



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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: FILE FILE FILE
Milwaukee County Automated Mapping and Land Information System
2711 W. Wells St.
City Campus - Rm 426
Milwaukee, WI. 53208

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MCAMLIS 96th Steering Committee Meeting Materials

Enclosed please find a set of materials that the steering committee will take up at its scheduled March 18th Meeting.

- I. Meeting Agenda
- II. Special Order of Business – Introduction of new members
- III. Meeting Minutes of the 95th Steering Committee meeting held March 18th, 2014 (to be distributed at the meeting)
- IV. Reports
 - A. **2014 Work Plan Status**
 1. Report materials related to Interactive Map Viewer
 2. Report materials related to Interactive Mobile technology
 3. Report materials related to Interactive Collaboration
 4. Report materials related to Interactive Website
 5. Report materials related to Interactive Data
 - B. **Maintain Core Foundational Elements**
 1. NA
 - C. **Promote the Integration of Parcel Based Land Information**
 1. Report materials related to the status of MCAMLIS street address and Cadastral map maintenance operations.
 - D. **Educational Outreach**
 1. Report materials related to the status of work performed on behalf of MCAMLIS in support of local community GIS efforts

- D. **Countywide Initiatives**
 - 1. Report materials related to the status of work performed regarding Countywide Program Initiatives
- E. **Fiscal**
 - 1. Report materials related to the MCAMLIS Program 2014 Current Year Fiscal status
- IV. Old Business
 - A. Report materials regarding status of the State of Wisconsin efforts to develop a Statewide Parcel Map as part of Act 20 initiatives related to the Wisconsin Land Information Program (WLIP);
 - B. Report materials related to the 2015 Regional Orthophotography Project
- V. New Business
 - A. Staff report & recommendation regarding 2015 MCAMLIS Orthophotography Project
 - B. Staff report & recommendation regarding the SE Wisconsin 2015 LiDAR Elevation Project
 - C. Report materials regarding the 2015-2019 Surveyor Cost recovery Plan
- VII. Correspondence
 - A. NA

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**MILWAUKEE COUNTY AUTOMATED MAPPING
AND LAND INFORMATION SYSTEM**

Ninety-Sixth Steering Committee Meeting

AGENDA

Date: September 23rd, 2014
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD Hdqtrs, Room 401
260 W Seeboth St.
Milwaukee, WI. 53204

- I. Roll Call
- II. Introduction of New Committee Members
- III. Meeting Minutes
Consideration of the minutes of the 95th Steering Committee meeting held
March 18th, 2014
- IV. Reports
 - A. **2014 Work Plan Status**
 - 1. Interactive Map Viewer
 - VWR.01 – Improve the MCLIO Interactive Mapping Service
 - VWR.02 – Implement MCAMLIS Data Extract Service
 - 2. Mobile Technology
 - MBL.01 – Deploy Mobile Property Locator
 - 3. Collaboration
 - COL.01 – Education and Training
 - COL.02 – MCAMLIS Business Planning
 - 4. Website
 - MOL.01 – MCAMLIS on-line Presence
 - 5. Data
 - DAT.01.1 – Historical Aerial Photo Collection
 - DAT.02.1 – Planimetric Polygon Maintenance
 - B. **Maintain Core Foundational Elements**
 - 1. NA

C. Promote the Integration of Parcel Based Land Information

1. Report by Milwaukee County Register of Deeds staff on MCAMLIS street address and cadastral map maintenance operations; and
2. Report by City of Milwaukee staff on MCAMLIS street address and cadastral map maintenance operations.

D. Educational Outreach

1. Report by MCAMLIS Staff on the status of work performance on behalf of MCAMLIS in support of local community GIS efforts.

E. Countywide Initiatives

1. Report by MCAMLIS Staff regarding Countywide Initiatives and program activity status.

F. Financial

Report by Milwaukee County DAS staff on MCAMLIS Fiscal status

V. Old Business

- A. Report by MCAMLIS Staff regarding status of the State of Wisconsin efforts to develop a Statewide Parcel Map as part of Act 20 initiatives related to the Wisconsin Land Information Program (WLIP);
- B. Report by MCAMLIS Staff regarding status of the 2015 Regional Orthophotography Project

VI. New Business

- A. MCAMLIS staff recommendation regarding the 2015 MCAMLIS Orthophotography Project for consideration by the MCAMLIS Steering Committee
- B. MCAMLIS staff report & recommendation regarding the SE Wisconsin 2015 LiDAR Elevation Data Project
- C. MCAMLIS staff report regarding the 2015-2019 Surveyor Cost Recovery Plan

VII. Correspondence

VIII. Date, time, and place of next meeting

IX. Adjournment



OAKCREEK
— WISCONSIN —

OFFICE OF
THE MAYOR

August 15, 2014

Don Nehmer, Chairman of the MCAMLIS Steering Committee,
Milwaukee Metropolitan Sewerage District
260 W. Seeboth St.
Milwaukee, WI. 53204-1446

Re: MCAMLIS Steering Committee Appointment

Dear Mr. Nehmer:

As Chairperson of the Milwaukee County Intergovernmental Cooperation Council (ICC) it is my privilege to appoint a member to the MCAMLIS steering committee to represent the 18 suburban communities within the County.

I am appointing Doug Seymour, Director of Community Development for the City of Oak Creek to represent the ICC on this steering committee. Mr. Seymour has extensive knowledge and experience dealing with development and geographic information issues common to our suburban communities and will make an excellent addition to the steering committee.

Sincerely,

Steve Scaffidi
Mayor

Don Nehmer, Chairman of the MCAMLIS Steering Committee,
Milwaukee Metropolitan Sewerage District
260 W. Seeboth St.
Milwaukee, WI. 53204 – 1446

September 4, 2014

Dear Mr. Nehmer:

As director of the Milwaukee County Department of Administrative Services it is my privilege to appoint Ms. Erica Horton, Budget Analyst to replace Mr. Dan Laurila to the MCAMLIS Steering Committee to represent Milwaukee County fiscal interests on the committee.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Tyler", with a long horizontal flourish extending to the right.

Don Tyler, Director

Milwaukee County Department of administrative Services

MINUTES OF THE 95th MEETING
MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM
STEERING COMMITTEE

Date: March 18th 2014
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD Hdqtrs
260 W Seeboth St.
Milwaukee, WI. 53204

Members Present

Donald R. Nehmer, Chair	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
Greg High	Director, Architecture, Engineering and Environmental Services Division, representing Milwaukee County Department of Administrative Services Facilities Management
Dana Kahle	GIS Supervisor, representing Timothy Marquardt, Manager - EDAM Support, We Energies
Dan Laurila	Fiscal Analyst, Milwaukee County DAS, representing Don Tyler, Director of Milwaukee County Department of Administrative Services
Nancy Olson, Vice Chair	Chief Information Officer, City of Milwaukee
John La Fave	LIO, Milwaukee County Register of Deeds
John Bennett	City Engineer, City of Franklin representing the Intergovernmental Coordinating Council of Milwaukee County

Members Absent

Kurt W. Bauer	Milwaukee County Surveyor
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Guest and Staff Present

William C. Shaw	MCAMLIS Project Manager, Milwaukee County DAS/ECD-MCAMLIS
Brad Blumer	GIS Specialist, Milwaukee County DAS/ECD-MCAMLIS
Katheen Bach	GIS Analyst, Milwaukee County Register of Deeds
Pamela Booth	GIS Developer – Project Lead, City of Milwaukee, ITMD
Tammy Bronson	GIS Analyst, City of Milwaukee, ITMD
Marcia Cornell	Civil Engineer - Senior, City of Milwaukee, DPW
Hardy Miehsner	Consultant, Spatial Data Systems

I. ROLL CALL

Chairman Nehmer, called the Ninety-Forth meeting of the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee to order at 9:00a.m. Roll Call was taken by circulating an attendance signature sheet and a quorum was declared present.

II. SPECIAL ORDER OF BUSINESS

ELECTION OF 2014 MCAMLIS STEERING COMMITTEE OFFICERS

Nehmer: stated that there is a recommendation from the nominating committee included in the packet of materials and asked for a motion or if there were any further nominations for the positions of Chair and Vice-Chair.

Laurila: stated that he and Mr. High had met and were hereby recommending that the current MCAMLIS Steering Committee officers – Don Nehmer, Chair and Nancy Olson, Vice Chair be nominated for the new term. Further stating that Milwaukee County continues in the un-elected capacity of Secretary

Motion: Laurila, moved approval of the Nomination Committee recommendation to nominate Don Nehmer, Chair and Nancy Olson Vice Chair

Second: Bennett

Nehmer: stated that there was a motion and a second and asked if there were any discussion or any other nominations

Motion: Bennett, moved that nominations be closed

Second: Kahle, motion carried unanimously

Nehmer: stated that nominations and discussion was closed and asked the committee to vote on the original motion to accept the recommendation of the nominating committee

Motion carried unanimously

III. MEETING MINUTES

CONSIDERATION OF THE MINUTES OF THE 94TH STEERING COMMITTEE MEETING HELD DECEMBER 3RD, 2013

Nehmer: stated that a copy of the minutes was provided with the meeting materials and asked if any corrections or changes are required.

Motion: Lafave moved approval of the minutes as written

Second: Bennett, motion carried unanimously

IV. REPORTS

A. MAINTAIN CORE FOUNDATIONAL ELEMENTS

- 1. REPORT BY MCAMLIS STAFF ON THE STATUS OF THE 2012/2013 ORTHOPHOTOGRAPHY/OBLIQUE IMAGERY PROGRAM**

Shaw: directed the Committee to the report included with the meeting materials and that the status of the project remains as reported at the Committee's previous meeting. He further noted that the orthophotography has been received and posted to the MCLIO website.

Shaw: continued his report describing that subsequent to distributing the imagery that positional inaccuracies were discovered regarding elevated road decks and overpasses. Pictometry was notified and located an error in their procedures and agreed to recompile and deliver the imagery meeting our positional accuracy requirements. He further stated that staff had notified anyone who had received a copy of the original data and had developed procedures to redistribute the corrected data to whomever required the more accurate imagery.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file

2. REPORT BY MCAMLIS STAFF ON THE STATUS OF THE 2010 PLANIMETRIC UPDATE PROGRAM

Shaw: directed the Committee to the report included with the meeting materials. He stated that delivery is complete for all of 22 areas as included on the status exhibit included with the materials. All project deliveries have been completed. Mr. Shaw noted that in addition to the completion of updates to selected areas containing planimetric features and the delivery of polygonal features representing travelled right of way, bridges and buildings across the county that a pilot area was used to test the contractor's ability to complete the production of discrete polygons for additional features e.g., paved/unpaved driveways, paved/unpaved road shoulders, surface parking and sidewalks. Shaw further stated that all the MCAMLIS partners have been notified that the planimetric feature data is available and an on-line distribution method was being used for those who required the data for local use – 9 partners have requested and received the data prior to generating this report.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file

B. PROMOTE THE INTEGRATION OF PARCEL BASED LAND INFORMATION

1. REPORT BY MILWAUKEE COUNTY REGISTER OF DEEDS STAFF ON MCAMLIS STREET ADDRESS AND CADASTRAL MAP MAINTENANCE OPERATIONS

Bach: directed the Committee to the report included with the meeting materials.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

2. REPORT BY CITY OF MILWAUKEE STAFF ON MCAMLIS STREET ADDRESS AND CADASTRAL MAP MAINTENANCE OPERATIONS

Bronson: directed the Committee to the report included with the meeting materials.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

C. EDUCATIONAL OUTREACH

1. REPORT BY MCAMLIS STAFF ON THE STATUS OF WORK PERFORMANCE ON BEHALF OF MCAMLIS IN SUPPORT OF LOCAL COMMUNITY GIS EFFORTS

Shaw: directed the Committee to the report included with the meeting materials, noting that staff had recently presented at the WLIA Annual Conference in Middleton. Mr. Shaw invited the Committee to refer to a number of related exhibits included in the materials and answered a questions. Mr. Shaw noted that staff had facilitated the 8th meeting of the Milwaukee Municipal GIS Users Group (MMGUG) held on 1/14/14 at the MMSD Headquarters and noted that the next meeting is scheduled to be held at the City of Cudahy 4/8/2014.

Shaw: continued with an explanation of a MCLIO website Dashboard Report Exhibit noting a prediction of nearly 6 million operations fell short in 2013 and ended up being 5.75 million operations logged on the website through the end of the year – which maintains a trend of adding nearly 1 million operations each year dating back to 2009. He further reported continued maintenance of the website to include new materials and data. Further noting the quarterly update of Sheriff Sale Foreclosure’s occurring countywide.

Shaw: reported that staff continues to work with the City of Cudahy regarding a request to support their asset management initiative using MCAMLIS on-line services in combination with Asset Management software produced by Cartegraph.

Olson: asked what level of effort was involved with developing the capabilities required to support Cudahy’s project.

Shaw: replied that initially the level of effort was expected to be minimal. The effort was initially confined to loading Cudahy’s databases and enabling the feature services required to allow the Cartegraph and ESRI’s Desktop to consume and edit features contained e.g., signs, water valves etc.. He noted that problems with the data itself were encountered and the database elements had to be reformulated to become fully compatible within the Cartegraph cloud based system. He further stated that staff effort was roughly a full 2 weeks overall.

Olson: asked how this project tied into the Five-Year Workplan

Shaw: replied that the Five-Year Workplan included projects that broadly support community project efforts that make use of MCAMLIS services similar to the Cudahy project. He further added that the Cudahy project was not specifically included in the plan although the Cudahy work was initiated prior to enacting to plan and that the

project work has essentially completed with the expectation of supplying Cudahy minimal operational support going forward.

Olson: inquired as to whether there was a concern that this type of effort by MCAMLIS staff could mushroom into a larger resource commitment

Shaw: replied that at the present time it was not a concern although he could see where this may become larger if multiple communities became involved. He added that he saw this project as more of a test bed for staff to become familiar with cloud based services and that adding another community e.g., Hales Corners or Greendale would not entail a large effort as long as the parameters remained the same or similar.

Olson: voiced concern regarding the long-term commitment to supply hosted services e.g., Cudahy and that the Committee should be made more aware of what was involved in order to make an informed decision going forward.

Nehmer: noted that one of the tasks included in the 2014 Workplan included an effort to establish a policy and procedure for purposes of evaluating projects that would be considered by the Committee for approval in the future

Olson: questioned what may be involved with developing a Service level Agreement (SLA). Noting that an effort with Rukert & Mielke was mentioned in the report materials

Shaw: replied that this was preliminary and that discussion was proceeding with Rukert & Mielke in hopes that the draft SLA agreement language would assist further policy development as in the project that Mr. Nehmer had referred

Committee: discussion between Mr. Nehmer, Ms. Olson and Mr. Shaw concluded with a suggestion by Mr. Nehmer that perhaps a sub-committee and possibly other resources may need to be formed to further develop the details around this topic.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

D. COUNTYWIDE INITIATIVES

1. REPORT BY MCAMLIS STAFF REGARDING 2013 COUNTYWIDE INITIATIVES AND PROGRAM ACTIVITY STATUS

Shaw: directed the Committee to the report included with the meeting materials. Noting the deployment of the 4th Quarter consolidated City of Milwaukee and County Cadastral Data and the growing importance of address information and related accomplishments e.g., Historical Aerial photo, street centerline, plat of survey and Community Basemap Projects among others.

Bennett: commented that having the historical aerial data available was very useful in determining zoning issues and that he looked forward to having access to the 1937 imagery among other years e.g., 1963

Shaw: continued, relaying progress on non-project related efforts e.g., websites enhancements and migration to new technologies, most notably HTML5, Silverlight and promoting Pictometry Connect.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

2. REPORT BY THE MILWAUKEE COUNTY SURVEYOR REGARDING 2013 SURVEYOR ACTIVITY STATUS

Shaw: in the absence of Mr. Bauer, the County Surveyor gave the report referring the Committee to 2013 Surveyor Activity Status included with the meeting materials. Further noting the accomplishments included in the report and making specific mention that the County's procurement policy regarding DBE requirements were met and exceeded in the commission of the Surveyor's contract with MCAMLIS.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

E. REPORT BY MILWAUKEE COUNTY DAS STAFF ON MCAMLIS FISCAL STATUS

Laurila: directed the Committee to the fiscal report supplement provided to the Committee at the meeting. He briefly summarized the contents of the report for the Committee stating that the EOY 2013 fiscal report reflected current balances. In summary, revenues in 2013 were down along with expenditures resulting in a surplus of \$114,000 and leaving a \$1.6 million balance in the MCAMLIS Trust account. Further stating that in 2014 based on budgeted project expenditures and revenue estimates that \$326,000 will have to be transferred out of the MCAMLIS Trust leaving a projected balance of \$1.3 million EOY 2014 into 2015.

Committee: discussed the projected 2014 budgeted deficit of \$326,000 and how that may impact the MCAMLIS Trust account. Mr. Laurila recommended that the MCAMLIS Trust should not be taken below \$1 Million - \$750,000. Mr. Nehmer questioned this amount and submitted that there were two dynamics leading to the projection 1) the 2013 surplus was due to a limited amount of project work and that the 2014 budget now includes \$260,000 in project work and 2) revenues are down with operational costs now more closely match MCAMLIS revenue. Mr. Shaw noted that at least a portion of the growth in the MCAMLIS Trust fund was due in part to the policy of the Steering Committee holding back 10% of operating revenues - this practice has had the effect of rolling the Reserve into the next years Unrestricted balance component of the MCAMLIS Trust.

Nehmer: requested that MCAMLIS and fiscal staff prepare an analysis of the revenue and trust and make a recommendation to the Steering Committee at the next meeting.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

V. OLD BUSINESS

A. REPORT BY MCAMLIS STAFF REGARDING STATUS OF THE STATE OF WISCONSIN EFFORTS TO DEVELOP A STATEWIDE PARCEL MAP AS PART OF ACT 20 INITIATIVES RELATED TO THE WISCONSIN LAND INFORMATION PROGRAM (WLIP)

Shaw: directed the Committee to the report items included with the meeting materials. The materials included coordinated responses to the State Department of Administration by both the Land Information Officers Network (LION) and the Wisconsin Geospatial Coordinating Council (WIGICC) requesting more clarity by the state in regard to the proposed Statewide Parcel Project. Mr. Shaw noted that the MCAMLIS Steering Committee had voted to not endorse this project because it was not well defined and would essentially commit Milwaukee County funds to the State without a clear understanding of how the funds would be used.

Committee: discussed the new funding mechanism that would be in place at the beginning of 2015 and thanked staff for keeping the Committee informed regarding the States parcel program.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

VI. NEW BUSINESS

A. REPORT BY MCAMLIS STAFF REGARDING STATUS OF THE 2015 REGIONAL ORTHOPHOTOGRAPHY PROJECT;

Shaw: directed the Committee to the report items included with the meeting materials. He noted that the materials include an RFP prepared by SEWRPC staff that is currently published and waiting for responses from two vendors – Quantum Spatial and Pictometry through next month. He further enumerated the various products that would be collected and the options that Milwaukee County would likely want to consider.

Committee: discussed the possibility of having both Pictometry and Quantum Spatial orthophotography products certified by SEWRPC staff and questioned whether there would be an opportunity to select Pictometry even if the Commission evaluated the RFP and selected Quantum. Mr. Shaw replied that SEWRPC would not restrict the choices of the LIO's insofar as the Commission's basic planning requirements would be met. Mr. Bennett added that the ICC has made it known to him that their desire would be to select Pictometry. Mr. Shaw stated that he did not see an issue with selecting Pictometry since that would align with Milwaukee's previous choices and based on his understanding of the SEWRPC staff venter certification process this would be possible.

Mr. High inquired about the opportunity to acquire LiDAR and whether it mattered from which vendor. Mr. Shaw replied that LiDAR acquisition would be determined separately and that whichever vendor provided this data meeting the specification and having the least cost would be the probable choice. Mr. Bennett inquired regarding whether there would be a possibility to acquire 3" resolution versus 6" resolution orthophotography. Mr. Shaw confirmed that would be an option and that a 3" selection by the Committee would be a matter of the cost and value. Mr. Nehmer asked when a decision would be required. Mr. Shaw stated that a Committee decision could be made as late as the 1st quarter of 2015 although preferably it could be settled much sooner – possibly at the Committee's Fall or December meeting. Mr. Bennett asked when the photography would be available. Mr. Shaw stated that it would possibly be available in September of 2015 for a 2015 spring flight.

Nehmer: stated for the minutes that the report was accepted by consensus and is to be placed on file.

III. CORRESPONDENCE

NA

IV. DATE, TIME, AND PLACE OF NEXT MEETING

Mr. Nehmer opened the discussion of the next meeting by offering that the normal Summer meeting may be postponed into the Fall but a decision to delay the meeting would be contingent on the need to meet and discuss a possible MCAMLIS fiscal situation if one arose. Suggesting that the Summer meeting, if held, would be focused solely on fiscal issues and asked MCAMLIS staff to report if there would be need to meet to consider any unforeseen fiscal situation in June if necessary.

June 24th, 2014 @ 9:00 am, MMSD (if required)

Secretary's Note: MCAMLIS Staff reported to the MCAMLIS Chair that revenue was meeting minimal expectations and that cancellation of the June Meeting was advised. Meeting cancellation notices were sent on May, 28th, 2014

September 23rd, 2014 @ 9:00 am, MMSD (next regular meeting)

V. ADJOURNMENT

Motion: Olson, moved to adjourn

Second: Bennett, motion carried unanimously



Respectfully submitted,
William Shaw



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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: INTERACTIVE MAPPING & DATA EXTRACT SERVICES

BACKGROUND

This work effort will deploy multiple improvements to the MCLIO Interactive Mapping and Data Extract services. The new viewer will offer improved responsiveness (timeliness of data rendering and tool functions), accessibility (map printing, Pictometry, CSM retrieval), usability (GUI), and availability of data.

Specific improvements include the following: improved usability and GUI experience; faster response times; enhanced search capabilities – locate by feature, address or intersection; data extraction service – ability to clip and ship data sets for a defined geographic location; support services and documentation on how to run certain functions such as CSM, Plats of Survey, and document retrieval; online user guide and training materials.

The viewer will provide access to the Pictometry viewer via a web service (Pictometry Online). Users will also have access to Pictometry Online (POL) as a stand-alone viewer. In addition to supplying the plug-in or web service, MCAMLIS will offer information on the availability of these tools and training on how to use them.

The viewer extract service will allow them to select one or more MCAMLIS reference data layers to be extracted for a user-specified geographic area, which will result in downloadable datasets in one of a predetermined set of data formats e.g., AutoCAD (.dxf or .dwg) and MicroStation (.dgn) formats.

DELIVERABLES

- Geocortex Silverlight Viewer
- Online Viewer-specific user guide and training materials.
- Provide MCLIO web viewer training.
- Acquire and deploy Pictometry Desktop Plug-in Extensions.
- Pictometry Desktop Plug-in Training and documentation on tool use.

- Operational data extract service for Milwaukee County Reference Data available on the MCLIO interactive mapping service for partner access.
- Documentation / how-to materials for applying the data extract service.

PROJECT SPECIFICATIONS

VWR.01 & 02– Improve the MCLIO Interactive Mapping & Data Extract Services

- Adopt new web viewer architectures utilizing Silverlight and HTML based technology. The current version of the GeoCortex Silverlight Viewer replaces to be released for both public and secure access.
- Pictometry Viewer integration
- Extract Utility Workflow development integrated within the new Silverlight & HTML Viewers

STATUS:

The long awaited Silverlight Viewer replacement has arrived and is in production. Feedback on the new viewer has been minimal although generally positive. Some functionality needs further development before achieving 100% parity with the 'Legacy' Viewer e.g., CSM, Subdivision search and a few others.

The 'Legacy' Viewer remains in production and continues to be utilized at about half the traffic volume that was typical prior to launching its replacement Viewer. There are no current plans to abandon this Viewer but as we approach 100% functional parity later this year there will be no reason to continue its support and we will plan to fully deprecate at that time.

Work is progressing on the 'Extract' Services functionality and we are optimistic that this will be in place through the next quarter.

Pictometry integration is complete and associated tools and extension is published and available via the new Viewer or independently via service connections and downloads.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- MCLIO Web Silverlight Viewer deployed 6/30 (MCAMLIS Viewer Exhibit)
- Prepared and deployed Viewer specific user guide
- Deployed Pictometry Desktop Plug-in extension and documentation

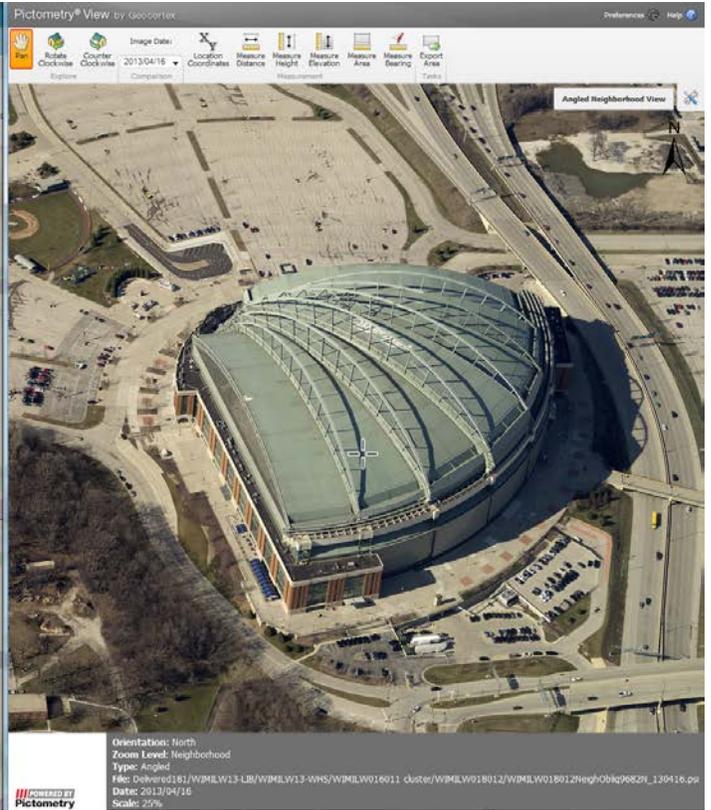
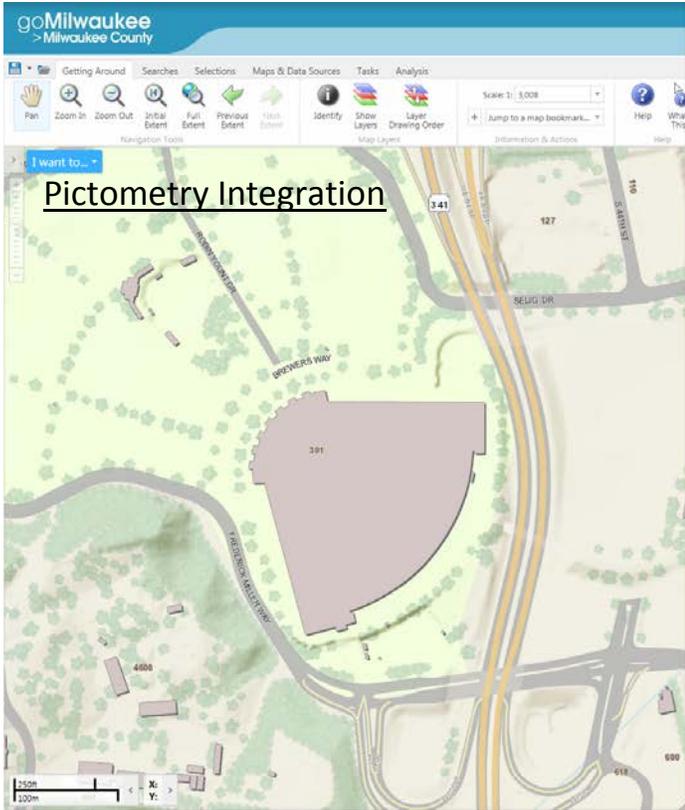
NEXT

- Continue deployment of Silverlight Viewer enhancements
- Develop and deploy Extract Utility Workflows
- Prepare and deploy help and training videos

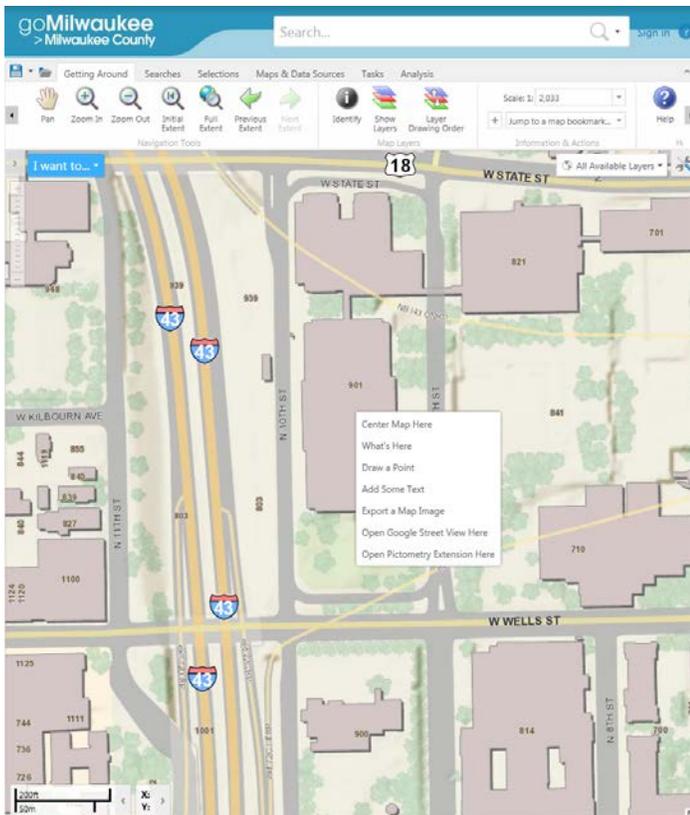
Attach: MCAMLIS Viewer Exhibits

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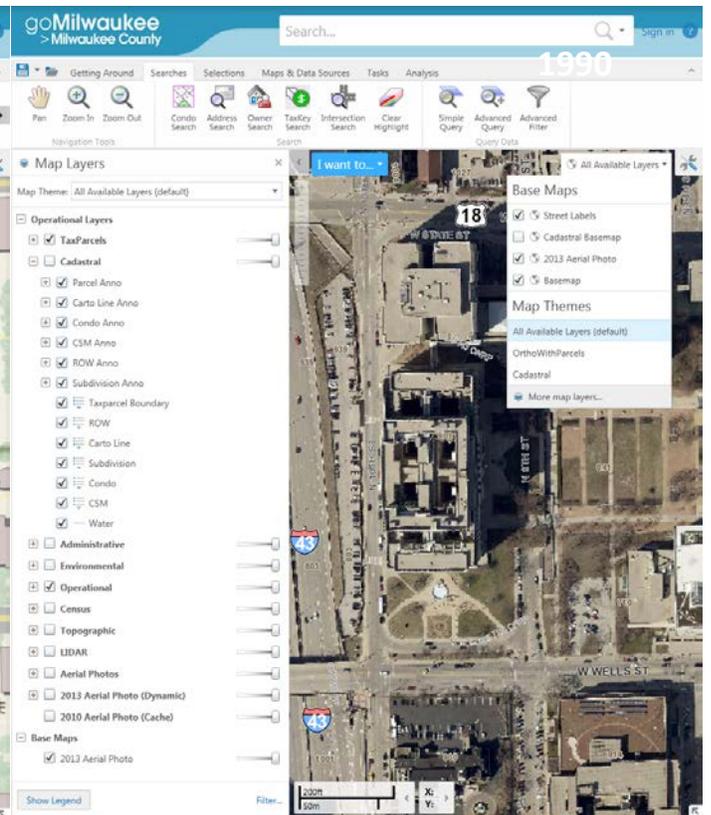
MCAMLIS Viewer



What's Here?



Basemap and Layer Selections



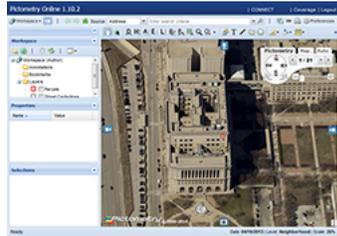
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Milwaukee County Pictometry Imagery

[LIO Home](#) | [Online Applications](#) | [Data](#) | [Maps](#) | [Announcements](#) | [Links](#) | [About](#)

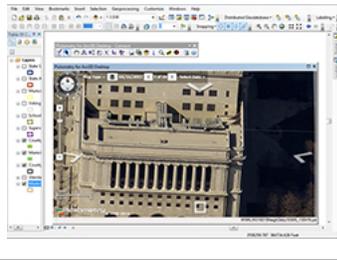
Pictometry Online Viewer



Pictometry Online (Login Required)

- [Request Access](#)

Download ArcGIS Toolbar



Pictometry Connect ArcGIS Toolbar (Login Required)

- [ArcGIS Desktop - Connect - ArcMap 10.X](#)
- [User Guide](#)
- [Release Notes](#)

Available Through [Pictometry Downloads](#)

> You will be require to log in in order to use the toolbar. <



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Community Business Development Partners

Economic Development

Introduction

Land Information Office

Announcements

Online Applications

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Commonly Requested Maps

Milwaukee Metro GIS Links

About the Land Information Office

Real Estate Services

Facilities Management

Information Management Services Division

Office for Persons with Disabilities

Procurement

Risk Management

Sustainability

Contact the Land Information Office

Submit Questions or Fee
MCLIO, Room 426, 2711
St., Milwaukee, WI 53130
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Related Sites

- [County Interactive Map](#)
- [County GIS Data](#)
- [Register of Deeds](#)
- [Real Estate Records Access](#)
- [County Land Records Portal](#)
- [Milwaukee Metro GIS Links](#)
- [Southeastern WI RPC](#)

Milwaukee Metro Geospatial Events

Sep 23 MCAMLIS Steering Committee Meeting

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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MOBILE PROPERTY LOCATOR APPLICATION

BACKGROUND

The mobile property mapping application provides organizations with the ability to view property ownership information in the field via a mobile application for phone or tablet. Core capabilities include the ability to retrieve property and owner information at or near the user's current location, or to retrieve property information based on a user-supplied address. This activity includes the development of a feature data service for parcels. The Web feature service will expose the parcel data layer for use by MCAMLIS Partners to support the acquisition of parcel data directly into desktop applications or enterprise solutions for publishing along with any partner's own business data.

DELIVERABLES

- Deploy property locator mobile application.
- Deploy mobile address retriever tool.
- Deploy online how-to materials; limited number of webinars and/or podcasts.

PROJECT SPECIFICATIONS

MBL.01, .02 – Deploy Mobile Property Locator & Feature Data Service for Parcels

- Users will be able to:
 - Query and retrieve parcel attribution and symbology,
 - Control access to features using ownership-based access control, and
 - Prevent users from editing feature geometry.
- The feature service will allow MCAMLIS to serve parcel features over the Internet, and will provide the symbology to use when displaying the features. Partners can execute queries to get features that can be used in client applications. Partners can consume feature services using either a web client (e.g., Geocortex), desktop applications (e.g., ArcGIS for Desktop), or Mobile applications.

STATUS: ████████

This project shows great potential to demonstrate opportunities for deploying mobile applications however there are many scoping concerns that need to be resolved before development can be initiated. The BNA ranked this activity high enough to be included in the 2014 Work Plan but there are no identified partner(s) who have explicitly engaged MCAMLIS to jointly explore deployment of a Property Locator Application.

Since applications of this type are not within the normal boundaries of MCAMLIS product development - pursuit of this project is currently on hold until a user/partner is solicited and a Mobile Property Locator Application can be meaningfully scoped.

In the mean time staff plans are to continue to engage partners and others to better understand mobile application and the service needs of our user community and report progress in this arena as these continue to evolve.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- Tested limited deployment of GeoCortex HTML based Parcel Viewer.
- Partially deployed Feature Data Service for parcels

NEXT

- Develop meaningful specifications and seek examples to better understand user requirements and value

* * * * *



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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: COLLABORATIVE EDUCATION AND TRAINING

BACKGROUND

This task establishes and executes an education and training program sponsored by MCAMLIS for Partners and MCAMLIS support staff, and includes two key components:

- 1) Developing and deploying a set of guidelines, criteria, and procedures for how to create online how-to materials for MCAMLIS-provided capabilities (e.g., MCLIO Viewer and the Property Locator); this will allow materials to be inventoried and searchable via the MCAMLIS portal for Just-In-Time (JIT) training.
- 2) Coordinating and executing commonly needed training or education among Partners, in the form of webinars or short in-room or virtual classroom settings focused on particular subjects that do not require full days. This will focus initially on responding to immediate needs of MCAMLIS to support current work practice.

DELIVERABLES

- Guidelines, criteria, and MCAMLIS procedures for producing and deploying online user and training how-to materials for MCAMLIS-provided capabilities and data.
- Commonly needed Partner-driven JIT Training:
 - Two to three key topic sessions (webinar-like or part of MMGUG).
 - Two to three formal training sessions (formal in-room or virtual classrooms, or may be an extended MMGUG day).
- External support on guidelines and JIT training coordination.
- Plan for training program, including costs

PROJECT SPECIFICATIONS

COL.01 – Education and Training

COLLABORATION

- Establish methods to introduce technology architectures that are new to MCAMLIS/Partners, such as feature services and mobile LBDT.
- Apply LBDT-based technologies (e.g., Geocortex Essentials, Pictometry tools, and if relevant, core applications that are based on LBDT, e.g., ProPhoenix).
- Provide consulting support services: consensus building, collaborative decision-making, and business analysis associated with these new technology architectures.

STATUS:

While the BNA identified training and education to be critical for partner success there appears to be limited consensus on how MCAMLIS can effectively address this need. For now staff efforts will concentrate on growing training opportunities organically through sponsorship of on-line training via GoTo Meeting, YouTube, promotion of training support of the ESRI Virtual Classroom and local events e.g., WGITA sponsored luncheons and MMGUG meetings.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- Included an Introduction to Python Scripting at the 10th MMGUG Meeting 7/22/2014.
- Initiated support for the 'ESRI Virtual Campus' partner training paid for by MCAMLIS
- MCLIO Newsletter and website announcements: CENSUS, FEMA, NAPSG Foundation
- MCLIO website calendar events: WGITA Asset Management & GIS
- MCLIO website

NEXT

- Promote 'ESRI Virtual Campus' offerings
- Develop criteria and guidelines featuring MCAMLIS supported services

Attach: Website Exhibits; Announcements, Calendar, ESRI Virtual Campus

* * * * *



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Sustainability

Explore Census Data Using Online Applications

August 21, 2014: The U.S. Census Bureau has released an interactive map series named Census Explorer. There are several editions that give information down to the county or census tract level, including population estimates, retail data, people, education and income, and commuting data. You can search for locations and switch between several recent census collections, as well as estimates and surveys.

[Read More...](#)

FEMA Releases Flood Map Service Center

August 19, 2014: In July FEMA released a new Flood Map Service Center Application. All flood hazard products are now available free of charge, and the former products catalog have been replaced with an integrated Search All Products feature that allows you to find and download all products for a geographic area.

[Read More...](#)

NAPSG Foundation Virtual Training: NSGIC GIS Inventory

August 29, 2014: The National Alliance for Public Safety GIS Foundation is offering virtual training regarding the National States Geographic Information Council GIS Inventory System on Wednesday, September 10th, at 11:30 a.m. (CDT).

[Read More...](#)

Two Local Organizations Receive Esri Special Achievement in GIS (SAG) Awards

July 30, 2014: We Energies and General Mitchell International Airport were honored with "Special Achievement in GIS" awards at the recent Esri International User Conference in San Diego, CA.

[Read More...](#)

Milwaukee Metro GIS User Group (MMGUG) 10 Recap

July 23, 2014: The tenth meeting of MMGUG was held at the City of Greenfield on July 22nd. Turnout was great, with over 40 attendees from about 18 organizations, a record! There were excellent presentations and lively networking.

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2015 Orthophotography Survey Results

July 21, 2014: MCAMLIS recently surveyed user preferences for the spring 2015 aerial imagery collection project. The survey gauged satisfaction and interest regarding the following types of data: Orthophotography, Oblique Photos (Pictometry), and Elevation data.

[Read More...](#)

MCAMLIS AWARDS PLANIMETRIC POLYGON PROCESSING SERVICES CONTRACT TO G.R.W. INC. OF LEXINGTON, KY

July 16, 2014: GRW has started work on the final phase of a massive project that will complete efforts to create planimetric feature polygons.

[Read More...](#)

MCAMLIS BEGINS WORK ON THE 2014 PARTNER COLLABORATION IMPROVEMENTS (COL) PROJECT

July 15, 2014: MCAMLIS recently engaged Spatial Data Solutions to assist in developing the MCAMLIS/Partner Collaboration Improvements (COL) Project.

[Read More...](#)

Page 1 of 3 [Next >>](#)

Would you like to receive e-mail updates from the Land Information Office? [Sign up for our e-mail newsletter!](#) You can typically expect to receive 1-2 messages per month from us.

Contact the Land Information Office

Submit Questions or Feedback
MCLIO, Room 426, 271
St., Milwaukee, WI 53131
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- [County Interactive Map](#)
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- [Register of Deeds](#)
- [Real Estate Records Access](#)
- [County Land Records](#)
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- [Southeastern WI RPC](#)

Milwaukee Metro Geospatial Event

Sep 23 MCAMLIS Steering Committee Meeting

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Esri Training

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ESRI Virtual Campus training is available through the Milwaukee County Land Information Office for interested parties in the Milwaukee area. The ESRI Virtual Campus training provides a high-quality learning experience using interactive exercises, examples, and instructional resources to create a rich learning environment. Web courses teach a variety of topics related to ESRI software, the theory underlying GIS technology, and the application of GIS tools in particular fields. Some Web courses include downloadable trial editions of ESRI software.

[See Full Course List >>](#)

The number of classes available annually is limited. If you are interested in participating in a training class, please contact the Milwaukee County Land Information Office at MCLIOservices@milwaukeecountywi.gov.

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Economic Development > Land Information Office > About the Land Information Office > Milwaukee Metro Geospatial Events Calendar

Milwaukee Metro Geospatial Events Calendar

LIO Home Online Applications Data Maps Announcements Links About

As a service to our users, we maintain a calendar of upcoming meetings, conferences, and relevant training sessions happening in the Milwaukee Metro area. Please contact us if you would like to suggest an event for the calendar. In addition, we also display the Wisconsin Geospatial Events Calendar maintained by the State Cartographer's Office in Madison. The SCO calendar contains events happening throughout Wisconsin, as well as in surrounding states.

September 2014							Print	Week	Month	Agenda
Mon	Tue	Wed	Thu	Fri	Sat	Sun				
Sep 1	2	3 9am Wisconsin St	4	5	6	7				
8	9	10	11am Seiler Instru	12	13	14 NSGIC Annual Wisconsin Count				
15 NSGIC Annual Conference [Charleston, SC] Wisconsin Counties Association A	16	17	18 11am GIS Essenti	19 11am GIS Essenti	20	21				
22 9am MCAMLIS St	23 8:30am Wisconsin	24	25 3pm GIS Comes t	26	27	28 1:30pm The Map T				
29	30	Oct 1 Minnesota GIS/LIS Annual Conference [Rochester, 9am Wisconsin St	2	3	4	5				

Events show n in time zone: Central Time



Contact the Land Information Office

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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MCAMLIS BUSINESS PLANNING

BACKGROUND

This task establishes the process and procedures to make certain that Partner requirements and priorities are included in MCAMLIS Programming and planning activities. This will include involvement in strategic planning, as well as tactical planning: the process needs to include how to adjust to opportunities or key demands (e.g. natural disaster) as they surface. The process will need to be able to balance providing solutions for countywide needs with those that might be more specialized (smaller area, select set of Partners). This task will result in a detailed process – including criteria used to select and prioritize projects - and a first run-through of the process for tactical planning.

DELIVERABLES

- Documented Strategic and Tactical MCAMLIS Business Planning Process and procedures.
- Adjustments to MCAMLIS Program for Year 2015 through 2019.

PROJECT SPECIFICATIONS

COL.02 – MCAMLIS Business Planning

- Task will assess the process, tools, and lessons learned from the BNA Project.
- Partner staff will participate in the process.
- Task will be executed immediately preceding the need for tactical planning (~a few months preceding budget planning for new operating year).

STATUS:

This project is progressing well and is positioned to be introduced to the Steering Committee at its December 2014 meeting.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

COLLABORATION

- Engaged the services of Spatial Data Systems to conduct partner interviews and begin drafting a policy and procedure document.

NEXT

- Research and document similar organizational approaches
- Draft critical criteria scoring matrix and partner survey
- Continue draft of the MCAMLIS Business Planning Procedure and Guidelines
- Present proposed MCAMLIS Business Planning Procedure and Guidelines to the Steering Committee for consideration

* * * * *



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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MCAMLIS WEBSITE IMPROVEMENTS

BACKGROUND

This task will make it easier for MCAMLIS Partners and other stakeholders to obtain information about MCAMLIS data, data services, and the MCAMLIS Program.

Most importantly, it will provide an online, easily searchable and filtered list of the MCAMLIS data and map/data services available through MCAMLIS. Online how-to materials will be created.

In addition, this task will load material for online presence that more clearly defines the MCAMLIS organization and its Partners, and the MCAMLIS Program components (Portal, Data, Capabilities, Collaboration, and Program Management).

These improvements will be done either to the existing MCAMLIS website or a new site, whichever is more effective for short-term value.

DELIVERABLES

- Refinements to existing Site or a new stand-alone site (MCAMLIS.com).
- Improved online, searchable list of MCAMLIS Data, Data Services, and their currency.
- Online how-to materials for the searchable list.
- Improved online, searchable content regarding MCAMLIS: who, what, Work Plan.
- Preliminary findings for a new MCAMLIS brand.

PROJECT SPECIFICATIONS

MOL.01 – MCAMLIS Website Improvements

- Efficiently distributes MCAMLIS-related information, in particular, information regarding the currency and update plans of MCAMLIS data and data services.
- Increase use of MCAMLIS services and applicability of the data.
- Improve exposure to the MCAMLIS Program.

STATUS: 

Considerable effort has been put toward the development of a completely redesigned and architected website. Refinements were applied to the existing site e.g., feature data is now listed and searchable. The new website was deployed on 6/30.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- Website redesign and deployed 6/30

NEXT

- Continue development of web training tools
- Enhance and maintain web pages

Attach: Website Improvements and Monitoring Exhibits

* * * * *

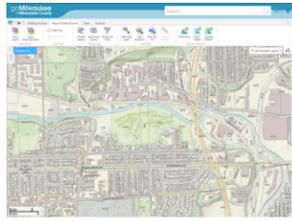
MCAMLIS Online Website Improvements

Land Information Office

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Milwaukee County Interactive Map



By launching the interactive map, you agree to the terms of this disclaimer.

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Announcements from the Land Information Office

Explore Census Data Using Online Applications

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Milwaukee Metro GIS User Group (MMGUG) 10 Recap

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Geospatial Data

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The purpose of the Geospatial Data page is to provide the public with access to the geographic data available through the Milwaukee County Land Information Office. Users may use this site to access and/or download geographic data and the associated metadata (when available). Users who wish to access or download data agree to understand and abide by the terms and conditions of the [MCLIO Data Requisition Guidelines](#). Data that is not available via ArcGIS Map Service or in your preferred format can be requested using the [data request form](#).

Please note, data not available via an ArcGIS Map Service or in your preferred format can be requested. There may be a cost associated with distributing the data that will be estimated at the time of the request. All data in this catalog (unless otherwise noted) is referenced to the GCS North American 1927 coordinate system, using the NAD 1927 datum and Clarke 1866 spheroid. (NAD_1927_StatePlane_Wisconsin_South_FIPS_4803) - WMS Services, by default, are in GCS_WGS_1984. It is recommended that you do not add them first to a map document, or be sure to set the projection to Wisconsin State Plane after adding the layer.

[Submit a Data Request >>](#)

Keyword Search: Show 25 entries

Layer Name	Description	Category	Metadata	Map Service	ArcGIS Layer File
ADM_CNTY_BND	Milwaukee County boundary	Political boundaries			
ADM_CNTY_MUNI_SUB_BND	Milwaukee County municipality boundaries	Political boundaries			
ADM_CNTY_SCHOOL_DIST	Milwaukee County School District boundaries	Administrative boundaries			
ADM_CNTY_SUPV_DIST_2012	County Supervisory District Boundaries	Political boundaries			
COLOR_2013_4IN	Color Orthophotography captured in 2013 with a 4" GSD resolution, leaf off	Imagery and Basemaps			
US Census					

Aerial Photography for Milwaukee County

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Most county-wide data sets are accessible through an ArcGIS Service and WMS Layer, which can be added to an ArcMap document. You may access the data in those formats using the link icons:

To request any of the following aerial photography in a different format, please see our [data request form](#).

2013 Aerial Photography

Spatial Resolution: 4 inches
Color: Color RGB
Extent: County
Raster Dataset Name: COLOR_2013_4IN

2010 Aerial Photography

Spatial Resolution: 6 inches
Color: Color RGB
Extent: County
Raster Dataset Name: COLOR_2010_6IN_ACUPLUS

2009 Aerial Photography

Spatial Resolution: 3 inches
Color: Color RGB
Extent: Approximately Glendale and Fox Point
Raster Dataset Name: COLOR_2009_3IN_GLNDL_FXPT

Milwaukee County Automated Mapping and Land Info System

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The Milwaukee County Automated Mapping and Land Information System (MCAMLIS) is a public-private consortium begun in 1990 by and between Milwaukee County, the Milwaukee Metropolitan Sewerage District, AT&T (previously Wisconsin Bell), the We Energies (previously Wisconsin Electric Power Company, and the Wisconsin Gas Company). A Steering Committee comprised of representatives from each of the above entities plus representatives from the City of Milwaukee and the Intergovernmental Cooperation Council of Milwaukee County oversees all activities of the consortium.

MCAMLIS was formed to develop and maintain the automated mapping base essential for the creation of a modernized land information system for Milwaukee County. In so doing, MCAMLIS is overseeing implementation of the Milwaukee County land records modernization plan set forth in the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) Community Assistance Planning Report No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System. This plan, published in October 1989, was formally adopted by the Milwaukee County Board of Supervisors on February 15, 1990, and was approved by the Wisconsin Land Information Board on January 7, 1991. This plan has since been updated on five-year intervals, most recently dated 2010. The mapping effort detailed in the County plan builds upon historic, coordinated base mapping efforts carried out by Milwaukee County, the Milwaukee Metropolitan Sewerage District, some of the cities and villages in the County, and the SEWRPC.

Committee Member Representatives

Kurt W. Bauer	Milwaukee County Surveyor
Donald R. Nehmer, Chairman	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
John L. La Fave, LIO	Milwaukee County Register of Deeds
Nancy A. Olson, Vice Chair	Chief Information Officer, Information and Technology Management Division, City of Milwaukee
Timothy Marquardt	Manager - EDAM Support, WE Energies
Gregory G. High	Director, Milwaukee County Architecture, Engineering and Environmental Services Division
Doug Seymour	Director of Community Development, City of Oak Creek, representing the Intergovernmental Coordinating Council of Milwaukee County
Erica Horton	Analyst, Department of Administration Services, representing Director, Milwaukee County Department of Administrative Services
Kevin S. Anderson	Design Area Manager, Milwaukee Metro North AT&T

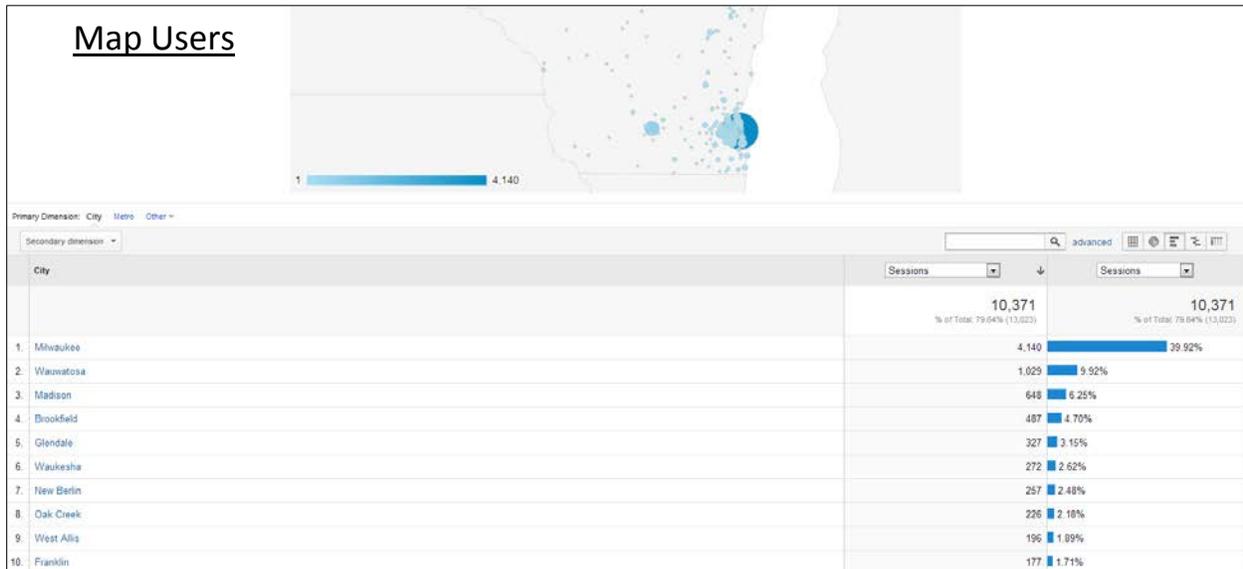
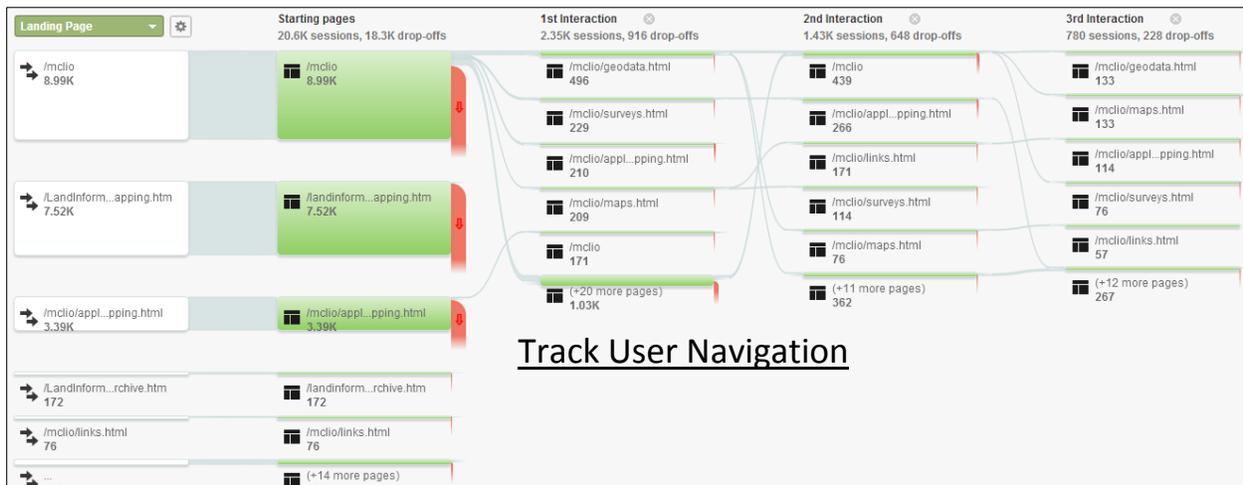
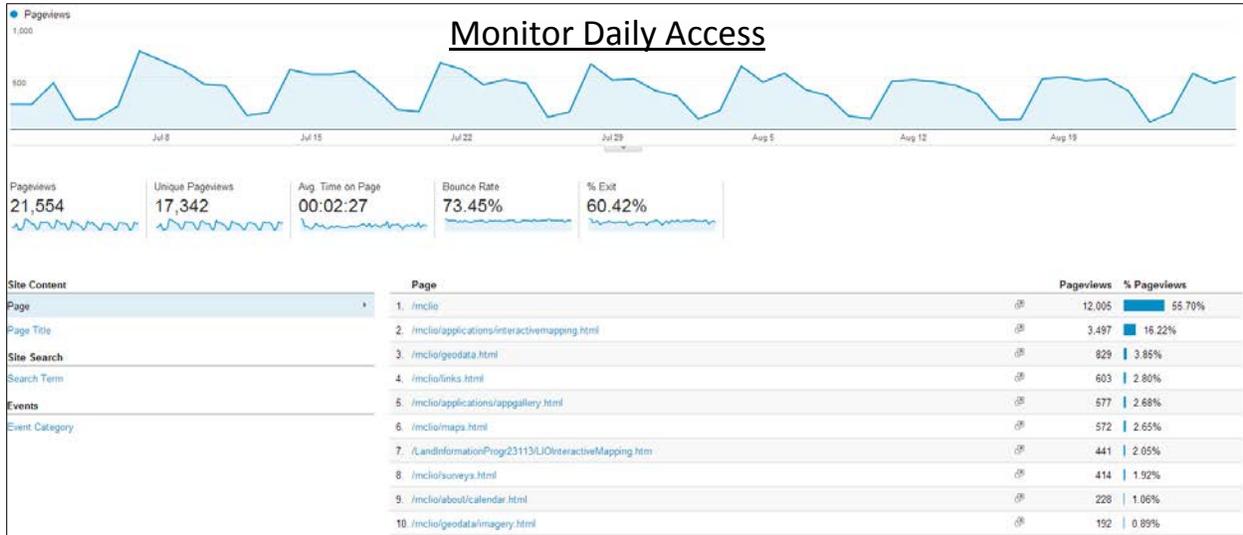
MCAMLIS Steering Committee Meetings

The next MCAMLIS Steering Committee meeting will be held Tue, September 23, 9am – 11am at Milwaukee Metropolitan Sewerage District, 260 W Seeboth St, Milwaukee, WI.

Meeting Materials

[Agenda](#)

Google Analytics – MOL Statistics





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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MCAMLIS NON-VECTOR DATA IMPROVEMENTS

BACKGROUND

This work effort will improve data management practices technologies that provide MCAMLIS **non-vector** reference data into the MCAMLIS data repository and prepare it for efficient access. MCAMLIS non-vector reference data refers to the following: geo-referenced imagery (Imagery: Ortho, Oblique, LiDAR, Caches), documents and photos, and potentially, video and audio. This does not include Partner-shared or Partner-hosted data, and does not include MCAMLIS vector reference data.

In particular, this effort will focus on providing the following: apply Esri Image Server; finalize historical aerial work; and explore the value of using OnBase, the County's document management solution, for MCAMLIS.

DELIVERABLES

- 2014 Deploy additional Historical Aerials

PROJECT SPECIFICATIONS

DAT.01.1 – Historical Aerial Photo Collection

- Complete the historical aerial project; enhances the ability to analyze current imagery and data e.g., historical drainage patterns across the county.
- Promotes the function and benefit of what MCAMLIS provides and how it goes about providing it, resulting in increased use.
- Improves MCAMLIS Program Category: Data Products and Services.

STATUS:

- The State Cartographers Office (SCO) delivered a complete set of scanned image files representing 199 images covering Milwaukee County taken in 1937. These images were transferred electronically to Milwaukee County and are suitable to be processed MCAMLIS Staff for distribution via web services.

- The Southeast Regional Planning Commission agreed to allow Milwaukee County to scan and geo-reference aerial images located in the Commissions image library. The source aerial photography is black and white, 9" X 9" format aerial negatives that reside in the SEWRPC archives and are stored as individual negatives in plastic sleeves. The archive includes a complete set of images for each of seven (7) years (approximately 462 image negatives). The SIDWELL Company has been contracted by Milwaukee County to scan each negative and deliver the image data to Milwaukee County to be processed by MCAMLIS Staff for distribution via web services.

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- MCAMLIS staff has completed geo-referencing the SCO 1937 image data and has posted this via the MCLIO website. (attached Historical Aerials Exhibit)
- MCAMLIS staff has completed geo-referencing the SEWRPC 1990 image data and has posted this via the MCLIO website. (attached Historical Aerials Exhibit)
- MCAMLIS staff has partially completed geo-referencing the SEWRPC 1985 image data

DAT.01.1 –Historical Aerial Photo Collection Status								
% # of polygons	1937	1990	1985	1980	1975	1970	1967	1963
Scan Image Step 1	100%	100%	100%	100%	100%	100%	100%	100%
Geo-Reference Step 2	100%	100%	80%	0%	0%	0%	0%	0%
Web Service Step 3	yes	yes	no	no	no	no	no	no

NEXT

- Continue geo-referencing and posting image data via MCLIO services

Attach: Historical Aerial and 1985 Rectification Status Exhibits

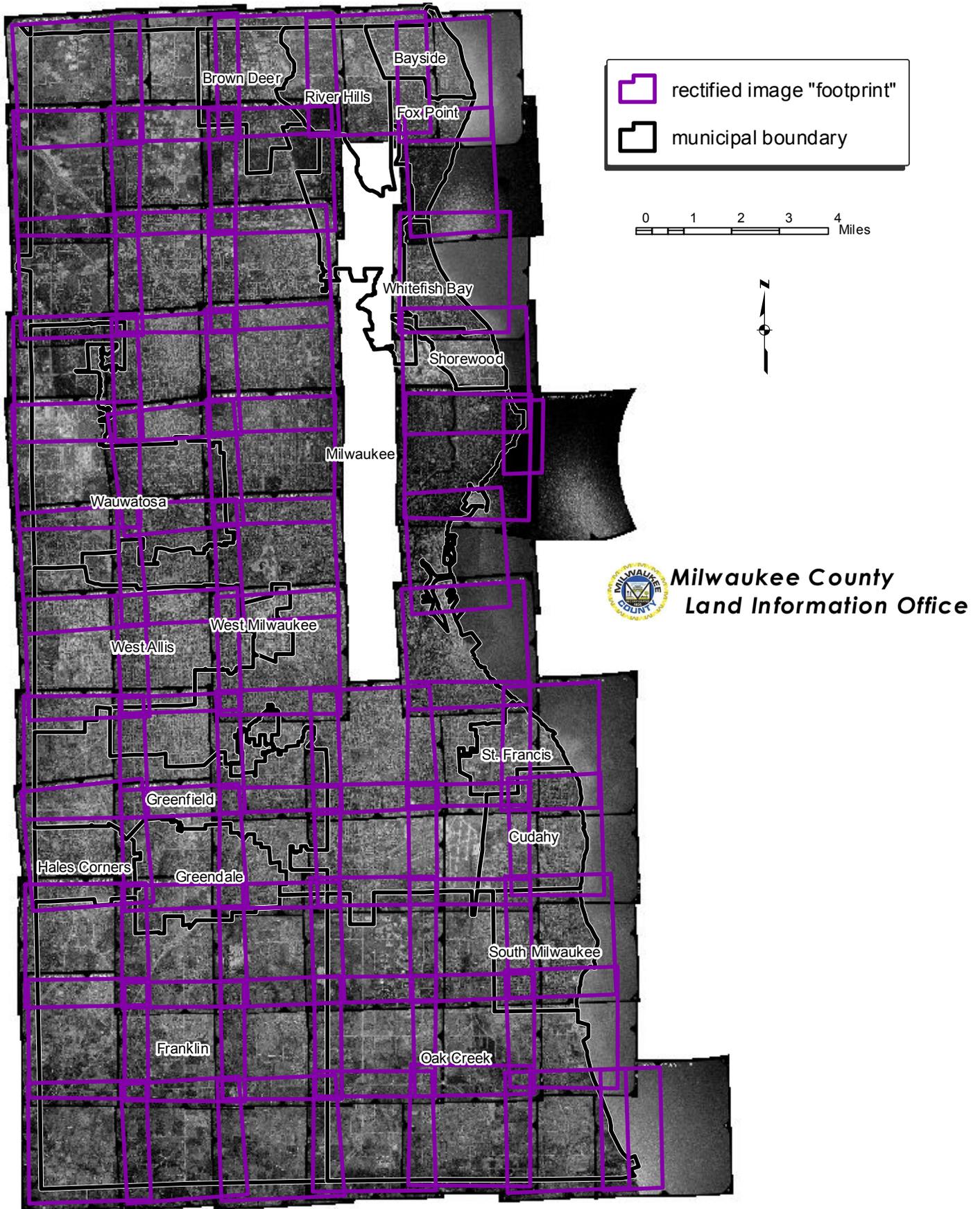
* * * * *

Historical Aerials



1985 Milwaukee County Aerial Photo Rectification Project Status

61 of 67 sheets rectified (91.0%) as of 8-30-2014





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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: MCAMLIS VECTOR DATA IMPROVEMENTS

BACKGROUND

This work effort will improve data offerings, management practices, and automation that get MCAMLIS vector reference data into the MCAMLIS data repository and prepare it for efficient access. MCAMLIS vector reference data refers to the following: Topographic / Planimetric Mapping, Enterprise Address System, and the Routable Street Centerline. This does not include Partner-shared or Partner-hosted data, and does not include non-vector data (imagery, video, audio).

In particular, this task will focus on providing the following: complete the polygonization of key planimetric data; provide map and data services associated with these planimetric features; and if priority is confirmed by Partners, improve enterprise address system (EAS) data maintenance (streamline coordination and prototype upcoming Esri product) and expedite routable street centerline (SCL) data maintenance.

DELIVERABLES

- 2014 Deploy completed planimetric polygons
- 2014/15 Deploy map/data services for planimetric polygons.

PROJECT SPECIFICATIONS

DAT.02.1 –Planimetric Polygon Maintenance

- Partners will see benefits in the vector information by having better knowledge about the currency and quality of the information being provided by MCAMLIS.
- Polygonization of planimetric objects will assist with data analysis e.g., impermeable surface run-off analysis and improve cartographic flexibility.
- Promotes the function and benefit of what MCAMLIS provides and how it goes about providing it, resulting in increased use.
- Improves MCAMLIS Program Category: Data Products and Services.

STATUS:

- Polygonization includes the following planimetric objects: building footprints, bridges, traveled ROW, sidewalks, surface parking, paved trails, and unpaved driveways.
- Polygon processing will be completed on 5 defined areas making up Milwaukee County. Areas will be delivered in successive months with the 1st area delivered EOM July - subsequent deliveries through November.
- MCAMLIS Staff will perform QA/QC on each delivery followed by acceptance of each area once changes have been performed on the data by the contractor leading to a successful review by MCAMLIS staff..
- Final QA and acceptance will be completed through February 2015

ACTIVITIES THIS PERIOD: 3/14 – 9/14

- April – June: draft, release, review, award and execute RFP and Professional Services Contract
- July – present: production processing began in July.
- Area 1 and 2 were delivered through August
- Area 1 & 2 are partially QA'd, no Areas have been accepted

DAT.02.1 –Planimetric Polygon Maintenance - Delivery Status					
% # of polygons	Area 1	Area 2	Area 3	Area 4	Area 5
	5%	20%	23%	35%	17%
Production Step 1	14-Jul	26-Aug			
QA/QC Step 2					
Acceptance Step 3					

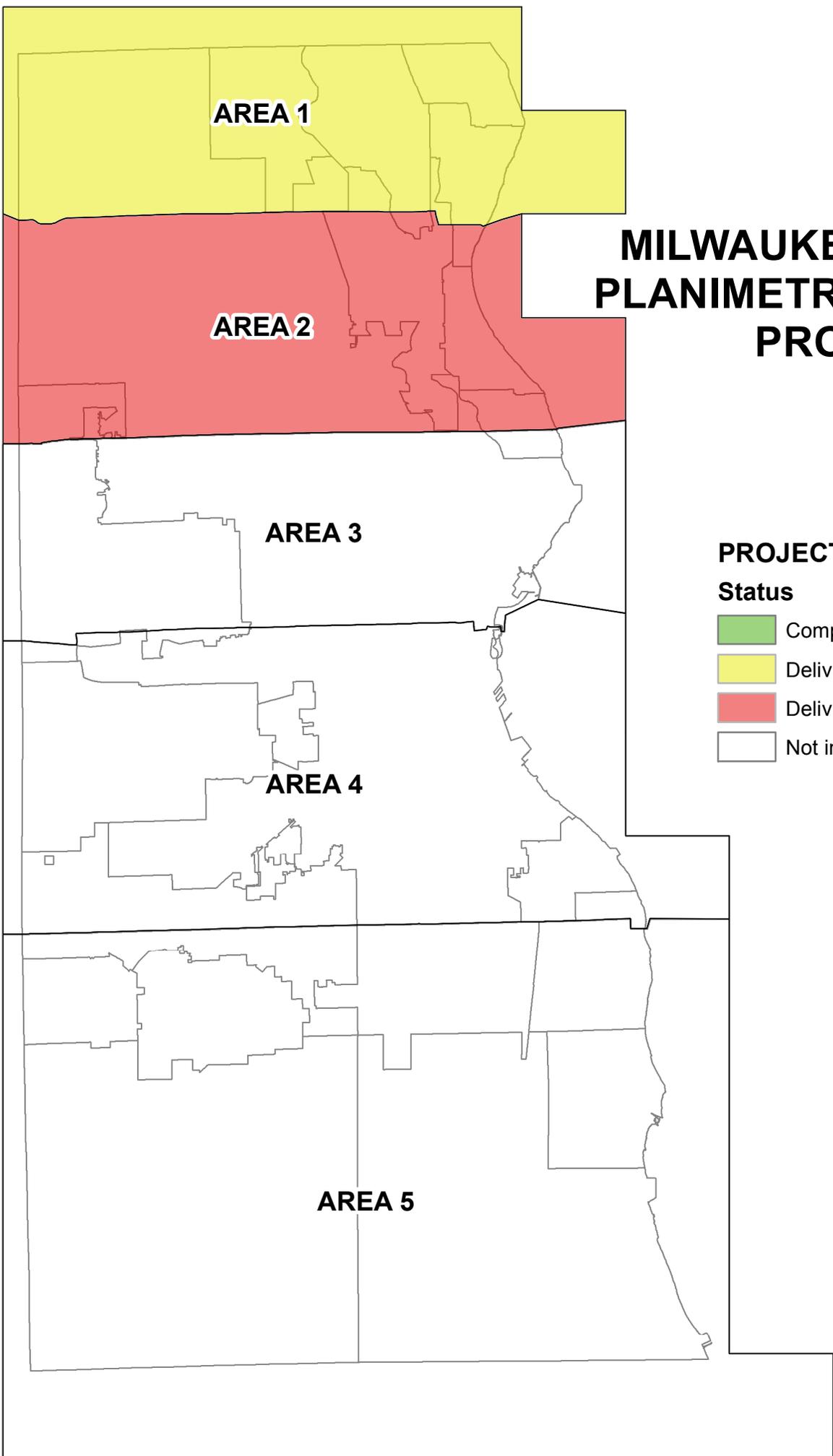
NEXT

- Continue production through acceptance

Attach: Planimetric Polygon Processing Status Map Exhibit

* * * * *

MILWAUKEE COUNTY PLANIMETRIC POLYGON PROJECT



AREA 1

AREA 2

AREA 3

AREA 4

AREA 5

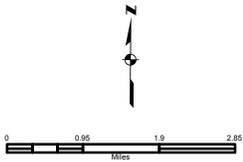
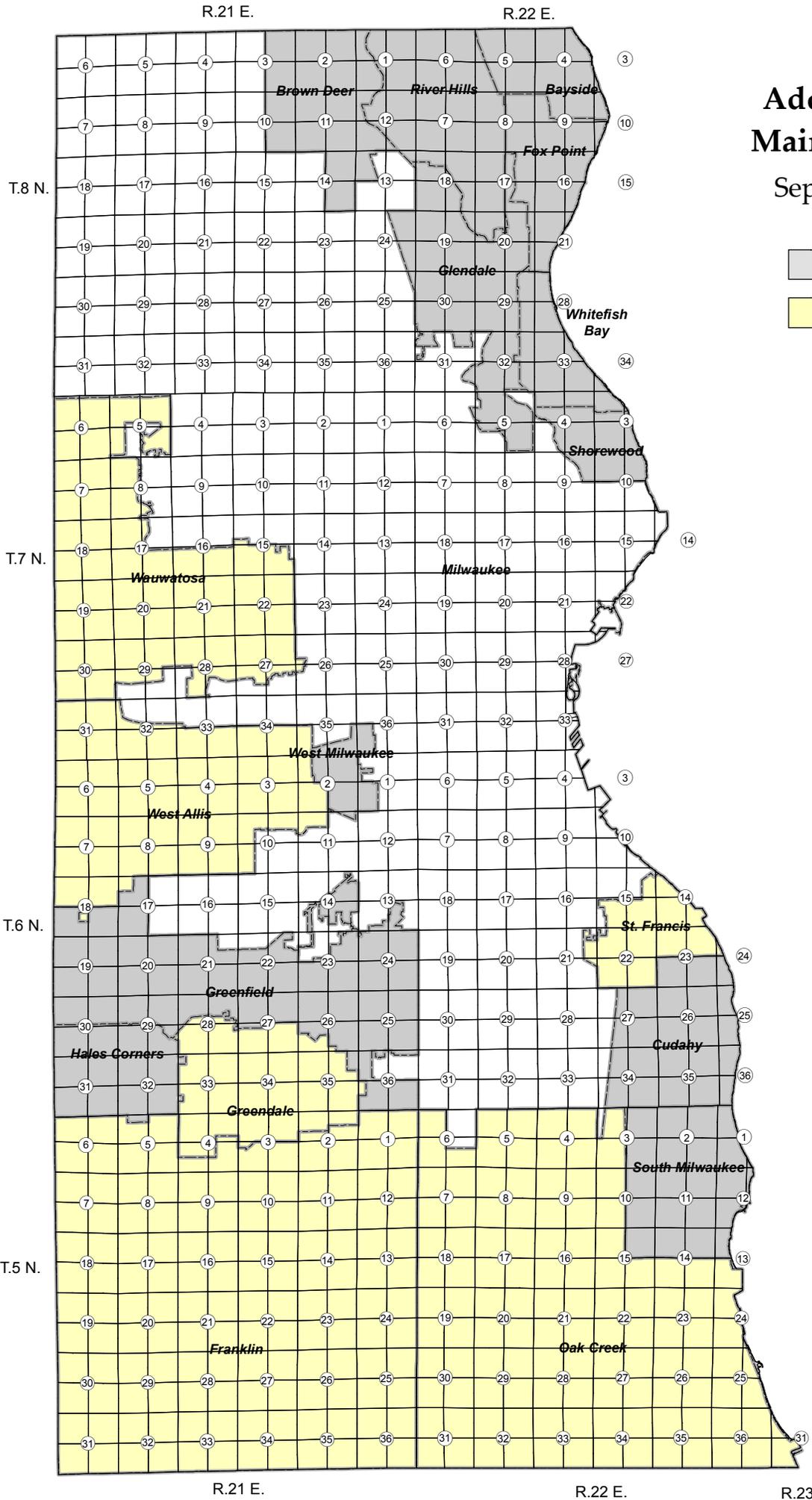
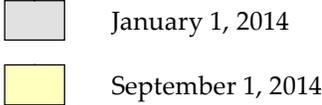
PROJECT AREAS

Status

-  Complete and Accepted
-  Delivered And QC
-  Delivered
-  Not in Process

MCAMLIS Address Database Maintenance Status

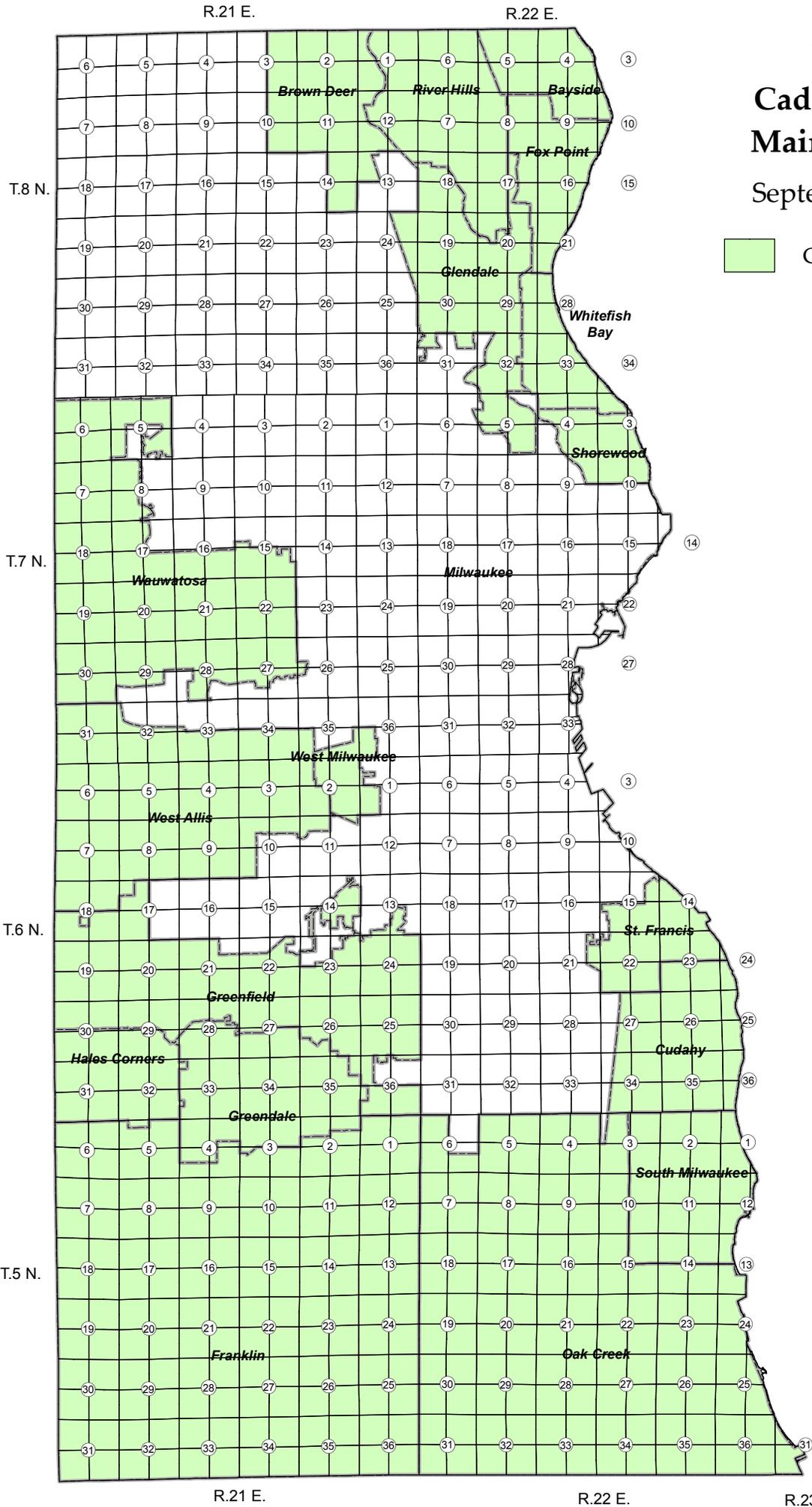
September 2014 Status



Source: MCAMLIS Project Manager

MCAMLIS Cadastral Database Maintenance Status September 2014 Status

 Current as of August 1, 2014



Source: MCAMLIS Project Manager

City of Milwaukee Cadastral Status

September 15, 2014

City of Milwaukee

-  Pending New Parcels - 63
-  Parcel Updates Jan. 2 - Sept. 15 - 198
-  City of Milwaukee Parcels
-  City of Milwaukee Boundary
-  Township/Range

T. 8 N.

T. 7 N.

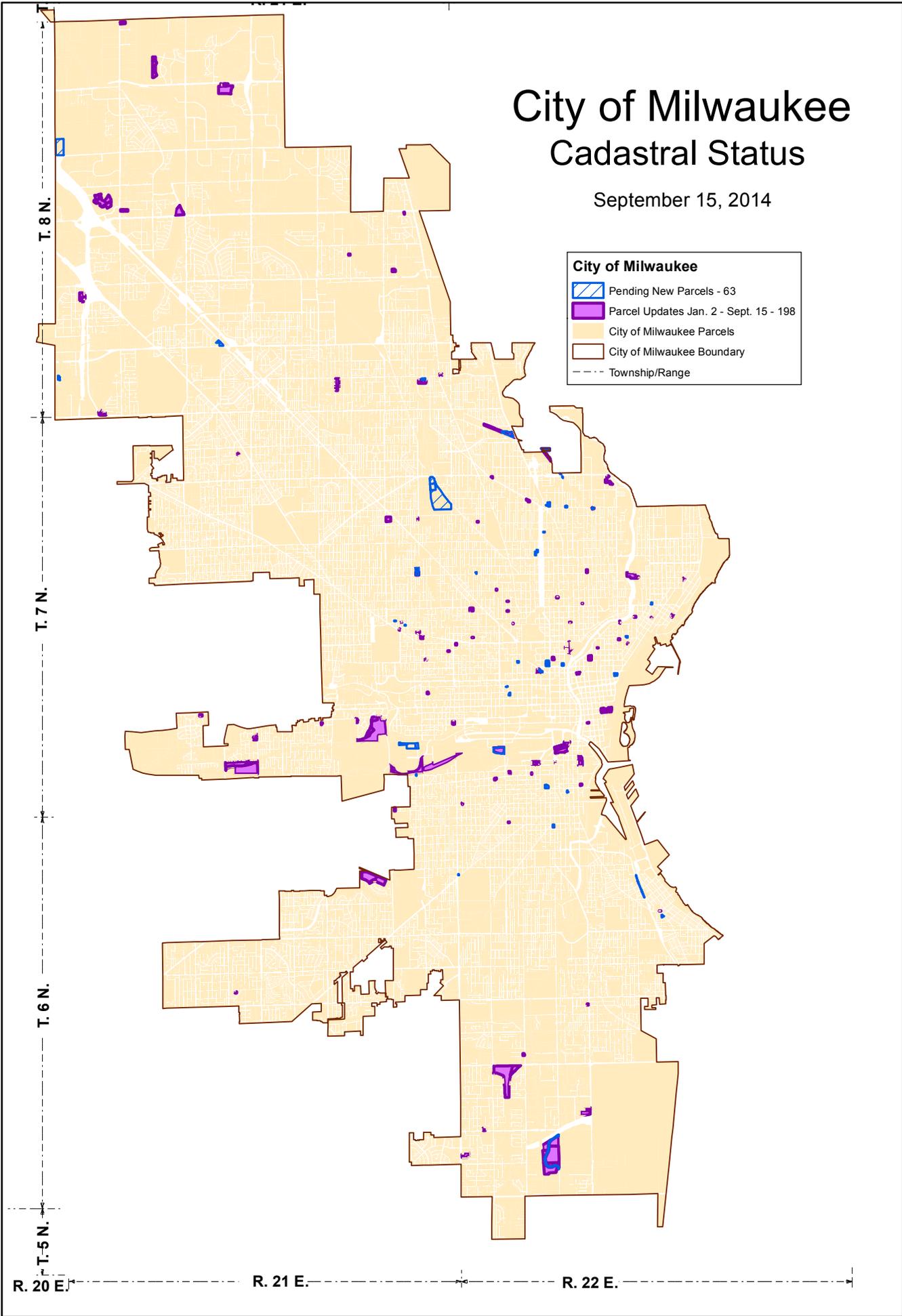
T. 6 N.

T. 5 N.

R. 20 E.

R. 21 E.

R. 22 E.

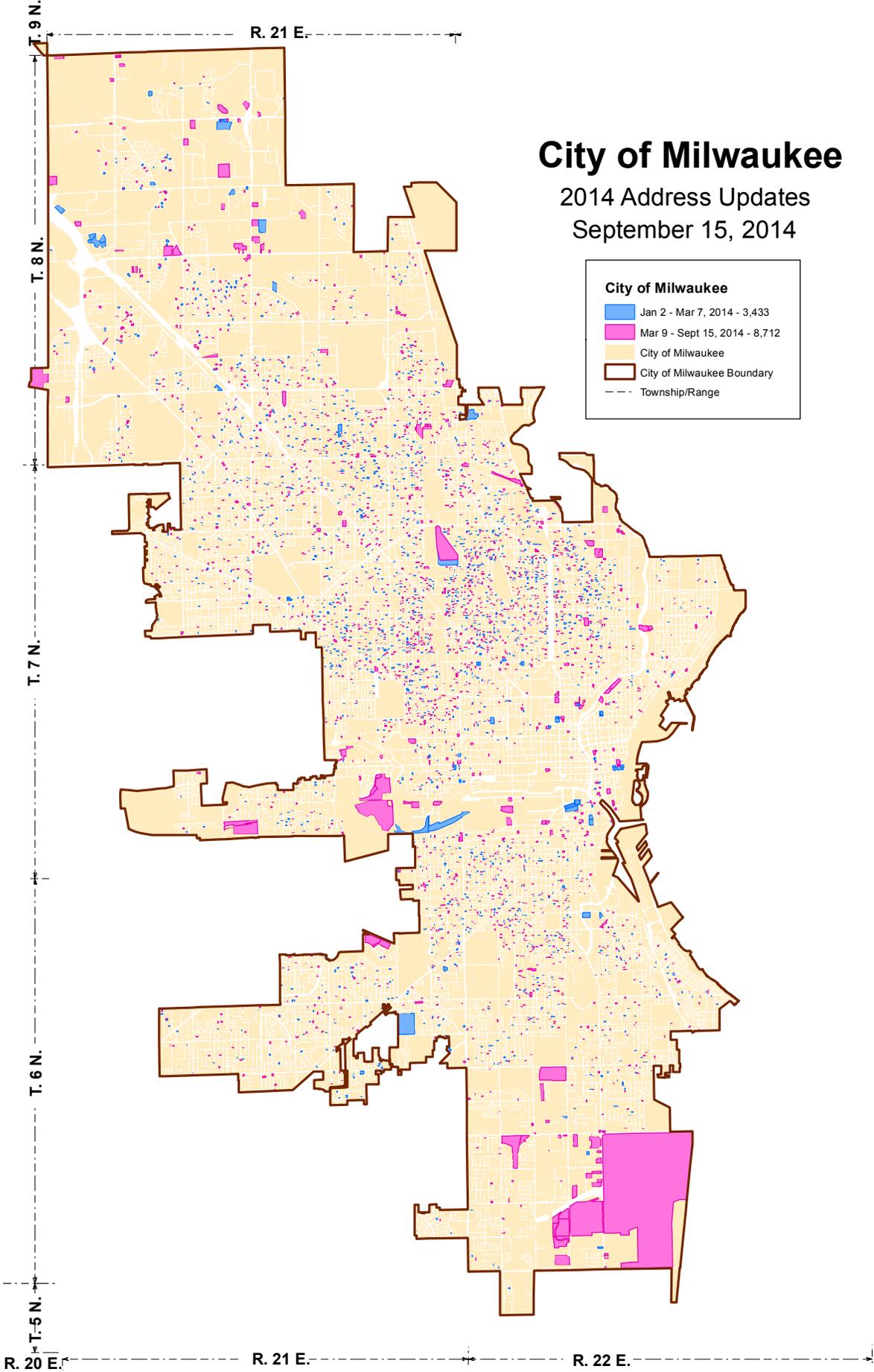


City of Milwaukee

2014 Address Updates
September 15, 2014

City of Milwaukee

- Jan 2 - Mar 7, 2014 - 3,433
- Mar 9 - Sept 15, 2014 - 8,712
- City of Milwaukee
- City of Milwaukee Boundary
- Township/Range





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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: September 5, 2014
SUBJECT: Educational Outreach Activity Status

BACKGROUND

The MCAMLIS Program Goals and Objectives included in the 'Land Information Strategic Assessment for 2013 –2016 identified the need for MCAMLIS Staff to develop and promote MCAMLIS products and services to MCAMLIS Partners and especially to include contacts and assistance related to local municipalities. The following describes MCAMLIS Staff activities under this objective for the preceding period:

ACTIVITIES THIS PERIOD – 3/14 – 9/14

1. Meetings and Presentations
 - Organized and facilitated the Ninth and Tenth meeting of the Milwaukee Municipal GIS Users Group (MMGUG). Meetings were held on 4/8/2014 @ City of Cudahy and 7/22 @ the City of Greenfield
 - Scheduled next MMGUG meeting to be held @ the Lincoln Park Blatz Pavilion tentatively scheduled for October 28th 2014
 - MCAMLIS Business Needs Assessment presentation to the Milwaukee County Board Economic and Community Development Committee – 6/24/2014
2. Maintained production MCLIO web services
3. Incorporated updated tutorial materials and announcements to users of the MCLIO Interactive Mapping Service website including:
 - Posting 1st & 2nd Qtr 2014 foreclosure data
4. Maintained open channels of communication regarding web hosting data on the MCLIO website:
 - working with the Village of Shorewood to assist in streamlining vendor developed website use of MCAMLIS web services
 - will meet with Rukert & Mielke regarding Service Level Agreement (SLA)/Memorandum of Understanding (MOU) in support of municipal clients e.g., Wauwatosa, Greenfield and Fox Point
5. Assisted Local Communities (exhibits attached)
 - North Shore Fire Department response time analysis
 - City of Franklin Economic Development profiles

NEXT

1. Continue MCLIO website training, data distribution and product enhancements; and
2. Prepare for MMGUG Meeting – Oct 28th

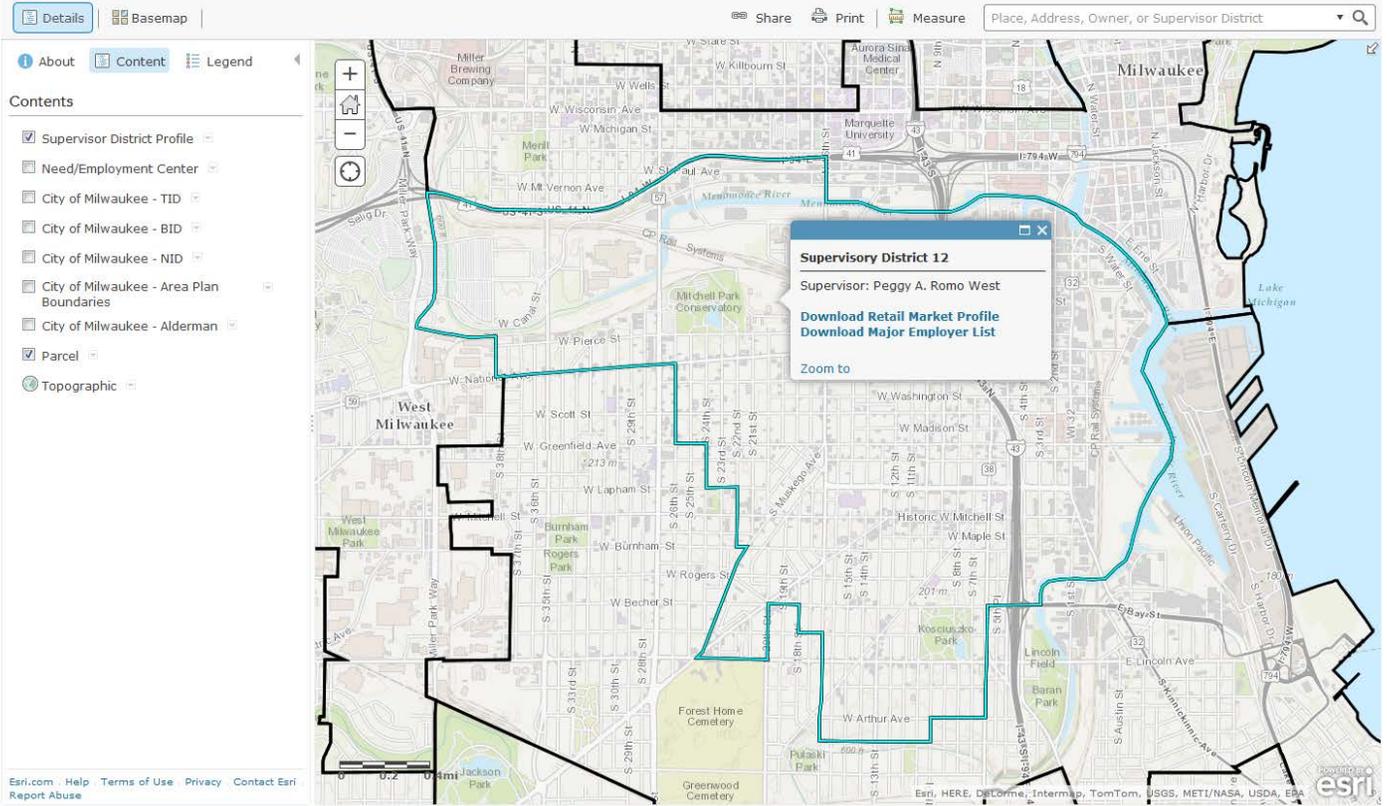
3. Continue to work with member participants to further their GIS goals e.g., 2014 MCAMLIS Work Plan Initiatives

Attach: NSF & ECD Exhibits

Economic Development Profiles

ArcGIS Economic Information Map

Sign In



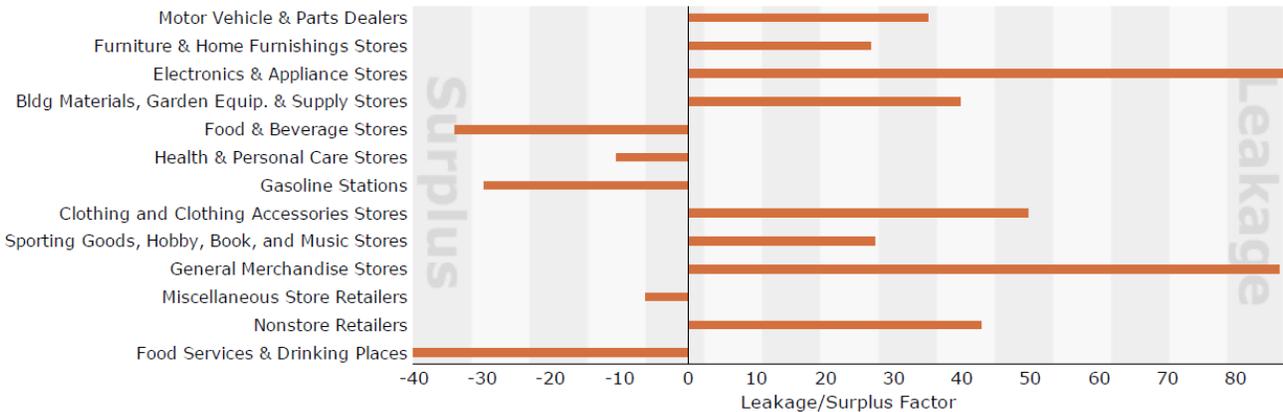
Retail MarketPlace Profile

Supervisory District 12
Area: 4.97 square miles

Prepared by Milwaukee County

Summary Demographics						
2013 Population						49,659
2013 Households						15,319
2013 Median Disposable Income						\$21,003
2013 Per Capita Income						\$11,432
Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-45,722	\$230,810,693	\$245,844,262	-\$15,033,569	-3.2	324
Total Retail Trade	44-45	\$206,343,357	\$188,650,299	\$17,693,058	4.5	215
Total Food & Drink	722	\$24,467,335	\$57,193,963	-\$32,726,628	-40.1	109
Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	\$37,680,794	\$18,020,910	\$19,659,884	35.3	19
Automobile Dealers	4411	\$32,901,369	\$8,314,127	\$24,587,242	59.7	8
Other Motor Vehicle Dealers	4412	\$2,011,797	\$2,381,153	-\$369,356	-8.4	5
Auto Parts, Accessories & Tire Stores	4413	\$7,767,628	\$7,325,630	\$441,998	-40.8	6

Leakage/Surplus Factor by Industry Subsector





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

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: September 5, 2014
SUBJECT: COUNTYWIDE PROGRAM INITIATIVES

BACKGROUND

This Goal states that - Where appropriate, identify, initiate, and complete projects proposed by Milwaukee County or its constituent municipalities, agencies of the federal, state or regional government, public utilities and by private entities, including, importantly, interested citizens which would, by understanding of the MCAMLIS Steering Committee, prepare information and maps useful for meeting the needs of the County and its local units of government and contributing toward the implementation of the Wisconsin Land Information Program.

CURRENT ACTIVITIES THIS PERIOD – 3/14 – 9/14

1. Address Database Maintenance

- Deployed 1st & 2nd qtr consolidated Milwaukee County and City of Milwaukee Cadastral Data;
- Maintained address point "situs" relationship to structure location; and .

Next

- Continuation of ongoing efforts incorporating updated multiple address source information

2. Plat-of-Survey Maintenance

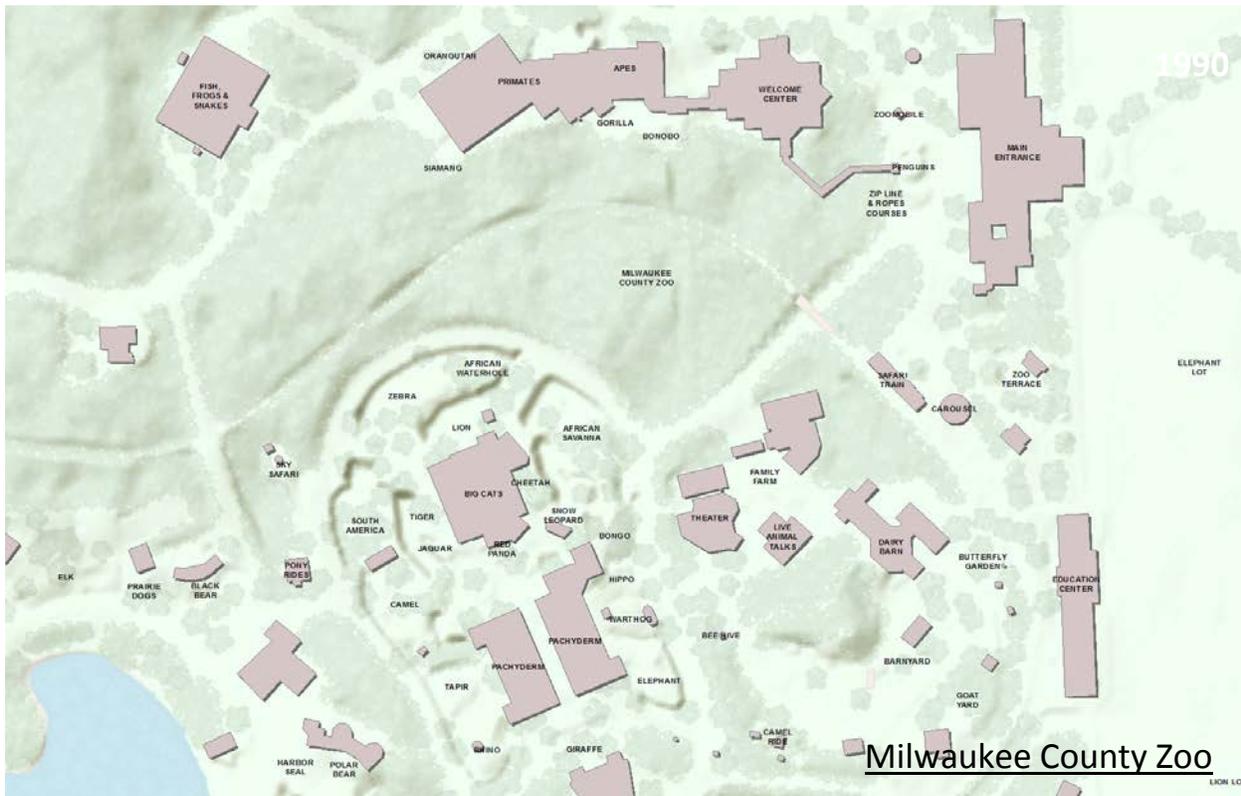
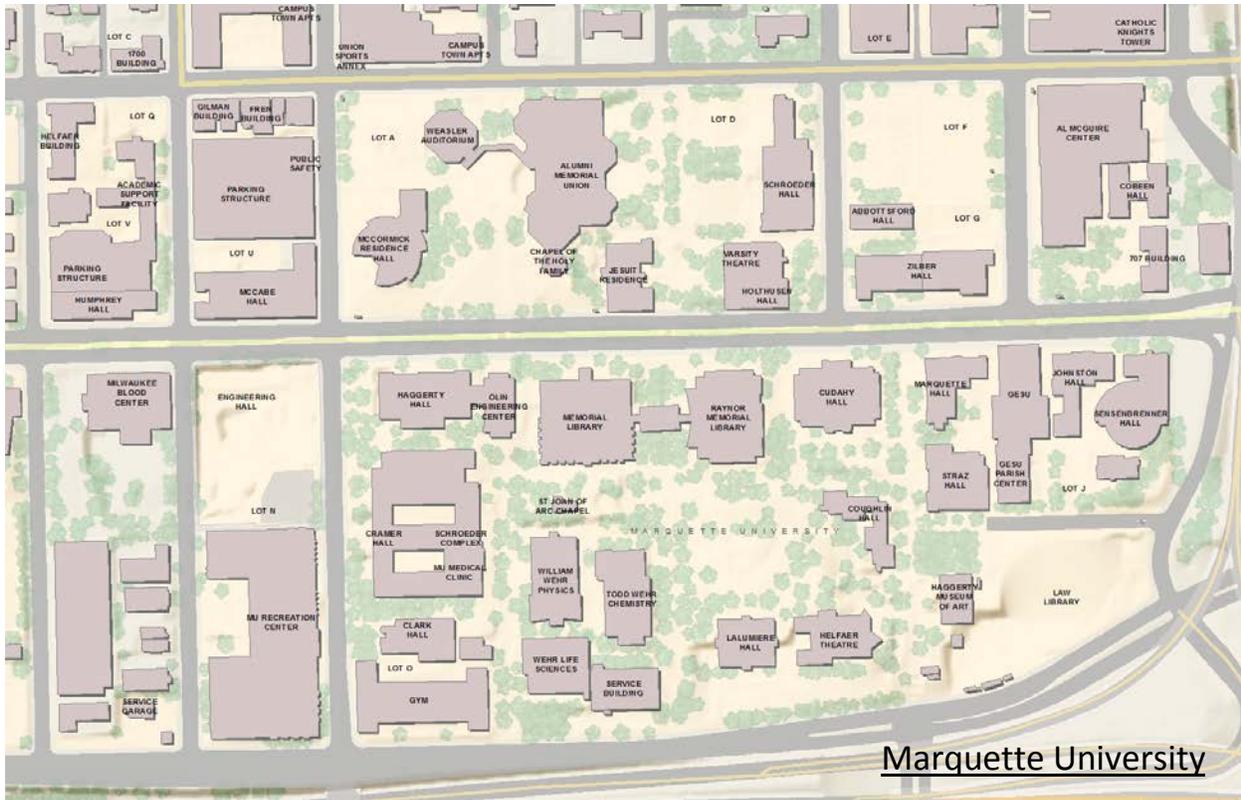
Plat of Survey Documents received from the Milwaukee County Surveyors Office are scanned and indexed to their respective parcel(s). The public is able to access these as they are posted to the MCLIO Interactive Mapping website. In total, there are 96,505 parcel references to 84,370 documents. In 2014 a total of 1,132 documents have been scanned and indexed into the Plat of Survey scanned document library.

3. Basemap Improvements

Updated ESRI basemap and deployed to ArcGIS On-Line and the MCLIO Interactive Map Viewer. Updates included additional detail for points of interest e.g., Milwaukee County Zoo and Marquette University.

Attach: Example Basemap Exhibit

Basemap Improvements – Points of Interest



2014 MCAMLIS YTD

		YTD	YE Projected
REVENUES - 2014 YTD			
2014 Actual Revenue		\$515,226	\$780,322
2013 Encumbrances Carried Over		\$315,014	\$315,014
TOTAL		<u>\$830,240</u>	<u>\$1,095,336</u>
OPERATING EXPENSES - 2014 YTD			
2014 Actual Expenditures		\$502,916	\$761,678
2014 Encumbrances		\$447,040	\$447,040
TOTAL		<u>\$949,956</u>	<u>\$1,208,718</u>
2014 Est. Net Income (Loss)		<u>(\$119,716)</u>	<u>(\$113,383)</u>

Fund Balance:		YTD	YE Projected
2013 Year-End Fund Balance*		\$1,547,750	\$1,547,750
2014 Operating Revenues (Shown Above)	+	\$830,240	\$1,095,336
2014 Exp + Enc for \$8 Fee Projects	-	\$949,956	\$1,208,718
2014 Est Fund Balance**	=	\$1,428,034	\$1,434,367
2014 Reserve Revenue @ 10%		\$0	\$0
2014 Est Fund Balance YTD - Unrestricted		\$1,291,034	\$1,297,367
2014 Est Fund Balance YTD - Restricted		\$137,000	\$137,000

*2013 YE Fund Balance represents the current amount in reserve as of 2013 YE close.

**2014 Est YTD Fund Balance represents the 2013 YE reserve netted against the actual 2014 expenditures and revenues. This figure will change throughout the year as additional 2014 expenditures and revenues are realized.

NOTE: 2014 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 MCAMLIS budget. The purpose of the report is to provide committee members a "financial snapshot" of MCAMLIS activities within a specific point in time.

2014 YTD Combined Fiscal Report - MCAMLIS (\$8) - as of 9-3-2014

Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	2014 Amount Encumbered	Amount Paid 2014 YTD	Total Amount Paid 2014 (Encumbrances + Actual)	Remaining Unpaid Balance
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 2	\$ 436,000	\$ 161,300	\$ 274,700	\$ -	\$ 274,700	\$ -
SOUTHEASTERN WI REGIONAL	County Surveyor	\$ 78,719	\$ -	\$ -	\$ 78,719	\$ 78,719	\$ -
GRW	Planimetric Map Replacement	\$ 125,000	\$ 108,618	\$ -	\$ 16,382	\$ 16,382	\$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance	\$ 91,780	\$ -	\$ 45,890	\$ 45,890	\$ 91,780	\$ -
	<u>2014 Work Plan</u>						
GEOCORTEX	VWR: Improve MCLIO Mapping Service	\$ 70,000	\$ -	\$ -	\$ 796	\$ 796	\$ 69,204
	MBL: Mobile Property Viewer	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
ESRI	COL: Collaborative Training & Education	\$ 25,000	\$ -	\$ 2,250	\$ -	\$ 2,250	\$ 22,750
RADGOV	COL: Business Planning	\$ 20,000	\$ -	\$ -	\$ 8,952	\$ 8,952	\$ 11,048
RADGOV	MOL: Website Improvements	\$ 20,000	\$ -	\$ -	\$ 3,659	\$ 3,659	\$ 16,341
GRW	DAT: Planimetric Polygon Processing	\$ 65,000	\$ -	\$ 98,650	\$ -	\$ 98,650	\$ (33,650)
SIDWELL INC, RADGOV	DAT: Historical Aerials	\$ 10,000	\$ -	\$ 1,750	\$ 6,943	\$ 8,693	\$ 1,307
	TOTAL	\$ 991,499	\$ 269,918	\$ 423,240	\$ 161,341	\$ 584,581	\$ 137,000

FY2014 Project Budget Status

FY2014 Project Budget Status			FY2014				Original Budget Estimate	FY2014 Revised Estimate	Actual \$ 8/31/2014	FY2014 Estimate Remaining	Budget Status
Project	Task ID	Task Description	Q1	Q2	Q3	Q4					
VWR		Viewer/Pictometry Improvement RollOut					\$70,000	7%	16%	84%	Green
	01	Improve the MCLIO Interactive Mapping Service					\$70,000	\$5,000	\$796	\$4,204	
	02	Implement Initial MCAMLIS Data Extract Service									
MBL		Mobile-Based Capabilities Implementation					\$50,000	10%	0%	100%	Green
	01	Deploy Mobile Property Locator Application					\$50,000	\$5,000		\$5,000	
	02	Develop MCAMLIS Feature Data Service for Parcels									
COL		MCAMLIS/Partner Collaboration Improvement					\$45,000	56%	45%	55%	Green
	01	Invest in LBDT/Collaboration Education and Training					\$25,000	\$5,000	\$2,250	\$2,750	
	02	Formalize Partner Input in MCAMLIS Business Planning					\$20,000	\$20,000	\$8,952	\$11,048	
MOL		MCAMLIS On-line Presence Improvement					\$20,000	20%	91%	9%	Green
	01	Make Initial Website Improvements					\$20,000	\$4,000	\$3,659	\$341	
DAT		MCAMLIS Data Improvement					\$75,000	145%	22%	78%	Red
	01	Make MCAMLIS Non-Vector Data Improvements					\$10,000	\$10,000	\$6,943	\$3,057	
	02	Make MCAMLIS Vector Data Improvements					\$65,000	\$98,650	\$16,869	\$81,781	
Budget Total							\$260,000	\$147,652	\$39,470	\$108,185	Green

Status Key -

Meets Original Budget Estimate

Meets Original Budget Estimate within 10% margin

Exceeds Original Budget Estimate over 10%

Green

Yellow

Red



Mr. Ed Eberle
Administrator of Intergovernmental Relations
Wisconsin Department of Administration

Dear Mr. Eberle:

On behalf of the Land Information Officer Network I would like to thank you for providing our organization with the opportunity to comment on the recently published Statewide Parcel Map Initiative Planning Process Framework. The Land Information Officer community finds the plan to be a positive step forward in the strategic initiative grant concept.

LION appreciates the commitment that the Department of Administration and your Division have placed on the financing of base budget and educational grants. The scenario of allocating an additional \$50,000 to each county is an equitable solution to the additional funds that will be transferred to the WLIP account.

Transparency is essential in the development of sound policy. LION would ask that language be included in the framework document that would require the Department of Administration to provide annual reporting on the use of WLIP funds similar to those that LIO's submit on a yearly basis. LION would recommend on page 7 under "Other DOA Duties SS 16.97(3)" the addition of a bullet point to indicate that the DOA is responsible for providing an annual report on activities using WLIP funding. In addition under "To be addressed in future communications" a bullet should be added "The State develops a three year Land Information Plan". These changes would create a transparent means to track the use of WLIP funds and would be a useful tool in the analysis of land modernization activities.

LION concedes that there will be members of the community that do not share the optimism conveyed in this letter. However, the majority will find value in the efforts that are being made and envision this document as a standard that provides a means for LION and State government to exchange ideas and coordinate future projects.

LION looks forward to the opportunity to work with the Department of Administration and the Division of Intergovernmental Relations in future endeavors.

Sincerely;

A handwritten signature in black ink, appearing to read "Al Brokmeier", is written over a light blue horizontal line.

Al Brokmeier
Land Information Officer Network Chairman

Statewide Parcel Map Initiative Planning Process Framework

Beginning January 1, 2015, counties will submit about \$7 million per year to the Land Information Fund, a segregated, nonlapsible trust fund for the Wisconsin Land Information Program (WLIP), according to s. 25.55, Wis. Stats. This concept document outlines a planning process framework for achieving statewide land information objectives, particularly a **Strategic Initiative Grant Concept** that would award Strategic Initiative grants under s. 16.967(7).

This concept document is being made available for the purposes of discussion and stakeholder feedback. No final decisions have been made on the allocation of Strategic Initiative grants, which would require an increase in statutory spending authority for the Land Information Fund via the biennial budget process for 2015-17. This document includes a detailed budget scenario that may change. Other aspects of the Parcel Initiative will be addressed in future communications.

**\$50k per County
with Strategic Objectives
to be Determined Through Participatory Planning Process
+ New WLIP Grant Agreement Conditions**

**Strategic
Initiative
Grant
Concept**

Overview	page 2
Budget	page 3
Distribution of Funding	page 4
Timeline	page 5
Outreach	page 6
Out of Scope	page 7

Overview: Strategic Initiative Grant Concept

**\$50k per County
with Strategic Objectives
to be Determined Through Participatory Planning Process
+ New WLIP Grant Agreement Conditions**

NEW WLIP GRANT AGREEMENT CONDITIONS

- GIS data sharing to be a requirement
- A checklist of priority benchmarks to be determined through a participatory planning process
- Benchmarking requirements may extend to municipalities, requiring multi-jurisdictional grant projects
- May reimburse documented costs incurred for completed projects
- Could require local match

STRATEGIC OBJECTIVES

To be determined through participatory planning process

1. Parcel short-term benchmarks, from 59.72(2)(a)
2. Parcel long-term benchmarks including associated activities, such as remonumentation
3. Other benchmarks (e.g., aerial imagery, LiDAR, etc.)
4. If specified benchmarks are met, anything else consistent with county land information plan

BUDGET SCENARIO

WLIP Revenue Projection Based on FY14 Figures	\$7,000,000
Base Budget Grants	(\$2,600,000)
Training & Education Grants	(\$72,000)
Strategic Initiative Grants @ \$50k to Each County	(\$3,600,000)
Projected Administrative Costs	(\$200,000)
Statewide Parcel Map & Other DOA Land Info Duties	(\$528,000)

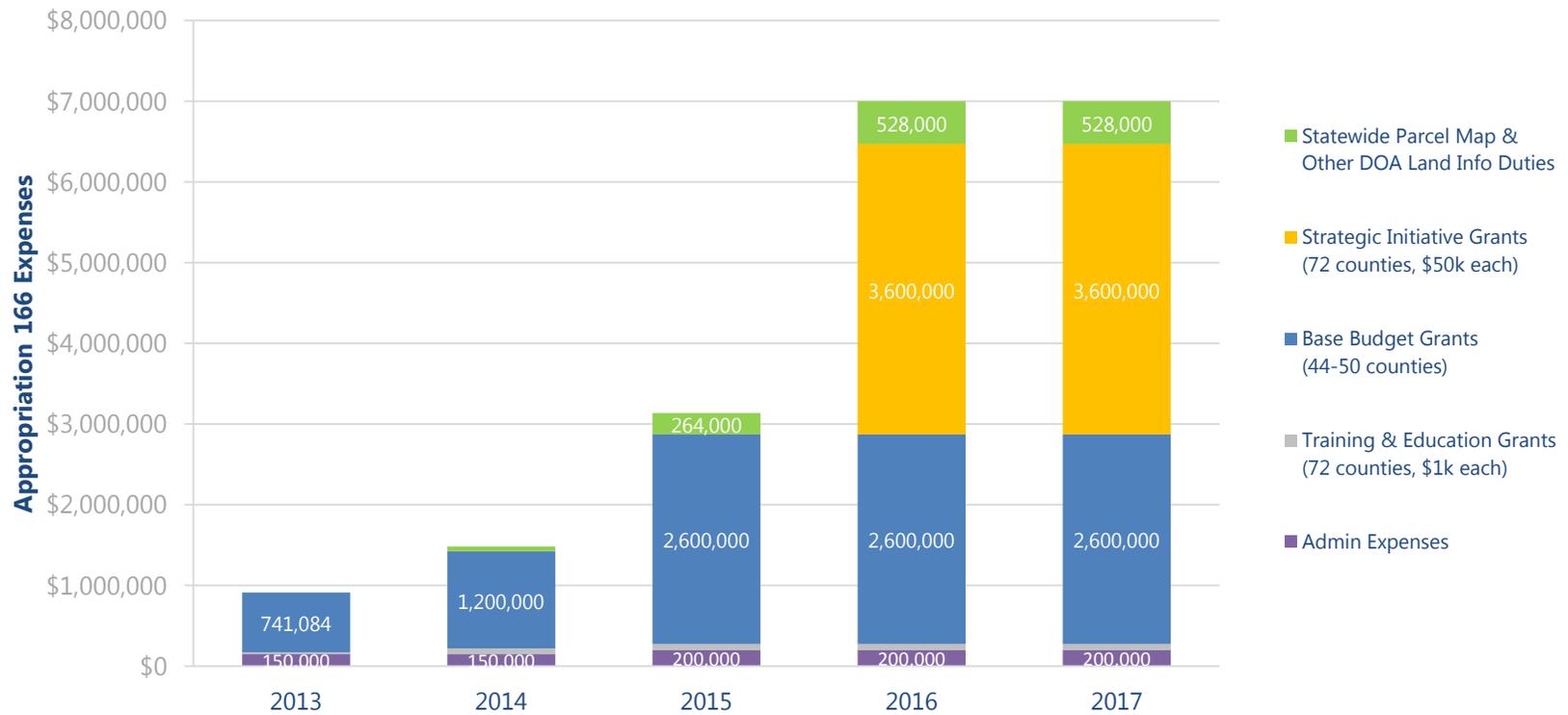
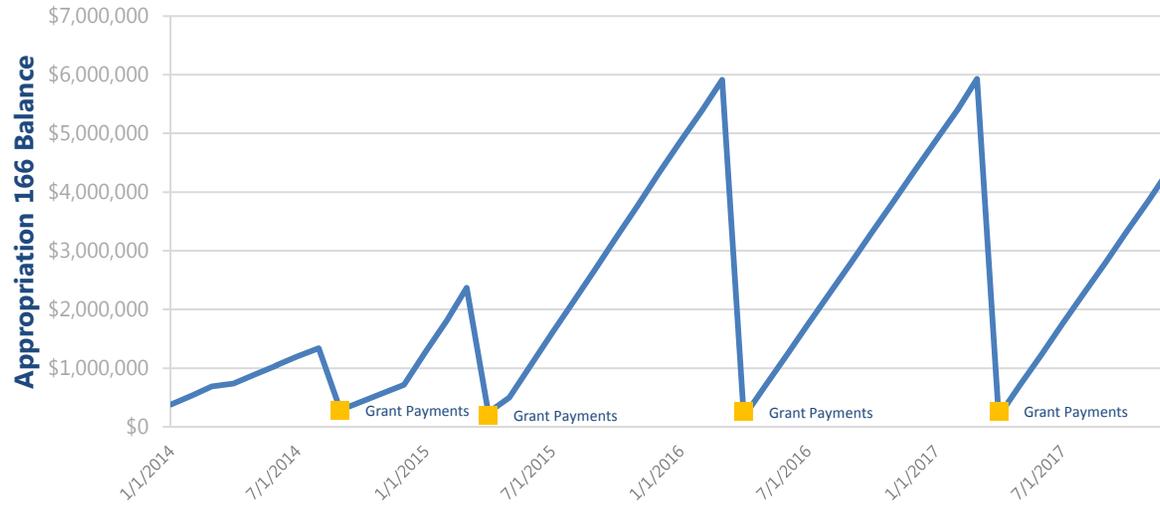
ADVANTAGES

- Addresses primary community concern of funding distribution
- Directs planning process focus to strategic objectives that benefit Wisconsin rather than allocation competition between interest groups
- Allows time for planning process to determine strategic objectives
- Does not punish counties for previous progress
- Treats every county the same
- Avoids complex allocation process or to first establish formal board
- Provides leverage to enforce data sharing requirements
- Enables poorer counties to catch up to benchmark levels
- The budget scenario provides funding for parcel map development and other Duties of the Department described by s. 16.967(3), Land Information Program, such as a land information clearinghouse

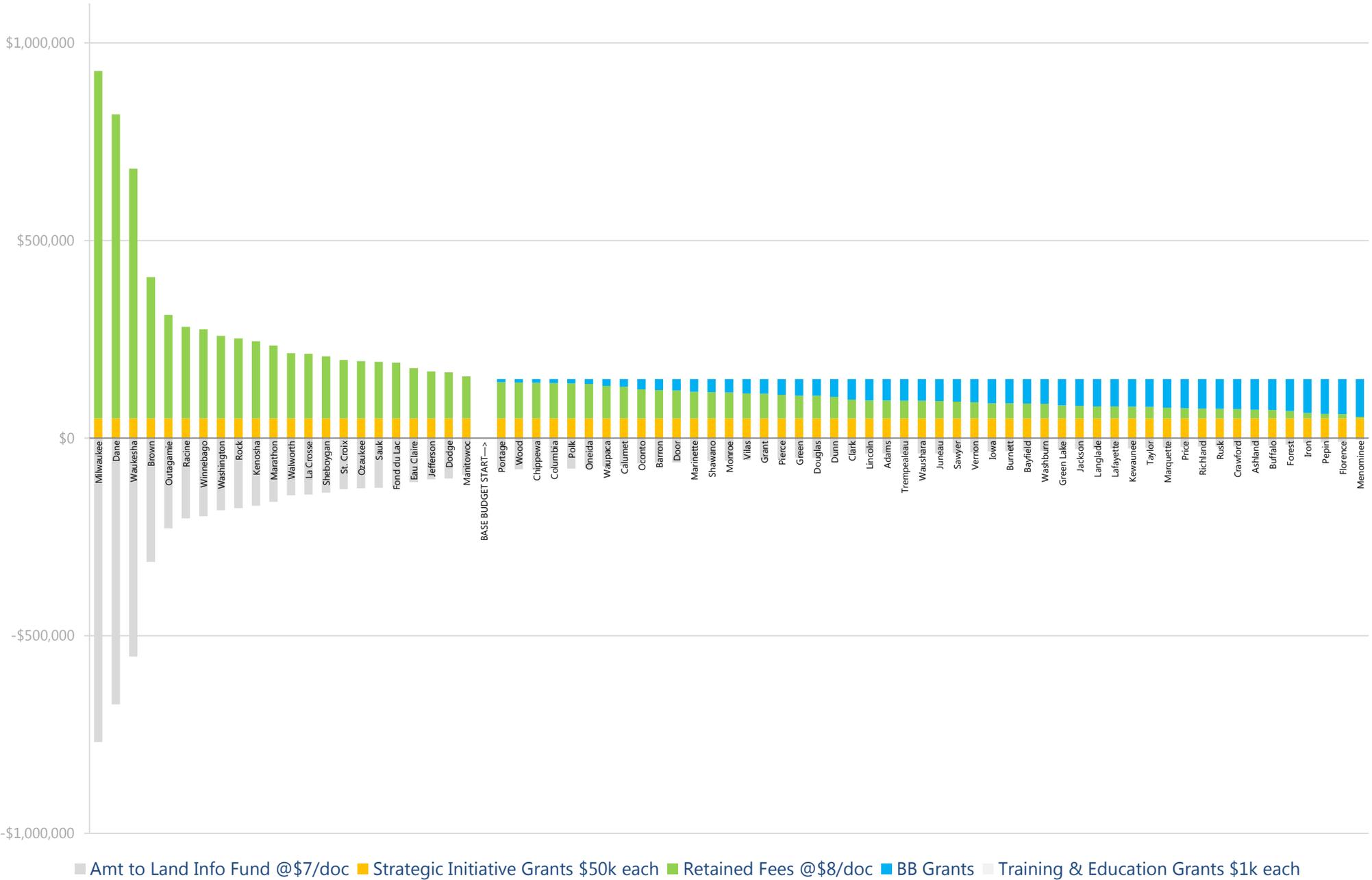
CHALLENGES

- Does not take land area and other county variables into account
- Does not directly fund municipalities that maintain parcel data
- Potential state agency-led GIS projects are not well defined and lack statutory directive, such as for aerial imagery and LiDAR
- Some counties still view themselves as contributing much more into the fund than they receive back in dollars and statewide benefits
- Statewide layer creation still dependent on aggregation of local data
- Clear and simple funding priority benchmarks may be hard to define
- Monitoring compliance with grant agreement requirements may take additional Department of Administration staff resources
- May be difficult to prevent additional grant funding from supplanting the use of non-WLIP funding already spent on land information

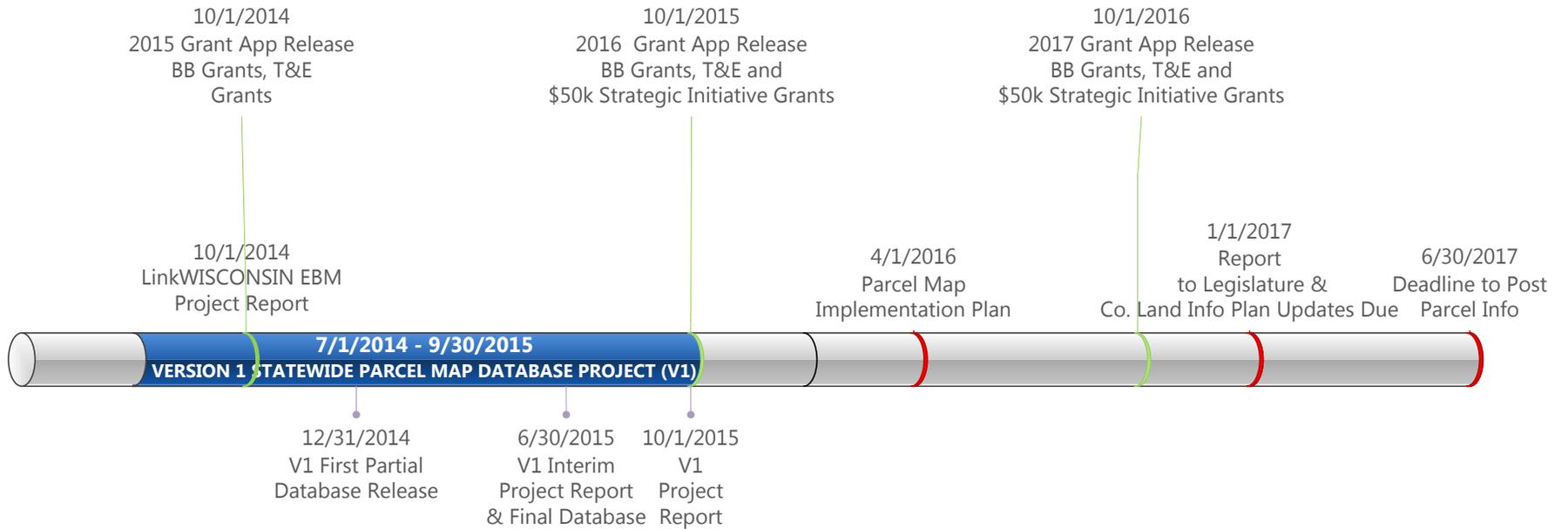
Budget



Distribution of All Funding to Counties



Timeline



County Outreach

2014 WLIP County Survey

- April–May 2014: Design survey with workgroup
- May 30, 2014: Release survey online
- June 13, 2014: Survey due

County Visits

- Goal: WLIP staff visit every county by end of 2015

County Site Visit Invite Group

- Land Information Officer
 - Register of Deeds Officer
 - Surveyor
 - Real Property Lister
 - County Board member of Land Information Council
 - Realtor member of Land Information Council
 - Public safety or emergency communications representative on Council
 - Other members of County Land Information Council
 - Zoning administrator
 - County planner
 - GIS technicians
 - Municipal GIS staff
 - Other interested persons
- **County Site Visit Discussion Topics**
 - Survey questions
 - Strategic Initiative Grant Concept
 - Vision of Parcel Initiative success and future of WLIP

State Agency and Other Stakeholder Outreach

- State agency and other stakeholder surveys to follow county survey
- Details to be determined

Out of this Document's Scope

Many topics relevant to the statewide parcel map planning process and Strategic Initiative Grant Concept are not addressed in detail in this document, but are covered in other places or will be addressed in future communications. The concept presented in this document will evolve to include other topics and address concerns raised by stakeholder groups.

Link-WISCONSIN EBM Parcel Mapping Project

As part of the state broadband initiative called LinkWISCONSIN, the Public Service Commission of Wisconsin is funding the development of statewide parcel and address point layers based on local address and parcel data. A comprehensive final report will be completed September 30, 2014 and will inform the Version 1 Statewide Parcel Map Database Project. More information is available at broadbandmap.sco.wisc.edu

Version 1 Statewide Parcel Map Database Project

The Version 1 Statewide Parcel Map Database Project is described in the Memorandum of Understanding between the State Cartographer's Office and the Department of Administration, Division of Intergovernmental Relations. The project will produce a final, public statewide parcel map database by June 30, 2015 and a final project report by September 30, 2015. More details at www.doa.state.wi.us/wlip

Other DOA Duties Under s. 16.967(3)

- How DOA might serve as the state clearinghouse for access to land information
- How DOA might maintain and distribute an inventory of land information available for the state
- How DOA might prepare guidelines to coordinate the modernization of land records and land information systems

To Be Addressed In Future Communications

- State agency and other stakeholder surveys and outreach
- 2015-16 county land information plan updates
- Future versions of statewide parcel map database and Implementation Plan for long-term development
- Determining benchmarks for county parcel datasets and other possible benchmarks
- Data sharing requirements of WLIP grant agreements

2015 Orthophotography Project status

McDougall, John G. <JMCDOUGALL@SEWRPC.org>

Thu 6/12/2014 10:15 AM

Inbox

To: Al.Brokmeier@kenoshacounty.org <Al.Brokmeier@kenoshacounty.org>; Andrew T. Struck (astruck@co.ozaukee.wi.us) <astruck@co.ozaukee.wi.us>; Andy M. Buehler <Andy.Buehler@kenoshacounty.org>; Cristina Richards (cpearson@co.ozaukee.wi.us) <cpearson@co.ozaukee.wi.us>; Dale Drayna (ddrayna@co.walworth.wi.us) <ddrayna@co.walworth.wi.us>; Donald G. Dittmar (ddittmar@waukeshacounty.gov) <ddittmar@waukeshacounty.gov>; Eric Damkot (eric.damkot@co.washington.wi.us) <eric.damkot@co.washington.wi.us>; James Landwehr (jlandwehr@waukeshacounty.gov) <jlandwehr@waukeshacounty.gov>; Julie A. Anderson (Julie.Anderson@goRacine.org) <Julie.Anderson@goRacine.org>; Bruhn, Kevin <Kevin.Bruhn@milwaukeecountywi.gov>; Kimberly Christman (Kimberly.Christman@goRacine.org) <Kimberly.Christman@goRacine.org>; Ron Voigt (rvoigt@co.ozaukee.wi.us) <rvoigt@co.ozaukee.wi.us>; Scott Schutze <Scott.Schutze@kenoshacounty.org>; Shaw, Bill <William.Shaw@milwaukeecountywi.gov>;

Dean Larson

District Manager

Pictometry International Corp.

Jeff Stroub

Vice President

Quantum Spatial, Inc.

Gentlemen:

The Commission staff and the Land Information Officers in our Region would like to thank you for the time and effort that you invested in the project proposals that you recently submitted for our 2015 Orthophotography Project. The proposals and follow up presentations were well received and very informative.

The following determinations have been made to date:

1. It is highly likely that this project when fully defined will consist of a mix of products prepared by each contractor.
2. SEWRPC has selected the 6-inch resolution orthophotography product from Quantum Spatial as the regional base product. In this respect, SEWRPC was unable to give consideration to Pictometry since it's proposal was not responsive to our specification that cost estimates be provided for orthophotography disaggregated from a package that includes oblique imagery.
3. With respect to imagery, each County is considering SEWRPC's position and its own product preferences. To date, both Milwaukee County and Kenosha County have indicated they will be meeting with Pictometry to discuss acquiring the Pictometry package of traditional orthography

with accompanying oblique imagery. With respect to orthophotography, the remaining five Counties will accept SEWRPC's 6-inch regional product, and possibly negotiate with Quantum Spatial for 3-inch resolution orthophotography for portions of counties.

4. The counties continue to consider their options relative to LiDAR and derived products.

We will keep you informed as this matter moves along. Please contact me if you have any questions.

John McDougall

GIS Manager

Southeastern Wisconsin Regional Planning Commission

W239 N1812 Rockwood Drive, P.O. Box 1607

Waukesha, Wisconsin 53187-1607

(262) 953-3217

jmcdougall@sewrpc.org



DEPARTMENT OF ADMINISTRATIVE SERVICES

DIVISION OF ECONOMIC DEVELOPMENT

MILWAUKEE COUNTY LAND INFORMATION OFFICE

2711 West Wells Street, Rm 426, Milwaukee, WI 53208 (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: September 5, 2014

SUBJECT: 2015 ORTHOPHOTOGRAPHY PROJECT

BACKGROUND

At its meeting held September 22nd, 2009, the MCAMLIS Steering Committee approved a staff recommendation to proceed with the acquisition of Pictometry International Inc. AccuPLUS certified orthophotography. This project was approved coincident with a project to acquire separate six-inch resolution digital orthophotography as included with the SEWRPC 2010 Regional Orthophotography Program. Both sets of digital orthophotography were acquired and delivered through 2010. Subsequent to delivery a comparative study was conducted. The results of this study were published in June 2011 and included in SEWRPC MEMORANDUM REPORT NO. 200: "COMPARISON OF THE RELATIONSHIP OF ALTERNATIVE 2010 ORTHOPHOTOGRAPHS FOR MILWAUKEE COUNTY TO NATIONAL MAP ACCURACY STANDARDS". This report concluded that both digital orthophotography acquisition methods exceed MCAMLIS benchmark horizontal accuracy standards.

Beginning with the 2005 Regional Orthophotography Project, Milwaukee County has acquired spring digital orthophotography every two or three years e.g., 2005, 2007, 2010, 2013.... The next scheduled orthophotography covering Milwaukee County is in spring of 2015. As in past five year cycles beginning in 1995, digital orthophotography acquired for Milwaukee County is eligible for partial funding by SEWRPC in support of regional planning efforts.

PROJECT

2015 Regional Orthophotography Project - the Southeastern Wisconsin Regional Planning Commission, in partnership with the Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha, solicited project and cost proposals from selected qualified vendors for a 2015 imagery and elevation mapping project in Southeastern Wisconsin.

The 2015 Orthophotography Project conducted by SEWRPC solicited project proposals to acquire digital orthophotography for the seven-county Southeastern Wisconsin Region. The Commission project also included the possibility of acquiring oblique aerial photography,

LiDAR data, and elevation mapping in the form of digital terrain model (DTM) files and contour and depression line files for all or portions of the Region.

2015 MCAMLIS Orthophotography Project - in cooperation with the Regional Orthophotography Project efforts, MCAMLIS staff pursued the evaluation of products included with the regional solicitation in addition to more specific products tailored to Milwaukee County needs. These products included 4" resolution imagery (available in 2013) and 3" resolution imagery both from Pictometry International. Staff conducted a survey of current imagery product users along with an imagery comparison (attached 3" vs. 4" Imagery Comparison Exhibit).

The MCAMLIS project is intended to complete the third of three flights as part of a six-year contract with Pictometry International Inc. The original contract entered into in spring of 2010 specified a six-year agreement for imagery to be acquired in years 2010, 2012 and 2014 assuming that funds are available and authorized for this purpose.

This project includes acquisition of Pictometry International AccuPLUS 3-inch pixel, color, digital orthophotography and oblique image photography as a package costing a total of \$141,494. A portion of the 2015 flight cost will be offset by regional planning funds available for this purpose. The SEWRPC contribution of \$15,366 will be used to offset a portion of the total project cost of \$141,494 leaving a required Steering Committee contribution of \$126,158.

RECOMMENDATION

Staff recommends that the MCAMLIS Steering Committee authorize expenditure of \$126,158 to complete the third of three flights included in a six-year contract for the acquisition of Pictometry International AccuPLUS 3-inch pixel, color, digital orthophotography and oblique image photography package.

In justifying this recommendation consider:

1. Pixel resolution of 3" or better is fast becoming the 'gold standard' for visualizing and managing infrastructure within the urban landscape. While 4" resolution is more than adequate for most purposes there is clearly an improvement between 3" and 4" resolution products.

Given that the incremental cost between the two Pictometry International products is \$16,678 or 13.2% the added advantage of better resolution and accuracy bears strong consideration - see 2015 Ortho Cost Analysis – **Recommended Alternatives**

2. As evidenced by input to the 2013 Business Needs Assessment and input to the 2014 Imagery Survey oblique imagery is highly desired and well integrated into the fabric of MCAMLIS Partner organization operations e.g., City of Milwaukee and Suburban community Assessor functions, Milwaukee County ROD, North Shore Dispatch etc.

Pictometry offers the best solution 'bar none' for functional integration support of their oblique products in a multitude of third party systems e.g., Computer Aided Mass

Appraisal, Computer Aided Dispatch, Web Support tools for viewing and measuring and numerous others.

Pictometry does not compete on the basis of Orthophotography alone and only sells a combined ortho and oblique product. Alternatively you can purchase an oblique product without ortho but the cost of alternatively acquiring 3" resolution orthophotography and a separate Pictometry 3" oblique product is considerably more expensive – see 2015 Ortho Cost Analysis – **Combined Alternative** totaling \$177,830 than buying the fully integrated Pictometry Ortho and Oblique products for \$126,158 as recommended.

Attach:

Image Survey and 3" vs. 4" Imagery Comparison Exhibit
2015 Ortho Cost Analysis

* * * * *

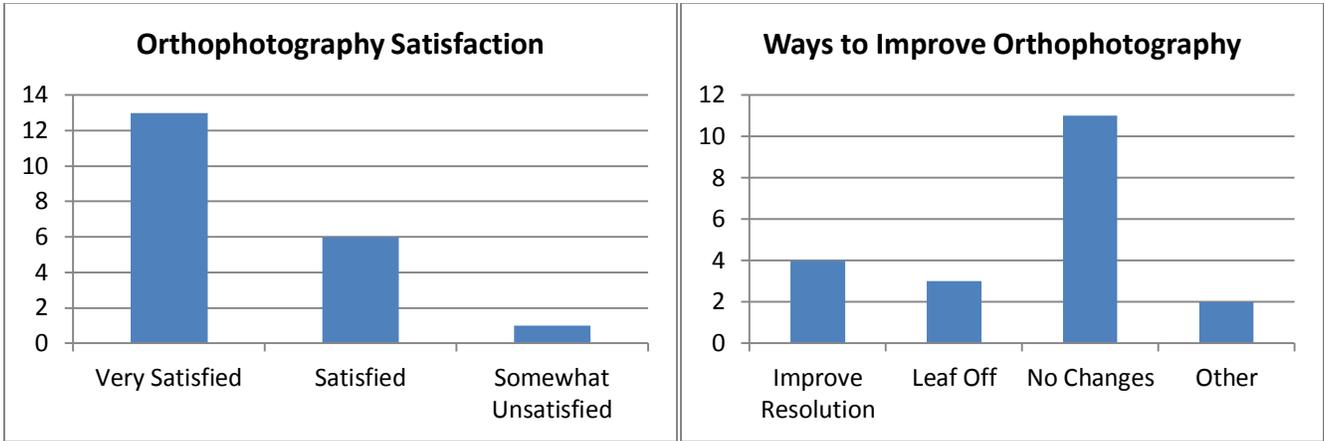
2015 ORTHO COST ANALYSIS

2015 ORTHOPHOTOGRAPHY ANALYSIS

	6 Inch Ortho	6 Inch Ortho w\ Oblique	4 Inch Ortho w\ Oblique	4 Inch Oblique	3 Inch Ortho	3 Inch Oblique	3 Inch Ortho w\ Oblique
Quantum Spatial							
Regional Planning	\$17,425 (\$72/SqMi)	\$57,113 (\$235/SqMi)			\$72,116 (\$298/SqMi)		\$132,828 (\$549/SqMi)
Contribution	\$15,336 (\$63/SqMi)	\$15,336 (\$63/SqMi)			\$15,336 (\$63/SqMi)		\$15,336 (\$63/SqMi)
MCAMLIS Total:	\$2,089 (\$9/SqMi)	\$41,777 (\$172/SqMi)			\$56,780 (\$235/SqMi)		\$117,492 (\$486/SqMi)
* Based on 242 Square Miles							
Pictometry							
Regional Planning		\$85,004 (\$316/SqMi)	\$124,816 (\$464/SqMi)	\$107,600 (\$400/SqMi)		\$121,050 (\$450/SqMi)	\$141,494 (\$526/SqMi)
Contribution		\$15,336 (\$57/SqMi)	\$15,336 (\$57/SqMi)				\$15,336 (\$57/SqMi)
MCAMLIS Total:		\$69,668 (\$259/SqMi)	\$109,480 (\$407/SqMi)	\$107,600 (\$400/SqMi)		\$121,050 (\$450/SqMi)	\$126,158 (\$469/SqMi)
*Based on 269 Square Miles							

Not Recommended	Least Alternative	Combined Alternative	Recommended Alternatives
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Orthophotography

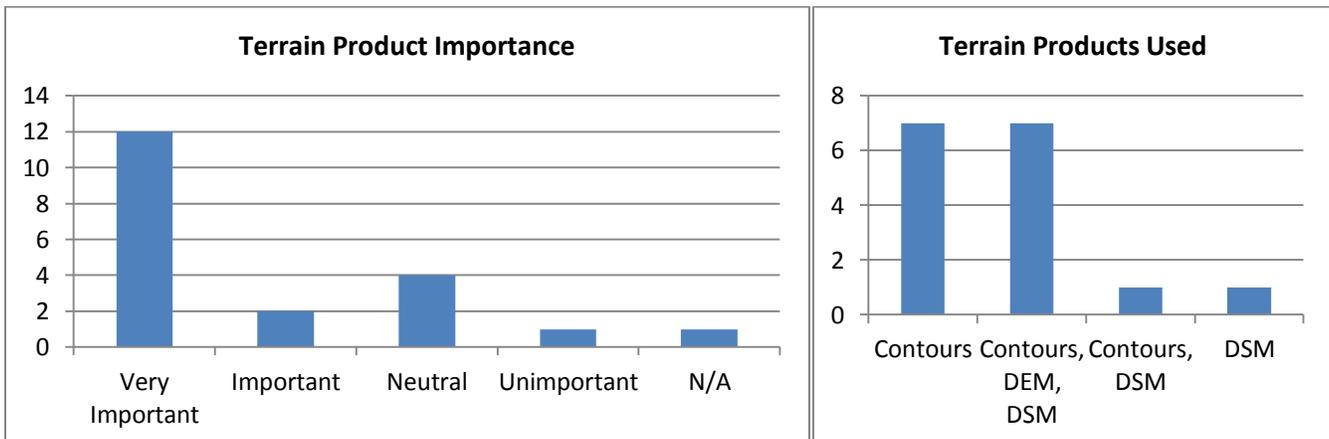


Comments: 1) More frequent collection. 2) Leaf on/off for classification/vegetation studies.

Oblique Photos



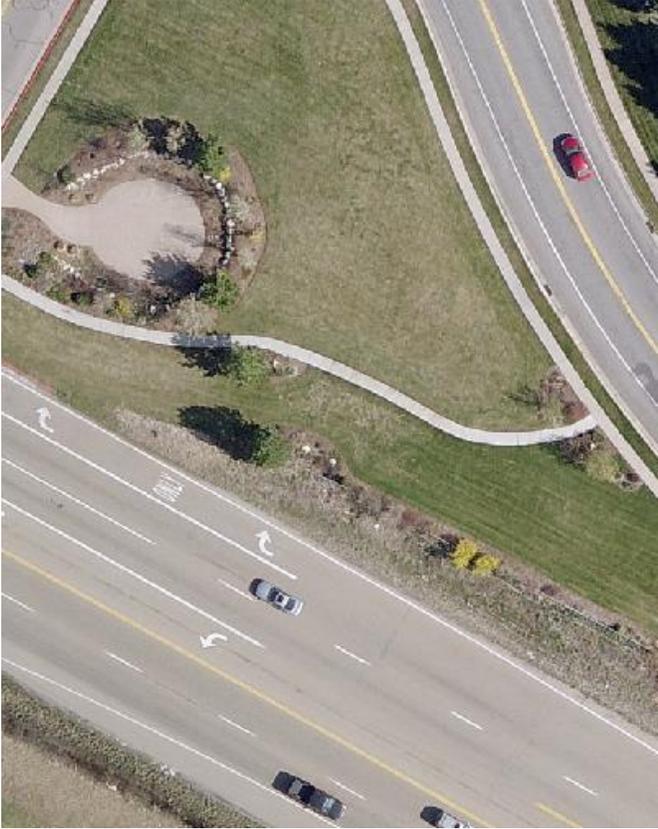
Terrain Products



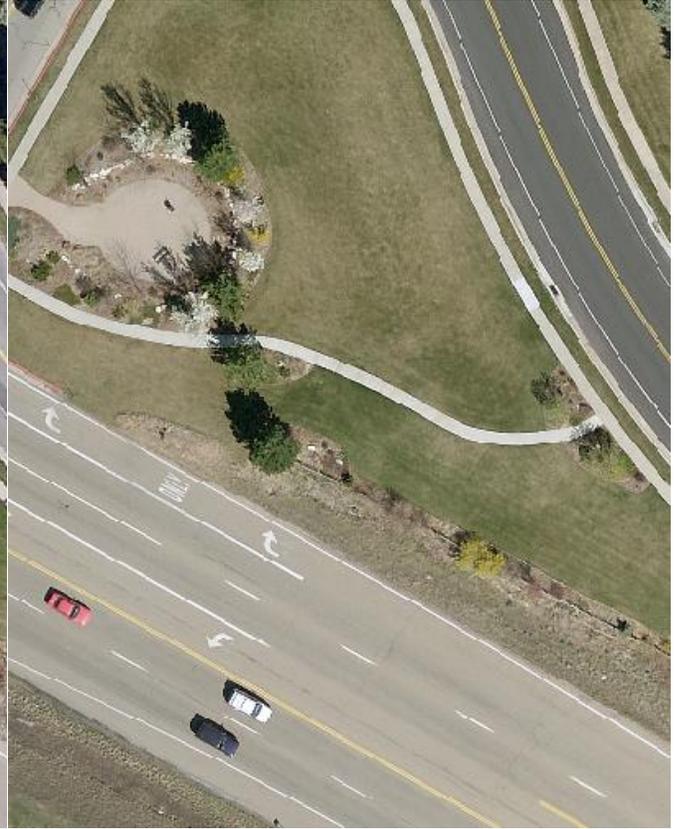
Comments: Increased resolution for DEM/DTM

1 in = 50 ft

4 Inch Resolution



3 Inch Resolution



1 in = 10 ft

4 Inch Resolution



3 Inch Resolution



PRE-PROPOSAL

USGS Broad Agency Announcement for 3D Elevation Program

BAA Number G14PS00574

Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project

Contact Person:

John McDougall

Geographic Information Systems Manager

Southeastern Wisconsin Regional Planning Commission

W239 N1812 Rockwood Drive, P.O. Box 1607

Waukesha, Wisconsin 53187-1607

262-953-3217

jmcdougall@sewrpc.org

Executive Summary:

The team of SEWRPC and Quantum Spatial will partner with five counties to acquire lidar and elevation data for an area of 2,087 square miles covering the most urbanized region of Wisconsin. SEWRPC will provide administrative and management guidance for the project, while Quantum Spatial, an experienced geospatial services provider, will serve as technical lead agency in the collection and preparation of lidar and derived elevation data sets. The project will result in the preparation of all deliverable products as specified by the USGS *Lidar Base Specification Version 1.0* and to the current definition of USGS Quality Level 2 (QL2). Total cost for this project is \$594,795, for which the project team is requesting a 50 percent grant award for assistance in completion of this work effort. The Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project is scheduled to begin in January 2015, with all deliverable products to be provided to the participating counties and to the USGS between September 15 and December 20, 2015.

Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) and Quantum Spatial, Inc. (QSI) will join in partnership to conduct a major lidar collection and elevation data preparation project in Southeastern Wisconsin. The project will cover the five counties of Milwaukee, Ozaukee, Walworth, Washington, and Waukesha in the most populous and developed region of Wisconsin. Lidar data collection and preparation will be performed for a total area of approximately 2,087 square miles, including the 100-meter buffer surrounding the main project area (Exhibit A). The project will result in the preparation of a number of elevation data sets, including raw and classified lidar point cloud data sets, bare-earth surface or raster DEM data sets, hydro-flattening breaklines, and various supporting metadata documentation.

The team of SEWRPC and QSI will collaborate with the appointed Land Information Officers in each of the five counties to complete this project. SEWRPC is the Federally-recognized Metropolitan Planning Organization for the Southeastern Wisconsin Region, and has assisted its counties and local governments in the collection and preparation of conventional topographic mapping for over 50 years, and digital elevation mapping for more than 25 years. The SEWRPC staff will bring project management experience to this joint effort, and will serve as contract administrator and liaison to the County Land Information Officers. QSI (formerly AeroMetric, Inc.) is a leading geospatial products and services provider with a long history of successful completion of projects both in Southeastern Wisconsin and nationally. The firm has successfully completed a number of lidar-related projects under Geospatial Products and Services Contracts (GPSC) with the Federal government. The QSI staff will provide technical expertise in lidar data collection and derived elevation data processing for this project. QSI will collect and process lidar data sets, prepare bare-earth DEMs and derived breaklines, perform quality control procedures on the deliverable digital products, and develop the required metadata.

Project Cost

The total cost for this project, consisting of lidar data collection, lidar processing, preparation of bare-earth raster DEMs, hydro-enforcing breaklines, and metadata for five counties, is \$594,795. The project team of SEWRPC and QSI, on behalf of the five cooperating counties, is requesting a 50 percent grant award—the amount of \$297,397—for assistance in completion of this project.

Project Deliverables

The project will result in the collection and preparation of all deliverable products with acceptance criteria as specified in the USGS *Lidar Base Specification Version 1.0*. The products to be delivered include four digital data sets: 1) raw point cloud; 2) classified point cloud; 3) bare-earth surface [raster DEM]; and 4) hydro-flattening breaklines. Complete metadata and reports will also be delivered. The lidar data and derived products will meet the current definition of Quality Level 2 (QL2) as specified by the USGS.

Project Schedule

The schedule for the Southeastern Wisconsin 2015 Lidar and Elevation Data Project is as follows:

January 2015	Lidar project begins; flight planning and resource allocation for lidar data acquisition initiated and completed within four weeks
March 15 - May 15, 2015	Lidar data collection initiated and completed within eight weeks, weather permitting; lidar processing and derived elevation data preparation begins; quality control of digital files and field survey work started
September 15 - December 20, 2015	Preparation and review of lidar and elevation files completed; all deliverable products provided by SEWRPC to Counties and USGS

Qualifications

Project team member QSI, as the technical lead agency in this partnership, has performed numerous lidar and elevation data projects in the U.S. and North America. QSI (as AeroMetric) has provided professional photogrammetric mapping and GIS services to the USGS since 1999. Recent major projects completed by QSI for the USGS include multi-resolution, multi-spectral imagery and lidar acquisition projects in New Hampshire and Rhode Island, and a multi-state project in New England that acquired and processed over 8,000 square miles of lidar and derived products. Deliverables for these projects included raw and classified lidar in LAS format, bare-earth DEM, and metadata, with all products conforming to USGS Lidar Base Specifications.

Data Acquisition Specifications

The Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project, under the technical guidance of QSI and with the administrative assistance of SEWRPC, will result in the preparation of deliverable products that meet or exceed all minimum specifications as outlined in the USGS *Lidar Base Specification Version 1.0*, and deliverable products that meet the current definition of Quality Level 2 (QL2) as specified by the USGS.

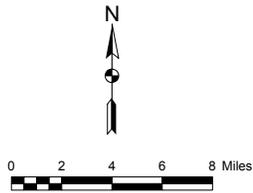
Unrestricted Data

The deliverable products for the Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project will be provided to the USGS without any restrictions whatsoever on use of the data.

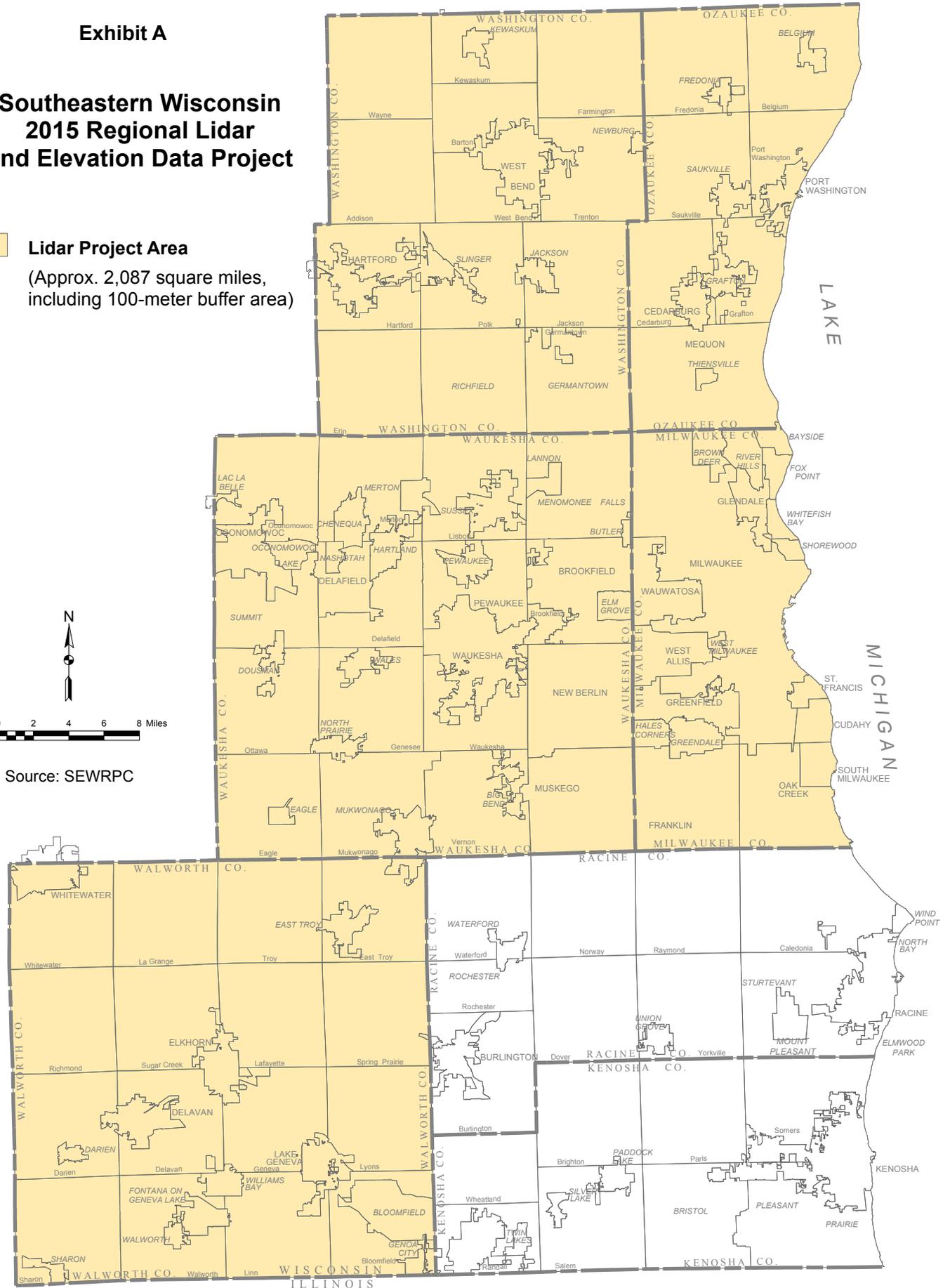
Exhibit A

Southeastern Wisconsin 2015 Regional Lidar and Elevation Data Project

 **Lidar Project Area**
(Approx. 2,087 square miles,
including 100-meter buffer area)



Source: SEWRPC



2015 Lidar County Cost Review

Cost Savings Potential Upon Successful USGS Grant Funding

County	Original Proposal Costs ^a <i>Lidar, DTMs, Contours (no FEMA Accuracy Report)</i>	County Share of USGS Lidar Proposal Costs <i>QL2 Deliverables as Specified by USGS ^b</i>	Potential Savings To County ^c
Milwaukee	\$62,343	\$34,795	\$27,548
Ozaukee	60,252	33,606	26,646
Walworth	148,910	82,974	65,936
Washington	112,321	62,454	49,867
Waukesha	149,675	83,569	66,106
Totals	\$533,501	\$297,398 ^d	\$236,103

^a Quantum Spatial proposal for QL2 deliverables dated April 23, 2014. Do not expect these costs to hold for production in 2016. Datums: NAD 27, NGVD 29.

^b To be discussed with Quantum Spatial at meeting on September 16, 2014. Datums: NAD 83 (2011), NAVD 88.

^c Given the vagaries of the Federal grant procurement process, the penchant of USGS to announce delays, and the lateness of the calendar year, SEWRPC staff recommends that LIOs obtain approval for the cost of the original proposal, with an understanding that grant funds may defray a significant portion of the costs.

^d Total project cost is \$594,795.

Table 4

**ALLOCATION OF COUNTY COSTS FOR SEWRPC COUNTY SURVEYING PROGRAM: 2015
(KENOSHA, MILWAUKEE, OZAUKEE, WALWORTH, AND WAUKESHA COUNTIES)**

County	Percent of Total U.S. Public Land Survey Corners	Percent of Total Urban Land Use (2010)	Cost Allocation			
			Base	50% of Remainder Based on Corners	50% of Remainder Based on Urban Land Use	Total
Kenosha	14.4	10.9	\$ 20,000	\$ 21,168	\$ 16,023	\$ 57,191
Milwaukee	12.7	30.1	\$ 20,000	18,669	44,247	82,916
Ozaukee	12.7	9.4	\$ 20,000	18,669	13,818	52,487
Walworth	29.9	12.8	\$ 20,000	43,953	18,816	82,769
Waukesha	30.3	36.8	\$ 20,000	44,541	54,096	118,637
Total	100.0	100.0	\$100,000	\$147,000	\$147,000	\$394,000

PCE/lgh
6/20/14

Table 4-Allocation of Costs for Surveying Program: 2015 (00218860).DOC