DATUM TO NEW FEDERAL DATUM**

Prepared by the

Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, WI 53187-1607
www.sewrpc.org

September 2017

\$10.00

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607

TELEPHONE (262) 547-6721
FAX (262) 547-1103

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September 20, 2017

STATEMENT OF THE EXECUTIVE DIRECTOR

As noted in the introductory section of this report, the Regional Planning Commission has, since 1964, recommended to the governmental agencies operating within the Region the creation and use of a unique system of survey control as a basis for the compilation of large scale topographic and cadastral maps; as a basis for the conduct of land and engineering surveys; and, as a basis for the development of automated, parcel based, land information and public works management systems within the Region. With the assistance of the constituent counties and municipalities, the recommended survey control system has been extended over the entire seven-county Region. All of the 11,753 U.S. Public Land Survey System corners within the Region have been monumented and the coordinate positions and elevations of the corners determined to a high level of survey accuracy. The survey control network has been widely used in the Region for over 50 years.

All of the horizontal survey control work within the Region has been referenced to the North American Datum of 1927. The Federal Government in 1983 created a new horizontal datum known as the North American Datum of 1983. To facilitate the use of the new datum within the Region by such agencies as may determine to do so, the Commission developed procedures for the conversion of the horizontal survey control network within the Region from the legacy datum to the new Federal datum. These procedures, and the issues concerned with datum conversion were addressed in a number of Commission publications, the latest being SEWRPC Memorandum Report No. 206, entitled, "Estimate of the Costs of Converting the Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums," and its Addendum, October 2012 and August 2015, respectively.

In 2016, the county land information council managers within the Region collegially determined to proceed with datum conversion, and to request Commission assistance in carrying out the conversion using the Commission-developed procedures to provide survey grade coordinates for all of the U.S. Public Land Survey System corners within the Region. On January 19, 2017, the Commission entered into an agreement with Milwaukee County governing the conversion of the survey control network within the County from the legacy horizontal datum to the new Federal datum. This report describes the datum conversion completed under the agreement. Importantly, the results demonstrated that the procedure developed by the Commission provided the desired level of accuracy in the converted coordinate positions of the U.S. Public Land Survey System corners, a level of accuracy meeting national Third Order Class I Standards.

It is also important to note that the completed datum conversion provides two of the four foundational elements of the county and municipal land information and public works management systems within the Region, a datum and an attendant map projection. The other two foundational elements—large scale topographic maps and real property boundary—cadastral—maps will also require conversion, as will the attribute data contained in the land information and public works management systems within the Region.

Respectfully submitted,

Michael G. Hahn

Michael G. Hahn

Executive Director

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STATE PLANE COORDINATES OF U.S. PUBLIC LAND SURVEY CORNERS IN MILWAUKEE COUNTY REFERRED TO NAD 83 (2011) DATUM

INTRODUCTION AND BACKGROUND

Since 1961, the Regional Planning Commission has recommended to the governmental agencies operating within the Southeastern Wisconsin Region the use of a unique system of survey control as a basis for the compilation of large-scale topographic and cadastral maps; as a basis for the conduct of land and engineering surveys; and, specifically for Milwaukee County, since 1989, as a basis for the development of a county automated, parcel-based, land information and public works management system.¹ The recommended survey control system requires the remonumentation of the U.S. Public Land Survey System corners within the Region and the establishment of State Plane Coordinates for those corners. The system also includes the establishment of elevations for the monumented corners and for related auxiliary bench marks to provide a reliable vertical survey control network fully integrated with the horizontal network.

Through the cooperative efforts of the Commission and its constituent counties and municipalities, the recommended survey control system has been extended over the entire seven-county Region. All of the 11,985 U.S. Public Land Survey System corners within the Region have been remonumented, and the coordinate positions, and elevations of the remonumented corners have been determined to a high level of accuracy. The resulting survey control network has been widely used for over 50 years in the preparation of large-scale topographic and cadastral maps, in the conduct of land and engineering surveys, and in the creation of parcel-based land information and public works management systems within the Region.

All of the coordinate positions of the remonumented stations of the survey control network within the Region have been referenced to the North American Datum of 1927 (NAD 27), a datum established and promulgated by the Federal government. The datum is based upon the Clarke Spheroid of 1866, a spheroid which fits the North American Continent and the Southeastern Wisconsin Region well. The elevations of the remonumented stations and of ancillary benchmarks have been referenced to the National Geodetic Vertical Datum of 1929 (NGVD 1929), a datum formerly known as the Sea Level Datum of 1929.

The Federal government in 1973 determined to undertake a readjustment of the national horizontal survey control network, and to adopt a new horizontal datum known as the North American Datum of 1983 (NAD 83), utilizing a new reference spheroid known as Geodetic Reference System of 1980 (GRS 80). The new horizontal datum was subsequently readjusted to create NAD 83 (2011). The Federal government in 1977 similarly determined to undertake a readjustment of the national vertical survey control network, and to adopt a new vertical datum known as the North American Vertical Datum of 1988 (NAVD 88).

REEVALUATION OF REGIONAL SURVEY CONTROL NETWORK

The Commission has long maintained that adoption and use of the new Federal datums within the Region does not provide any significant technical advantages over the continued use of the legacy datums. Nevertheless, in response to concerns raised by some practicing land surveyors and some county land information system managers about the continued use of the legacy datums within the Region, the Commission in 2012 prepared SEWRPC

¹ See *SEWRPC Community Assistance Planning Report No. 177*, "Feasibility Study for a Milwaukee County Automated Mapping and Land Information System", October 1989.

Memorandum Report No. 206, *“Estimate of the Costs of Converting the Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums,”* October 2012. In response to the specific requests of some county land information system managers, the report presented a procedure for converting the legacy datums within the Region to the newer datums and presented an estimate of the cost of such conversion meeting land and engineering survey accuracy standards. Given the high estimated cost of the envisioned conversion, and the lack of offsetting monetary benefits, the report recommended the continued use of the legacy datums within the Region. Despite this recommendation, some practicing land surveyors and some county land information system managers continued to express a desire to pursue datum conversion within the Region and to request Commission assistance in making the desired conversion. Given this continuing concern, and given the significant changes in surveying technology that had taken place since publication of Memorandum Report 206, the Commission in 2015 undertook a reevaluation of the findings and recommendations presented in that report. The findings of that reevaluation are set forth in an Addendum to Memorandum Report No. 206 entitled, *“Revised Estimate of the Costs of Converting the Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums,”* and published in August 2015.

PROCEDURES FOR DATUM CONVERSION

The procedure for the conversion of the horizontal control survey network within the Region from the legacy to the new datums as originally proposed in Memorandum Report No. 206, was based upon the technology available in 2012 to provide a high order of accuracy in control survey work. The originally proposed conversion procedure utilized a series of static Global Positioning System (GPS) observations² to provide new primary and secondary survey control networks within the Region. Based upon these higher order networks, new State Plane Coordinate positions on the North American Datum of 1983 (NAD 83) would then be obtained by occupying all of the stations comprising the network for further GPS observations. The procedure, while providing a high level of accuracy in the new position data, was costly – probably prohibitively so – considering the lack of known offsetting benefits.

Significant changes in surveying technology occurred after publication of SEWRPC Memorandum Report No. 206. These changes warranted reconsideration of the procedure originally proposed for datum conversion in that report. The changes in surveying technology included the completion by the Wisconsin Department of Transportation of a Continuously Operating Reference Stations (CORS) network within the State of Wisconsin, coupled with the development and acceptance of Virtual Reference Station (VRS) Technology.³ This technology eliminated: 1) the need to rely upon static GPS observations for the datum conversion work, and 2) the need for measurements to be made simultaneously by a roving GPS receiver and an attendant base station or stations. These two changes—while continuing to require occupation of all stations in the control survey network with a roving receiver—presented significant increases in the efficiency of the necessary field survey work, with attendant significant reductions in cost.

² In 2012 Global Positioning System observations intended to provide high orders of accuracy, known as static positioning surveys, utilized two or more receivers simultaneously receiving data from the system satellites. These data included dual-frequency carrier phase measurements that in effect represented distances. Post processing of the simultaneous observations provided precise vectors from which coordinate positions could be computed. The static survey procedure required stations in a network to be occupied and attendant data observed for significant periods of time—ranging from approximately 15 minutes to one hour.

³ Virtual Reference Station technology consists of a system of hardware and software designed to facilitate real-time global positioning system measurements based on a network of reference stations known as continuously operating reference stations—performing in the role of the base stations in static global positioning surveys. The network of receivers is linked to a computation center, and each station contributes its raw data to help create network-wide models necessary to provide accurate positioning of the roving receiver. The primary benefit of the technology is that it permits real-time kinematic positioning using a single receiver in the field while achieving centimeter-level accuracy.

Importantly, the Commission staff working with its veteran consulting geodesist—Mr. Earl F. Burkholder, P.S., P.E.—developed a unique procedure for horizontal datum conversion which minimized the number of control survey stations that had to be occupied by a roving GPS receiver to accomplish the desired conversion work. This procedure combines GPS field observations on a carefully selected minimum number of control survey stations in a subarea of the Region—such as a U.S. Public Land Survey System township—with measurement data collected in the original control surveys conducted within the Region to create the legacy survey control network. The procedure uses these legacy measurement data to compute the coordinate positions of the remaining unoccupied stations in the subarea. This unique procedure is more fully described in Appendix C of the Addendum to Memorandum Report No. 206. That Appendix C is reproduced as an appendix to this report.

REVISED COMMISSION RECOMMENDATION

The work accomplished in preparing the Addendum to MR No. 206 resulted in a change in the long-standing recommendation of the Commission to continue the use of the legacy survey datums within the Region. The Commission continued to recognize that the benefits of the conversion of the legacy datums to the new Federal datums remained largely intangible. However, the conversion using the procedure developed by the Commission staff would have one very important, although still intangible, benefit namely, the conversion procedure would retain the relative positions of all of the control survey stations within the Region as given by the legacy lengths and bearings of the one-quarter section lines, thus preserving the integrity of the legacy horizontal control survey network within the Region. This benefit was considered sufficient to warrant incurring the relatively modest cost of a horizontal data conversion. The Addendum accordingly recommended that each of the individual county land information system managers within the Region determine whether or not their agency desired to proceed with the conversion of the horizontal datum in use within the Region from NAD 27 to NGVD 83 (2011). If it was determined to proceed, it was indicated that the work could be accomplished by the Commission under contract with the counties concerned, the work being done on a county-by-county basis.

Similarly, the land information system managers would have to determine whether or not their agency desired to proceed with the conversion of the vertical datum in use within the Region from NGVD 29 to NGVD 88 (2012). However, in this case, the conversion would have to be carried out for the Region as a whole. Therefore, all seven county land information system agencies within the Region would have to agree to proceed, and would have to agree upon a distribution of the cost between the counties concerned. If it was determined to proceed, it was indicated that the work could be accomplished by the Commission under contract jointly with all seven county land information systems.

In considering the conversion of the horizontal datum within the Region, it was apparently understood by all concerned that such conversion would entail only two of the four foundational elements of a parcel-based land information or public works management system—the datum and related map projection and the control survey network. Each of the other two foundational elements—the topographic maps for ground truth, and the parcel based cadastral maps, together with the assembled attribute data, will require recompilation, or in the alternative, some form of adjustment if those elements are to be useable with coordinate positions on the new datum. Coordinate positions referred to the new horizontal datum cannot be plotted on the legacy topographic and cadastral maps of the existing land information and public works management systems within the Region. The conversion of the other two foundational elements and the attribute data of the existing systems will constitute the major portion of the costs of the conversion as set forth in SEWRPC Memorandum Report No. 206.

COUNTY ACTION

In a series of informal meetings held during the course of calendar year 2016, the seven county land information managers, acting on behalf of their agencies, unanimously agreed to proceed on a county-by-county basis with the conversion of the legacy horizontal datum in use within the Region to the new Federal datum. The managers similarly agreed unanimously to proceed cooperatively with the conversion of the vertical datum.

Accordingly, on January 31, 2017, Milwaukee County entered into an agreement with the Commission under which the Commission would convert the State Plane Coordinate positions of all 1,134 U.S. Public Land Survey System or System extension corners within County from the legacy datum—NAD 27—to the new Federal datum—NAD 83 (2011). The conversion was to be accomplished by the procedure set forth in Appendix C of the Addendum to SEWRPC Memorandum Report No. 206. As already noted, a copy of Appendix C of the Addendum to Memorandum Report No. 206 is provided in an appendix to this report. The work was to be accomplished in a period of two years from the date of the agreement. The “deliverables” under the agreement were to include, in addition to the new coordinate positions of the U.S. Public Land Survey system corners, revised control survey station record sheets—commonly known as dossier sheets—for each corner, and new control survey summary diagrams, each diagram covering six U.S. Public Land Survey System sections. This report documents the work accomplished and the products created and delivered under the agreement.

FIELD PROCEDURES

Following the procedure set forth in the appendix to this report, 160 remonumented U.S. Public Land Survey System or System extension corners were recovered and occupied for GPS measurement. The location of these corners is shown on Figure 1 appended. The State Plane Coordinates of the occupied stations referred to the new Federal horizontal datum are given in Table 1 appended.

The remonumented corners were recovered using the Record of U.S. Public Land Survey Control Station sheets – so called dossier sheets – on file with the Commission. To insure that the recovered monuments truly marked the corner locations concerned, a minimum of three tie distances to extant witness corners were measured, and the distances checked against those shown on the dossier sheets.

The equipment used in the field work included a Trimble R-8 Global Positioning System Receiver (GPS receiver) coupled with a Trimble TSC2 Data Collector.⁴ During the observations, the GPS receiver was linked to the CORS network created and operated by the Wisconsin Department of Transportation within and adjacent to the County by ordinary mobile telephones. This combination of equipment is known to be capable of obtaining National Geodetic Survey (NGS) Third Order, Class I network accuracy or better, equivalent to an accuracy of 1 part in 10,000 for the lengths of the one-quarter section lines. The GPS equipment was supported by a TopCon Model GPT-3002LW total station instrument capable of obtaining NGS Third Order Survey accuracy, and by 200 foot long steel tapes required to measure tie distances to witness corners, and to make attendant miscellaneous angular and distance measurements.

⁴ *The first artificial satellite geodetic positioning and navigation system was developed by the U.S. Department of Defense (DOD) for military purposes and became operational in 1983. Initially the DOD deliberately degraded the satellite transmissions to limit the positional accuracy for civilian use. In 1996 the DOD ended the degradation policy and made the system available for civilian use in a fully accurate mode – thus promoting the use of the system in surveying applications. The DOD system is the satellite positioning system that has become known by the acronym GPS for the term Global Positioning System. The GPS instrumentation used by the Commission in the creation of portions of the legacy regional survey control network exclusively used the DOD system. Since the completion of the legacy survey control network in the Region, other satellite based positioning and navigation systems have been created, such as systems by the European Union, Russia, and China. State-of-the-art receiving instruments can utilize signals from all of these satellite systems. The systems in combination are identified as the Global Navigation Satellite System (GNSS). The receiving instrumentation used in the conduct of the field work for the Milwaukee County datum conversion project utilized the GNSS system and did so in order that the observations would be made in a manner consistent with the instrumentation used by the Wisconsin Department of Transportation in conjunction with its system of Continuously Operating Reference Stations (CORS) within the Region.*

OFFICE COMPUTATIONS

The procedure for the datum conversion envisions utilizing the legacy lengths of the one-quarter section lines and the interior angles of the one-quarter sections in combination with the measured NAD 83 (2011) coordinates of the corners occupied for GPS measurement. The initial step in the computation process involved a least squares adjustment of the recorded legacy data to identify any errors or blunders that may exist in the legacy data. This initial step was intended to provide an absolutely “clean” data set for use in subsequent computations. A small number of relatively minor errors in the existing network were found together with a very small number of blunders involving such issues as transposition of integers, and the errors and blunders were corrected. The positions of a cluster of stations grouped within an identified area were found to only marginally meet the required network accuracy and were targeted for adjustment. In addition, the positions of two isolated stations were found to be in error, requiring correction.

The second step in the computation process involved combining the measured NAD 83 (2011) coordinate positions with the legacy lengths of the one-quarter section lines and the legacy interior angles of the one-quarter sections in a least squares adjustment to compute the NAD 83 (2011) coordinate positions of the 974 non-occupied corners within the County. The resulting NAD 83 (2011) State Plane Coordinates, and the lengths and bearings of the one-quarter section lines were recorded on the six section control summary diagrams covering the County.

PROBLEM AREAS

Analyses of the results of the initial computation of the positions of the survey control stations—U.S. Public Land Survey System corners—indicated that the positions of a cluster of stations within an approximately nine square mile area did not meet the required network accuracy. The discrepancies found involved the survey connections from the errant stations to stations in the surrounding network. The area concerned is shown on Figure 2. It contains 47 stations of which 14 were readjusted. The discrepancies found in the positions of the stations within the area ranged with respect to Northings, from a negative 0.42 to a positive 0.61 feet; and with respect to Eastings, from a negative 0.21 to a positive 0.26 feet. Even though these discrepancies marginally meet the required network accuracy standards, it was decided to adjust the positions as expressed on both the legacy datum and the new Federal datum to more fully meet the required standard.

Further analyses indicated that the discrepancies found could most likely be attributed to survey measurement or as computational errors made in the conduct of the precise traverses used to determine the legacy positions of the stations concerned. To correct the discrepancies found, the errant stations—corners—were, to the extent practicable at the time, occupied for GPS measurements. The occupied stations are shown on Figure 2. The GPS measurements together with the positions of the stations in the surrounding network were then used to adjust the position of the errant stations. These adjusted positions referred to the legacy datum were entered on revised legacy six section survey control summary diagrams, and for the adjusted positions referred to the new Federal datum were entered on new survey control summary diagrams prepared under the project.

In addition to the station position discrepancies found within the problem area previously described, discrepancies in the location of eleven stations were also found. These stations are also shown on Figure 2. The discrepancies range from a minimum of a negative 0.52 feet to a maximum of a positive 0.54 feet. Investigation of the history of the monumentation marking the positions of these stations, as given by the dossier sheets on record with the Commission for these stations, indicated that the discrepancies found were probably caused by blunders in the traverse surveys originally made to locate the positions of the corners. The positions of these eleven stations as given on both the revised legacy survey control summary diagrams and on the new diagrams prepared under this project reflect the true position of the corners.

FIELD VERIFICATION OF COMPUTED CORNER POSITIONS

To check the accuracy of the computed survey control station coordinates, an approximately 16 percent random sample of the stations—U.S. Public Land Survey System corners—within the County for which the coordinates were computed was selected. The location of the 186 sample stations are shown on Figure 3 appended. The monu-

ments marking the U.S. Public Land Survey System corners comprising the sample were recovered and occupied with GPS instrumentation to obtain independently measured coordinate values for the corners. The measured coordinate positions were then compared with the computed positions. The results are set forth in Table 2. Review of the data presented in Table 2 indicates that the largest difference between a measured and a computed northing was 0.21 feet, while the largest difference between a measured and a computed easting was 0.22 feet. The root mean square error between the measured and the computed Northings was 0.10 feet and between the Eastings was 0.09 feet. The test confirmed the validity of the NAD 83 (2011) coordinates as determined by the conversion procedure. It is interesting to note that the shift in the geographic positions of the legacy and new Federal horizontal datums within the Region, as measured by the spherical coordinate differences of a centrally located station within the County is about 0.067 seconds of latitude, and 0.297 seconds of longitude, equivalent to about 6.6 feet and 29.2 feet, respectively.

CONCLUSION

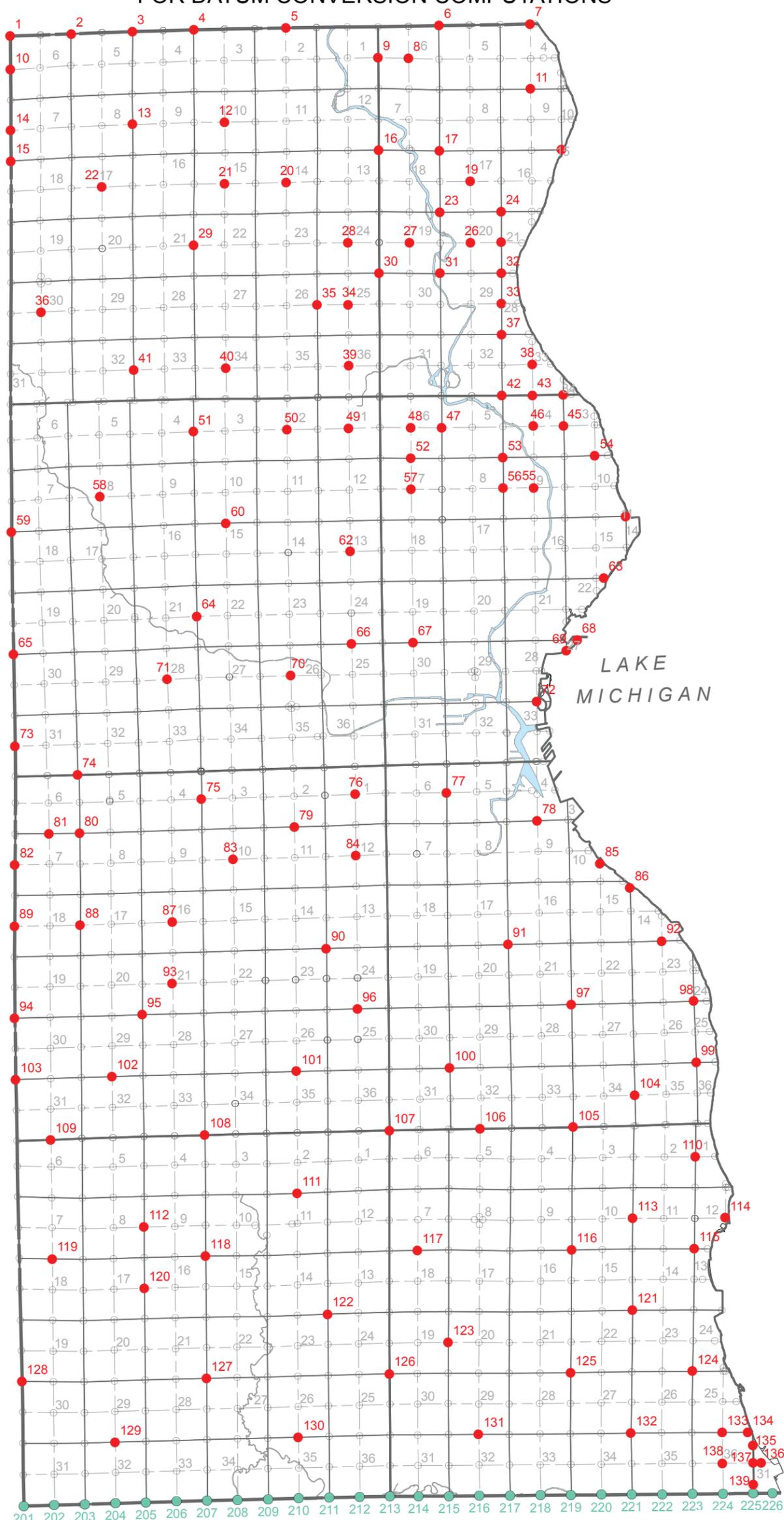
It may be concluded that the horizontal datum conversion procedure developed by the Commission staff provides an accurate and cost-effective means for the conversion of the legacy horizontal datum in use within the Region to the presently promulgated Federal datum. As described in this report, using the procedure the extant horizontal survey control network within Milwaukee County was successfully converted from the legacy datum—NAD 27—to the presently promulgated Federal datum—NAD 83 (2011). Independent field observations demonstrated that the converted State Plane Coordinate positions of the monumented County survey control network met Third Order Class 1 Standards—providing linear distance closures of 1 part in 10,000 or better. Importantly, the procedure preserves the validity of the survey control network referred to the legacy datum, the lengths of one-quarter section lines being essentially identical under the two datums.

In accordance with the agreement entered into between the County and the Commission governing the horizontal datum conversion, the following survey control data and materials were delivered in digital format to the County together with copies of this report:

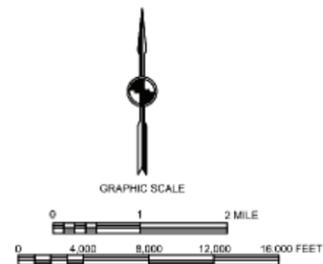
- A revised copy of the “Record of U.S. Public Land Survey Control Station”—so called dossier sheet—for each of the 1,134 survey control stations—monumented U.S. Public Land Survey System corners—within the County. The revised dossier sheets provide the State Plane Coordinates of the corner concerned referred to both the—NAD 27 and NAD 83 (2011) datums. An example of a revised dossier sheet is provided in Figure 4 appended.
- New six section survey control summary diagrams covering the County. These 47 diagrams show the monumented U.S. Public Land Survey Station corners, the State Plane Coordinates of those corners referred to NAD 83 (2011), the grid and ground level lengths of the one-quarter section lines, the interior angles of the one-quarter sections and the bearings of the one-quarter section lines, and the ground level area of the one-quarter sections. An example of a survey control summary diagram is provided in Figure 5 appended.

FIGURE 1

MAP OF MILWAUKEE COUNTY SHOWING US PUBLIC LAND SURVEY CORNERS OCCUPIED FOR GPS OBSERVATIONS TO DETERMINE NAD83 (2011) COORDINATES AS BASIS FOR DATUM CONVERSION COMPUTATIONS



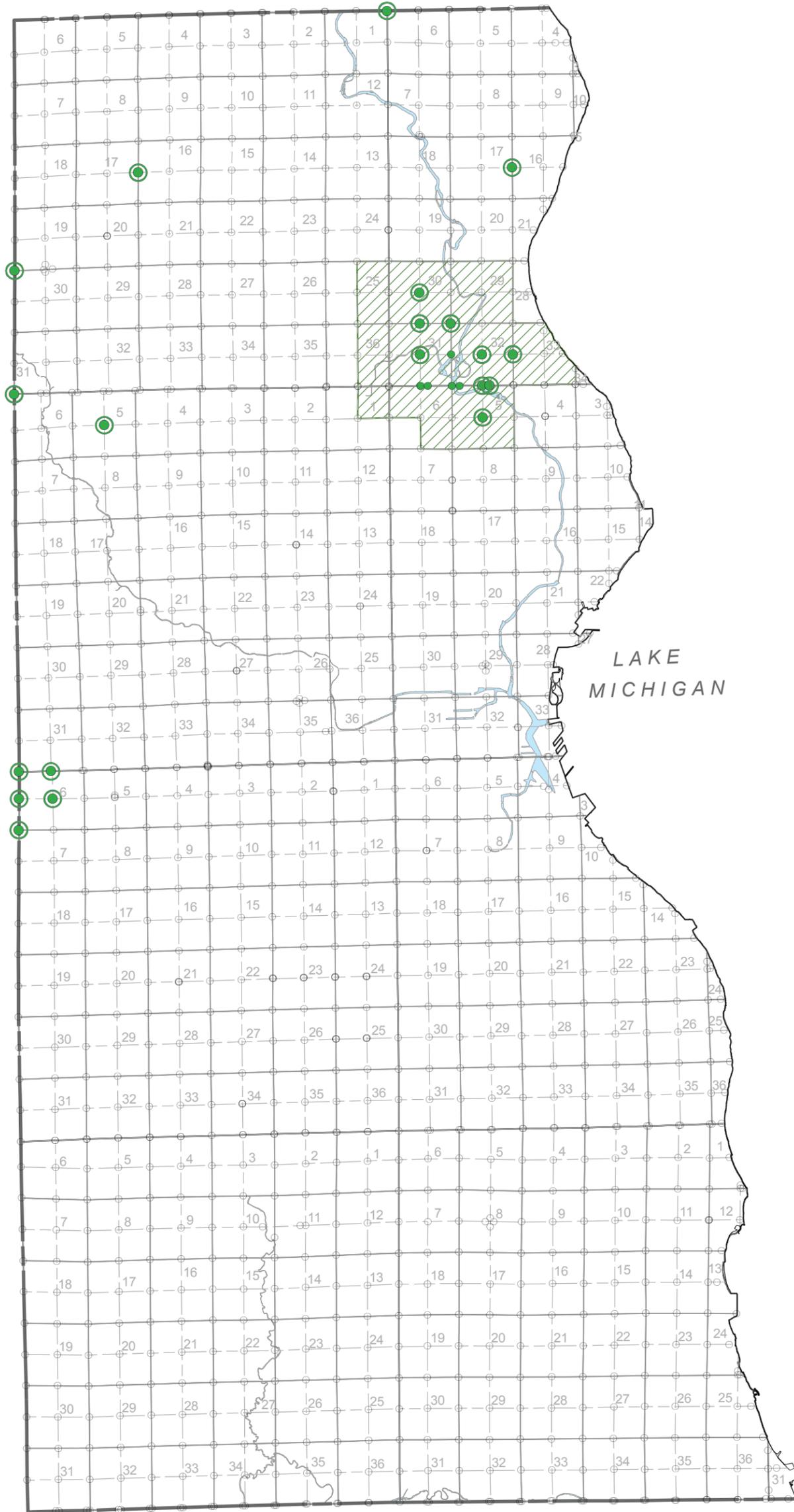
- Monumented USPLS Corners Recovered and Occupied for GPS Observations to be Used as Basis for Datum Conversion Computations
- Monumented USPLS Corners Either Recovered and Occupied for GPS Observations or with Adjusted NAD83 (2011) Position Determined in the Racine County Network Adjustment



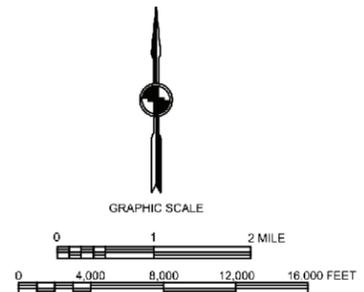
Source: SEWRPC.

FIGURE 2

MAP OF MILWAUKEE COUNTY SHOWING US PUBLIC LAND SURVEY CORNERS THE INITIALLY COMPUTED COORDINATES OF WHICH DID NOT MEET SURVEY CONTROL NETWORK ACCURACY STANDARDS



-  Problem Area
-  Monumented Corner Not Meeting Network Accuracy Standards and Readjusted
-  Monumented Corner Not Meeting Network Survey Standards Occupied for GPS Observations and Readjusted

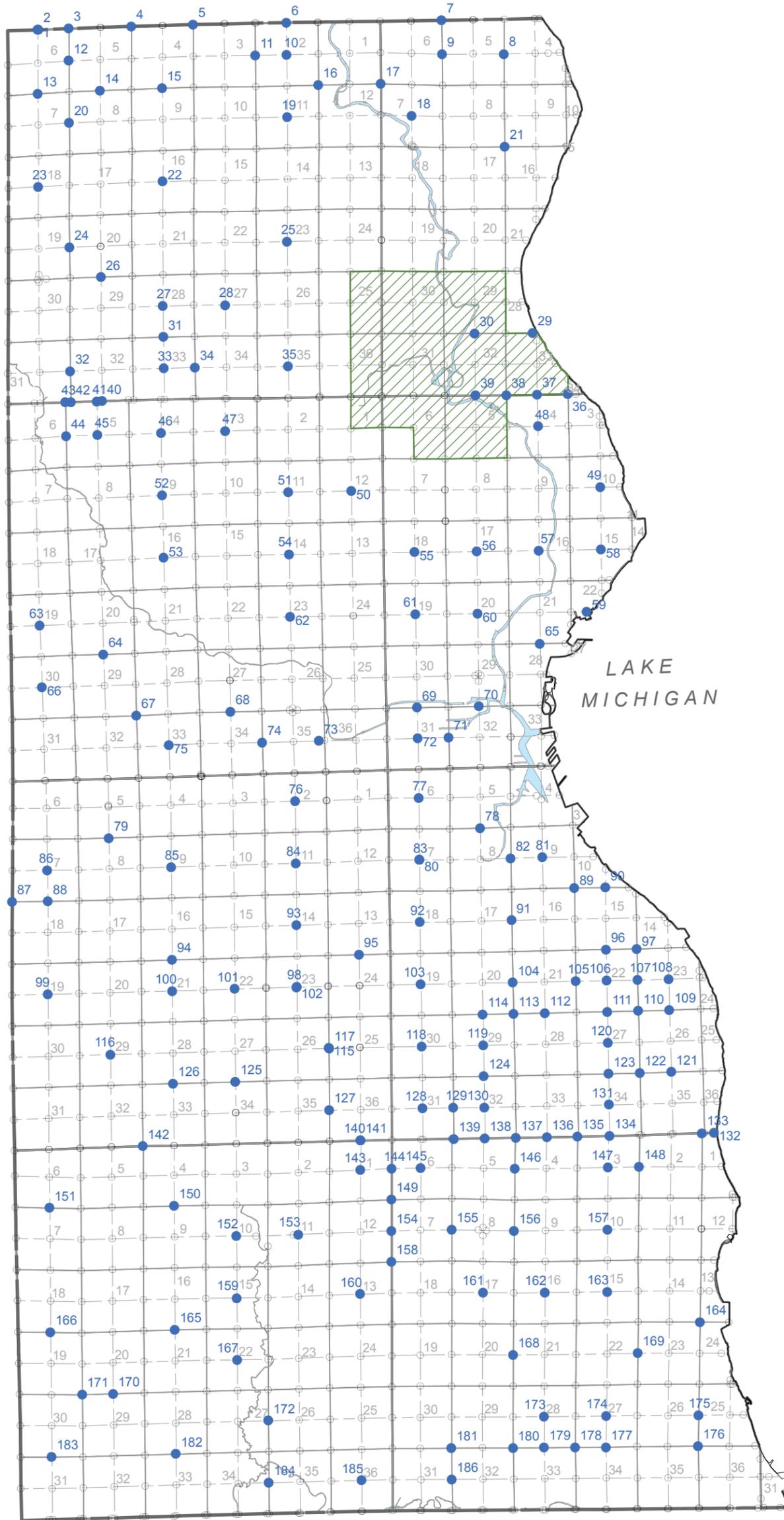


Source: SEWRPC.

FIGURE 2

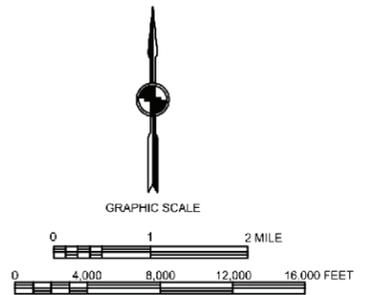
FIGURE 3

MAP OF MILWAUKEE COUNTY SHOWING US PUBLIC LAND SURVEY CORNERS OCCUPIED FOR GPS OBSERVATIONS TO VERIFY COMPUTED COORDINATE POSITIONS



 Problem Area

 Monumented USPLSS Corners Recovered and Occupied for GPS Observations Providing Independent Check on the Accuracy of Computed NAD83 (2011) Coordinates



Source: SEWRPC.

Figure 4

SAMPLE DOSSIER

RECORD OF U.S. PUBLIC LAND SURVEY CONTROL STATION

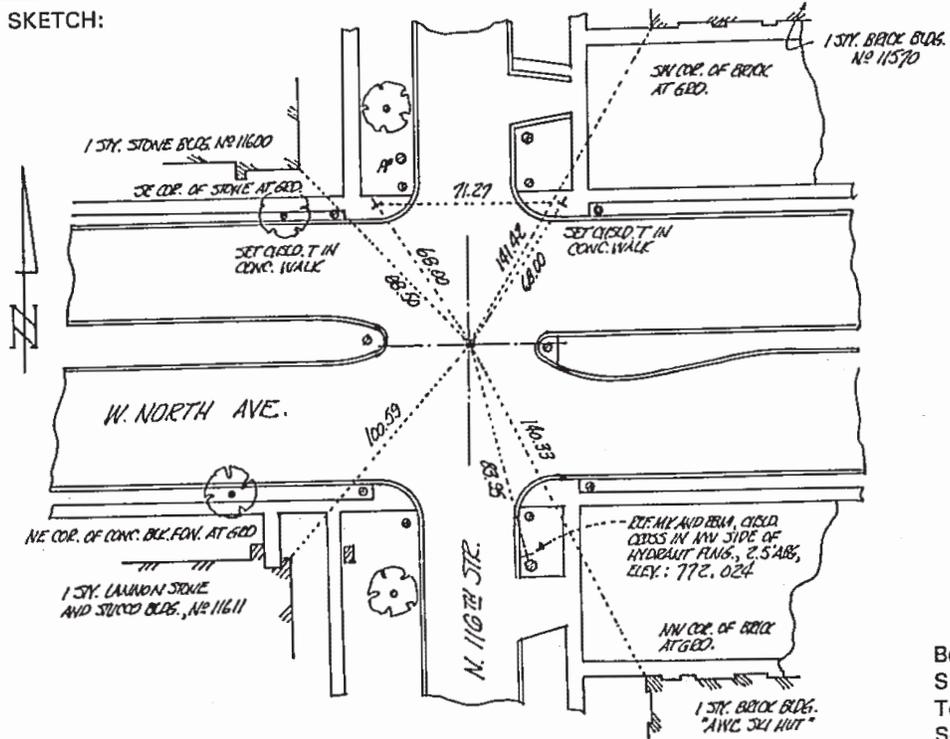
U.S. PUBLIC LAND SURVEY CORNER $\frac{18}{19}$ T 07 N, R 21 E, Milwaukee COUNTY, WISCONSIN

HORIZONTAL: NORTH AMERICAN DATUM OF 1927
 VERTICAL: NATIONAL GEODETIC VERTICAL DATUM OF 1929
 HOR. CONTROL: AERO-METRIC ENGINEERING, INC. 1988
 VERT. CONTROL:
 NORTHING: 392,387.19 USFT
 EASTING: 2,519,095.87 USFT
 ELEVATION: 770.118 FT
 HOR. ACCURACY: 3rd ORDER, CLASS I
 VERT. ACCURACY: 2nd ORDER, CLASS II

HORIZONTAL: NORTH AMERICAN DATUM OF 1983/2011
 VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (12)
 HOR. CONTROL: SEWRPC 2017
 VERT. CONTROL:
 NORTHING: 392,396.87 USFT
 EASTING: 2,487,558.05 USFT
 ELEVATION: FT
 HOR. ACCURACY: 3rd ORDER, CLASS I (COMPUTED)
 VERT. ACCURACY:

RBM ELEV. IN SKETCH BELOW TIED TO NGVD29 DATUM. CONVERSION FROM NGVD29 FT DERIVES NAVD88 HEIGHT

LOCATION SKETCH:



Bearing:
 S 02-04-13 E
 To Center of
 Sec. 19-7-21

SURVEYOR'S AFFIDAVIT: As County Surveyor, I hereby certify that I set a concrete monument with SEWRPC brass cap to mark this corner; replacing a broken concrete monument, said concrete monument with WisDOT aluminum cap having been set to mark this corner in 1988 by the City Engineer following street reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1958 by Walter L. Keil, State Highway Commission of Wisconsin Project Engineer, following street reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1943 by the Milwaukee County Highway Department following street reconstruction; replacing an iron rod set to mark this corner in 1919 by the Milwaukee County Highway Department following street reconstruction; replacing in turn an old cut limestone monument then marking this corner; that I referenced the same as shown hereon; and that this record is correct and complete to the best of my knowledge and belief.



DATE OF SURVEY: 11 JULY 1992 *Kurt W. Bauer* S - 157
 REGISTERED LAND SURVEYOR

FORM PREPARED BY SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC) 07210900 90 -
 CERTIFICATION APPLIES ONLY TO THE LOCATION SKETCH AND SURVEYOR AFFIDAVIT
 Source: SEWRPC.



**DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF ECONOMIC DEVELOPMENT
MILWAUKEE COUNTY LAND INFORMATION OFFICE**

633 West Wisconsin Avenue, Suite 903, Milwaukee, WI 53203 (414) 278-3927

MEMORANDUM

TO: Land Information Council
FROM: Kevin Bruhn, Land Information Officer
DATE: November 30, 2017

SUBJECT: Enterprise Asset Management

BACKGROUND

Cityworks was selected as the enterprise work order and asset management system for Milwaukee County. The goal is to replace existing work order systems with an enterprise wide solution. This will allow Milwaukee County the ability to manage capital assets by minimizing the total cost of owning, operating, and maintaining those assets at acceptable levels of service. It will also provide greater clarity, ease of management and the ability to perform intelligent and cost effective inspections, condition assessments, and reporting which may greatly assist in the capital planning process. As we are implementing this solution across the county, it will provide us with the opportunity to review current asset management and work order tracking processes and compare to industry best practices with the goal of simplifying and aligning with best practices where possible.

Cityworks has been installed within the Airport Division of the Milwaukee County Department of Transportation (MCDOT) since 2011 and is currently being implemented for the MCDOT Highway Maintenance Division. The hardware and software installation for MCDOT will provide the starting technical foundation for the Enterprise Program. The Enterprise Cityworks Project launched in August 2015 and is planning implementation for Zoo, Parks, House of Correction, Facilities, Fleet, Transit, and Economic Development by early 2018.

ACTIVITIES THIS PERIOD: 6/16 – 12/17

- Mapped over 500 Buildings from CADs, PDFs, aerials; including all floors, basements, roofs, rooms, doors, and windows
- Inventoried 5,000 rooms and 50,000 facility assets.
- 35 ArcGIS Collector apps have been created to support the collection of assets for the individual trades and County departments.
- Underground utilities have been mapped for all facilities and parks that have pools.

Attached:

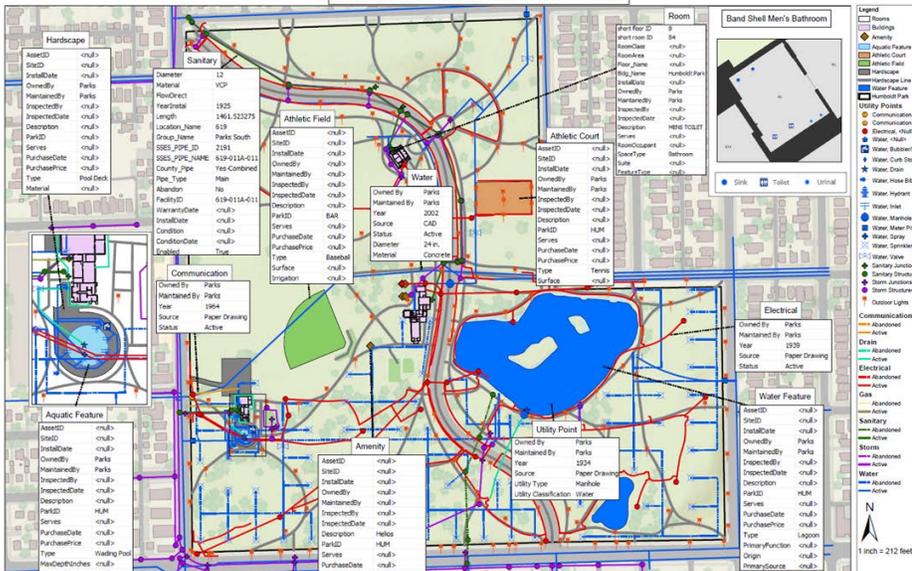
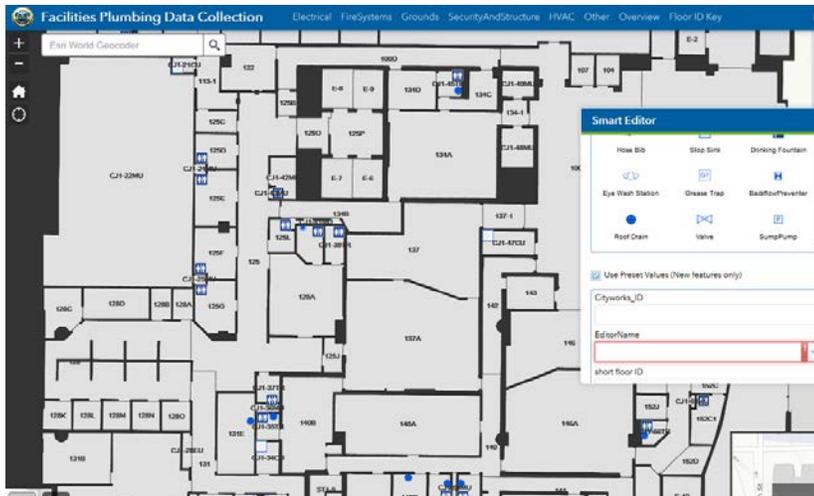
Examples of service request site, ArcGIS collector and Holmboldt Park with all assets

Create New Request - Location

On the **Request – Location** screen:

1. Select **Site**
2. Select **Building**
3. Select **Floor**
4. Select **Room**
5. Enter **Additional Site Details**, if needed
6. Once all information is entered in form, click **Next**

*Note: Blue dot location on map will move as you choose Site, Building, etc.





**DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF ECONOMIC DEVELOPMENT
MILWAUKEE COUNTY LAND INFORMATION OFFICE**

633 West Wisconsin Avenue, Suite 903, Milwaukee, WI 53203 (414) 278-3927

MEMORANDUM

TO: Land Information Council
FROM: Kevin Bruhn, Land Information Officer
DATE: November 30, 2017
SUBJECT: Raster Data Transformation to New Datum

BACKGROUND

This project is to move or migrate the GIS raster data to the new datum. The Land Information Office currently has 47 raster datasets. The LIO will transform the datasets into NAD 83 and then create services in NAD 1927 and NAD 1983. The LIO will continue to host both service sets of rasters for a transitional time so municipalities and other vendors have time to migrate to the new datum.

ACTIVITIES THIS PERIOD: 6/17 – 12/17

- The 2015, 2013 and 2010 flights are complete and the 2005 is currently being processed.
- The rest of the historical imagery from 1928 to 2000 (low resolution) will be transformed as seamless datasets.
- The LIO has started to transform the vector data with the same process as the raster datasets

NEXT

- The LIO will transform the vector data after the raster data has been completed.



**DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF ECONOMIC DEVELOPMENT
MILWAUKEE COUNTY LAND INFORMATION OFFICE**

633 West Wisconsin Avenue, Suite 903, Milwaukee, WI 53203 (414) 278-3927

MEMORANDUM

TO: Land Information Council
FROM: Kevin Bruhn, Land Information Officer
DATE: November 30, 2017
SUBJECT: Sanborn Fire Insurance Map Georectification

BACKGROUND

This is a new effort for the LIO. The Land Information Office has started a pilot project to gauge the interest and usefulness of georectifying a high resolution set of Sanborn Fire Insurance maps. There has been a regional interest in the ability to research the history of a specific property. The need to understand if the property has ever housed or produced hazardous materials for environmental reporting and remediation. These maps are used for various needs from basic historical research to Phase 1 Environmental Assessments. The LIO will create a publically available data service from the georeferenced images of the 1910 collection of Sanborn maps.

ACTIVITIES THIS PERIOD: 6/17 – 12/17

- The LIO has georectified all 919 tiles included the 8 volumes of images.
- A web service has been created to display this data.
- A [swipe application](#) has been created to show changes.
- The LIO acquired the high resolution scans of the 1894 collection of Sanborn maps from the American Geographic Societal Library at the University of Wisconsin Milwaukee.

NEXT

- The LIO will georectify the 1894 Sanborn maps in 2018.

COUNTY OF MILWAUKEE

INTEROFFICE COMMUNICATION

DATE: January 14, 2016

TO: Supervisor Theodore Lipscomb, Chair, Board of Supervisors

FROM: James Tarantino, Economic Development Director, Department of Administrative Services

SUBJECT: Land Information Council Creation and Appointment of Members

REQUEST

That the Milwaukee County Board of Supervisors create an advisory Land Information Council and appoints its membership.

BACKGROUND

In 1988, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) began a land records modernization study for Milwaukee County. At that time, the Milwaukee County Board of Supervisors requested that SEWRPC convene a task force to analyze the feasibility and cost effectiveness of the County developing an automated mapping and land information system. That resolution specifically requested the task force “to analyze the potential for 1) the County to utilize the City’s automated mapping (Intergraph) system, 2) the merging of the County and City’s needs into one system, and 3) the potential for creating a system that could also be shared and partially funded by utilities such as Wisconsin Energy Corporation, the Wisconsin Gas Company, Wisconsin Bell and other private businesses.” (File #88-379)

The SEWRPC study was a success in the sense that Milwaukee County has managed a land records modernization program that meets the needs of its constituents and is recognized throughout the State as a leading implementer of Geographic Information Systems (GIS). The GIS became known as the Milwaukee County Automated Mapping and Land Information System (MCAMLIS), and the Task Force that was formed to guide the initial study has continued operating in an advisory capacity and has taken the MCAMLIS name. The Land Information Office that currently operates under the Department of Administrative Services in the Economic Development Division has managed Milwaukee County’s GIS, which has become synonymous with the MCAMLIS task force.

Since the formation of MCAMLIS, awareness of the importance and potential application of GIS has grown in the public sector. In May 2010, the State of Wisconsin enacted SB-507 (2009 Wisconsin Act 314) which requires that counties with a land information office also establish a land information council. The Statute reads –

“59.72 (3m) LAND INFORMATION COUNCIL.

(a) If the board has established a land information office under sub. (3), the board shall have a land information council consisting of not less than 8 members. The council shall consist of the register of deeds, the treasurer, and, if one has been appointed, the real property lister or their designees and the following members appointed by the board for terms prescribed by the board:

1. A member of the board.
2. A representative of the land information office.
3. A realtor or a member of the Realtors Association employed within the county.
4. A public safety or emergency communications representative employed within the county.
- 4m. The county surveyor or a professional land surveyor employed within the county.
5. Any other members of the board or public that the board designates. (am) Notwithstanding par. (a), if no person is willing to serve under par. (a) 3., 4., or 4m., the board may create or maintain the council without the member designated under par. (a) 3., 4., or 4m.
(b) The land information council shall review the priorities, needs, policies, and expenditures of a land information office established by the board under sub. (3) and advise the county on matters affecting the land information office.” [[Wis. Stat. § 59.72 \(3m\)](#)]

Milwaukee County’s Land Information Office is also required to submit a countywide plan for land records modernization to the State Department of Administration under Wis. Stat. § 16.967(3)(e). The intent of the Land Information Office is to submit this plan with a demonstration of compliance with the Land Information Council statutory requirement, and as such is requesting that the Milwaukee County Board of Supervisors create and appoint a Land Information Council (LIC). The statute was written to apply to all counties in the State and as such has allowed for some flexibility in the appointment of the LIC members. In that Milwaukee County does not have a real property currently under employment, and that the current MCAMLIS task force includes a robust selection of members additional to the statutory requirement, that member position is not included in this recommendation. The Land Information Office recommends the following members to serve on the initial LIC –

MEMBER	APPOINTEE
Milwaukee County Board of Supervisors	Sup. Jason Haas
Land Information Office	Kevin Bruhn
County Treasurer	David Cullen
Office of Emergency Management	Christine Westrich
County Surveyor	Robert Merry (existing MCAMLIS member)
Milwaukee County Register of Deeds	John LaFave (existing MCAMLIS member)
City of Milwaukee Chief Information Officer	Nancy Olson (existing MCAMLIS member)
Metropolitan Milwaukee Sewerage District GIS	Emily Champagne (existing MCAMLIS member)
Intergovernmental Coordinating Council	Doug Seymour (existing MCAMLIS member)
Department of Administrative Services	Greg High (existing MCAMLIS member)
We Energies	Dawn Neuy – Manager, EDAM Support, (existing MCAMLIS member)

Importantly, this list of appointees includes substantially similar membership to the current MCAMLIS task force which will ensure continuity of services and promoting positive intergovernmental relations. It is advised that the initial appointees of the LIC serve two year terms and are enabled to assign designees to attend LIC meetings and act on their behalf.

This Board action which would create the LIC and its membership would also effectively replace the current MCAMLIS task force. The Land Information Office will make every effort to simplify and manage this transition process.

RECOMMENDATION

In order to achieve compliance with Wis. Stat. § 59.72 (3m), it is recommended that Milwaukee County create a Land Information Council and appoint its inaugural members as listed above.

James Tarantino

Economic Development Director, Department of Administrative Services

cc: Chris Abele, County Executive
Sup. Jason Haas, Chair, Intergovernmental Relations Committee
Intergovernmental Relations Committee Members
Teig Whaley-Smith, Director, Department of Administrative Services
Raisa Koltun, Chief of Staff, Office of the County Executive
Kelly Bablitch, Chief of Staff, County Board of Supervisors
Steve Cady, Research & Policy Director
Allyson Smith, Committee Coordinator
Kevin Bruhn, GIS Manager
David Cullen, County Treasurer
Christine Westrich, Director, Office of Emergency Management
John LaFave, Register of Deeds
Greg High, Director, Architecture and Engineering

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(ITEM) From the Director of Economic Development, Department of Administrative Services, requesting the creation of a Land Information Council and appointment of its members, replacing the Milwaukee County Automated Mapping and Land Information System Task Force, by recommending adoption of the following:

A RESOLUTION

WHEREAS, Milwaukee County (the County) has created a land information office, organized within the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) section, Economic Development Division, Department of Administrative Services, that is advised by a taskforce created by File No. 88-379; and

WHEREAS, this taskforce is known as the MCAMLIS Task Force and is charged with overseeing the implementation of the County’s land records modernization plan; and

WHEREAS, the land information office is directed by Section 59.72(2), Wisconsin Statutes to “coordinate land information projects within the county, between the county and local governmental units, between the state and local governmental units and among local governmental units, the federal government, and the private sector;” and

WHEREAS, under Section 59.72(3m), Wisconsin Statutes, any county with a land information office must establish a Land Information Council that is comprised of at least eight members, including the Register of Deeds, the County Treasurer, the real property lister if one has been appointed, or their designees, and the following members appointed by the Milwaukee County Board of Supervisors (County Board) for terms determined by the County Board: a member of the County Board, a representative of the land information office, a realtor or a member of the Realtors Association, a public safety or emergency communications representative employed within the County, the county surveyor, and any other members that the County Board dictates; and

WHEREAS, the Land Information Council is to “review the priorities, needs, policies, and expenditures of a land information office established by the board and advise the county on matters affecting” the land information office per Section 59.72(3m), Wisconsin Statutes; and

WHEREAS, the current MCAMLIS steering committee has been operating since 1988 and includes representation from some of the statutorily required members and also the Milwaukee Metropolitan Sewerage District, the Intergovernmental Coordinating Council, the City of Milwaukee, We Energies, and the Department of Administrative Services (DAS); and

47 WHEREAS, in order to comply with Section 59.72(3m), Wisconsin Statutes,
 48 County Board action to create a Land Information Council and appointment of its
 49 members is needed, whose members are to include:
 50

MEMBER	APPOINTEE
Milwaukee County Board of Supervisors	Supervisor Jason Haas
Land Information Office	Kevin Bruhn
County Treasurer	David Cullen
Office of Emergency Management	Christine Westrich
County Surveyor	Robert Merry (existing MCAMLIS member)
Milwaukee County Register of Deeds	John LaFave (existing MCAMLIS member)
City of Milwaukee Chief Information Officer	Nancy Olson (existing MCAMLIS member)
Milwaukee Metropolitan Sewerage District Geographic Information Systems	Emily Champagne (existing MCAMLIS member)
Intergovernmental Coordinating Council	Doug Seymour (existing MCAMLIS member)
Department of Administrative Services	Greg High (existing MCAMLIS member)
We Energies	Dawn Neuy – Manager, EDAM Support, (existing MCAMLIS member)

51
 52 ;and

53
 54 WHEREAS, the above listed members are enabled to appoint their designees as
 55 members of the Land Information Council; and

56
 57 WHEREAS, the term of appointment shall be for two years commencing on the
 58 date of this Resolution; and

59
 60 WHEREAS, the creation of a Land Information Council effectively replaces the
 61 MCAMLIS Task Force and DAS is hereby directed to use the term “Land Information
 62 Council” with reference to this advisory committee wherever practical; and

63
 64 WHEREAS, the Committee on Economic and Community Development, at its
 65 meeting of March 7, 2016, recommended adoption of the Director’s request (vote 4-0);
 66 now, therefore,

67
 68 BE IT RESOLVED, Milwaukee County hereby creates a Land Information
 69 Council and appoints its inaugural members; and

70
 71 BE IT FURTHER RESOLVED, the County Executive and the County Clerk
 72 and/or other appropriate County officials are hereby authorized to execute, after
 73 Corporation Counsel approval, any and all instruments, required to implement the intent
 74 of this resolution.

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srb
03/07/16
U:\Committees\2016\Mar\ECD\Resolutions\16-104 Land Info Council.docx