



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: December 4, 2014

SUBJECT: MCAMLIS 97th Steering Committee Meeting Materials

Enclosed please find a set of materials that the steering committee will take up at its scheduled December 16th Meeting.

- I. Meeting Agenda
- II. Meeting Minutes of the 96th Steering Committee meeting held September 23rd 2014
- III. 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. Report materials regarding progress on 2015 Regional Orthophotography Project
 2. Report materials regarding progress on 2015 Regional Elevation Data Project
 - 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);

V. New Business

- A. Letter recommending appointment of the MCAMLIS Project Manager to the title of Milwaukee County Land Information Officer (to be distributed at the meeting)
- B. Report materials regarding MCAMLIS Reserve Trust Account Utilization (to be distributed at the meeting)
- C. Draft agreement for 2015 Milwaukee County Surveyor Services between MCAMLIS and SEWRPC;
- D. Draft agreement for 2015 Map Maintenance Services between MCAMLIS and the City of Milwaukee

VII. Correspondence

- A. NA

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

Ninety-Seventh Steering Committee Meeting

AGENDA

Date: December 16th, 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. Meeting Minutes

Consideration of the minutes of the 96th Steering Committee meeting held September 23rd, 2014

III. 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. Report by MCAMLIS Staff regarding progress on 2015 Regional Orthophotography Project

2. Report by MCAMLIS Staff regarding progress on 2015 Regional Elevation Data Project

- 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
- IV. **Old Business**
 - A. Report by Wisconsin Land Information Program 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);
- V. **New Business**
 - A. Consideration of a Register of Deeds recommendation to appoint the MCAMLIS Project Manager to the title of Milwaukee County Land Information Officer
 - B. Consideration of a MCAMLIS & Fiscal Staff recommendation regarding MCAMLIS Reserve Trust Account Utilization
 - C. Consideration of a 2015 agreement for Milwaukee County Surveyor Services between MCAMLIS and SEWRPC;
 - D. Consideration of a 2015 agreement for Map Maintenance Services between MCAMLIS and the City of Milwaukee, and;
 - E. Appointment of a Nomination Committee to recommend officers to be seated at the Steering Committee's next regular meeting.
- VI. **Correspondence**
- VII. **Date, time, and place of next meeting**
- VIII. **Adjournment**

MINUTES OF THE 96th MEETING
MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM
STEERING COMMITTEE

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

Members Present

| | |
|-------------------------|---|
| Kurt W. Bauer | Milwaukee County Surveyor |
| Donald R. Nehmer, Chair | Capital Program Business Manager, Milwaukee Metropolitan Sewerage District |
| Doug Seymour | Director of Community Development, City of Oak Creek representing the Intergovernmental Coordinating Council of Milwaukee County |
| Greg High | Director, Architecture, Engineering and Environmental Services Division, representing Milwaukee County Department of Administrative Services Facilities Management |
| Dana Kahle | GIS Supervisor, EDAM Support, We Energies |
| Erica Horton | Fiscal Analyst, Milwaukee County DAS, representing Director of Milwaukee County Department of Administrative Services |
| Pamela Booth | GIS Developer – Project Lead, representing Chief Information Officer, City of Milwaukee |
| Katheen Bach | GIS Analyst, Milwaukee County Register of Deeds representing LIO, Milwaukee County Register of Deeds |

Members Absent

Guest and Staff Present

| | |
|-----------------|--|
| William C. Shaw | MCAMLIS Project Manager, Milwaukee County DAS/ECD-MCAMLIS |
| Kevin Bruhn | Senior GIS Analyst, Milwaukee County DAS/ECD- MCAMLIS |
| Brad Blumer | GIS Analyst, Milwaukee County DAS/ECD-MCAMLIS |
| Dan Laurila | Fiscal Analyst, Milwaukee County DAS |

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|------------------|--|
| Tammy Bronson | GIS Analyst, City of Milwaukee, ITMD |
| Phil Mroczkowski | Engineering Drafting Tech, City of Milwaukee |
| Jerrel Kruschke | Central Drafting Records Manager, City of Milwaukee |
| Emily Champagne | GIS Supervisor, Milwaukee Metropolitan Sewerage District |
| Hardy Miehsner | Consultant, Spatial Data Systems |

I. ROLL CALL

Chairman Nehmer, called the Ninety-Sixth 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

INTRODUCTION OF NEW COMMITTEE MEMBERS

Nehmer: announced that new Steering Committee members were attending their first meeting and asked the Committee members to introduce themselves followed by new member introductions of Dana Kahle – We Energies replacing Timothy Marquardt, Doug Seymour – City of Oak Creek replacing John Bennett and Erica Horton – Milwaukee County (arriving later) replacing Dan Laurila

III. MEETING MINUTES

CONSIDERATION OF THE MINUTES OF THE 95TH STEERING COMMITTEE MEETING HELD MARCH 18TH, 2014

Shaw: apologized for the minutes that were not included with the meeting materials and stated that copies were being provided to the Committee at this meeting.

Motion: Booth moved approval of the minutes as written

Second: High, motion carried unanimously

IV. REPORTS

A. 2014 WORK PLAN STATUS

1. INTERACTIVE MAP VIEWER

Shaw: directed the Committee to the report included with the meeting materials. He noted that the web-site was launched at the end of June and further directed the Committee to a number of exhibits highlighting the newly deployed web-site capabilities.

Secretaries Note: Due to a scheduling conflict Mr. Laurila requested that the Fiscal Report be taken out of order. Mr. Nehmer agreed to the agenda change. The original order of business will continue following the Fiscal Report.

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

Horton: directed the Committee to the fiscal report provided with the meeting materials. She briefly summarized the contents of the report for the Committee -noting that revenues through August 29, 2014 were just over \$500,000 and by adding 2013 carryover encumbrances of over \$300,000 resulted in to-date actual revenue balance of \$830,248. Further stating that projected YE revenue is estimated to be \$1.1 million. She then continued her report stating that current expenditures are \$950k with projected YE expenditures estimated to be \$1.2 million leaving a projected YE deficit of \$113,383.

Nehmer: submitted that revenue shortfalls were responsible for the projected deficit and not increased expenditures.

Laurila: concurred with that assessment.

Horton: continued her report regarding fund balances noting that the current estimated Reserve Fund balance was \$1.43 million with a YE estimate of \$1.43 as well.

Seymour: asked in the fund balances appeared to align with overall expectations.

Nehmer: submitted that historically the Reserve Fund balance was considered by the Committee to be available for allocation to projects and that the Committee would be considering this topic later on the agenda. In response to Mr. Seymour's question he added that the current balance appeared to be the highest it has been since 2007 but that because revenues are down that there remains a concern regarding maintaining a balanced budget.

Bauer: noted that there were projects in the past that had depleted the entire Reserve Fund balance and made reference to the topographic mapping project conducted earlier.

Nehmer: agreeing with Mr. Bauer stated that historically that was true but that the cost of the performance of similar projects today were falling in recent experience thus allowing that there can be flexibility as the Committee considers undertaking new projects.

Nehmer: directed the Committee to the 'FY2014 Project Budget Status' included in the meeting materials and asked Mr. Shaw to provide an explanation of this exhibit.

Shaw: reported that he had compiled a report regarding budgeted expenditures versus actual expenditures related to each of the projects included in the MCAMLIS 2014 Workplan approved by the Committee at the end of 2013. He then provided the Committee an explanation of each project's actual vs. budgeted cost and concluded by

estimating that the overall budgeted cost for the 2014 projects would possibly result in a much lower expenditure of \$150,000 rather than the original estimated \$260,000.

Seymour: inquired as to whether this budget surplus would return to the Reserve Fund balance.

Laurila: replied that changes to balances would be reflected by moving funds from the restricted to the unrestricted funding categories within the Reserve Fund but in effect would not change the overall Reserve Fund balance itself.

Nehmer: noted that at the March 18th Steering Committee Meeting that MCAMLIS and Fiscal Staff were requested to provide a recommendation to the Committee regarding an analysis of the unrestricted account balance in the Reserve Fund for purposes of guiding the Committee when considering project funding. He further requested that this item be included on the next meeting agenda.

Nehmer: then requested that Mr. Laurila verbally assure the Committee that sufficient funds were available in the current Reserve Fund balance to allow the Committee to consider two projects included on the agenda under New Business – 2015 Orthophotography and 2015 LiDAR Elevation Data. He added that Mr. Laurila's remarks would be provided to the Committee in lieu of a Fiscal Note that would normally accompany project requests but that one had not been prepared that specifically addressed items that would be considered by the Committee later today.

Laurila: relayed that the combined project expenditure requested to be considered would be approximately \$200,000 and if approved would be expected to be expended during the 2015 budget cycle. He noted that the County Executive has not yet proposed the 2015 County Budget and that a 2015 Budget remains to be approved by the County Board. He concluded that given the projected YE balance of \$1.3 million in the Reserve Fund that in the worst case if the funds for these projects were not available in the 2015 MCAMLIS Operating Budget that they could be transferred out of the Reserve Fund if necessary. He added that he could support the transfer of \$200,000 from the unrestricted to restricted balance within the Reserve Fund and into the MCAMLIS 2015 Operating Budget.

Nehmer: requested further clarification and inquired if these specific project funding requests were currently included in the MCAMLIS 2015 Operating Budget.

Shaw: explained that the original proposed budget – line 6149 included funds totaling \$400,000 and included funding for these projects but because the estimated MCAMLIS 2015 revenue is not expected to support this level of expenditure without causing an operating account deficit thus the line 6149 funding was reduced accordingly in the final proposed budget recommendation. He then stated that in consultation with MS. Horton it was agreed that unbudgeted operating revenue balances could be increased and made available via transfer from the Reserve Fund once the County's budget was finalized.

Horton: confirmed that the proposed MCAMLIS budget does not include the original \$400,000 amount that would have included the funding for these projects and a fund transfer could be necessary to allow for the funding of projects that may be approved by the Committee later today.

Shaw: summarized that for purposes of the Committee's work today that Mr. Laurila's remarks would serve to support the Committee's requirement for a Fiscal Note regarding the availability of funds to support the projects that would be considered later in the agenda. He further stated that he would follow-up with Mr. Laurila and Ms. Horton to prepare a proper Fiscal Note attesting to the statements made by fiscal staff at the meeting today.

Nehmer: further clarifying for the Committee that there would not be sufficient operating revenue included in the MCAMLIS 2015 Operating Budget to cover the cost of these projects, that sufficient funds were available in the Reserve Fund unrestricted account balance and therefore if these projects are approved it will necessitate a transfer of funds to cover any project cost from the MCAMLIS Reserve Fund.

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

A. 2014 WORK PLAN STATUS (CONTINUED)

2. MOBILE TECHNOLOGY

Shaw: directed the Committee to the report included with the meeting materials. He noted the mobile parcel viewer had not moved ahead and that he was concerned that it would be necessary to find a willing municipality or utility partner in need of establishing a mobile viewer environment similar to Zillo – a commercially available parcel viewer before much work on this project could be accomplished

He concluded that at this time the mobile project was in a holding pattern until staff was able to prepare and solicit input specifications and requirements.

Bauer: commented that the integration of coordinate positions and address information was considered critical elsewhere and that our capabilities to do this was notable due to our longstanding efforts in the development of the cadastral and address systems.

Booth: inquired regarding the need to develop the mobile application with a single user in mind and questioned if this approach would be suitable for others.

Shaw: replied that it was not his intention to exclude others but that there're inherent difficulties in engaging the many diverse communities in a meaningful way without introducing substantially more effort. He acknowledged that there would be an effort to emphasize and incorporate ideas and functionality that would account for broader community needs which would then present a better example for others to consider.

Booth: asked if there would be an effort to develop a prototype that could be built upon.

Shaw: agreed that this would be his approach.

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

3. COLLABORATION

Shaw: directed the Committee to the report included with the meeting materials. He stated the goals of the project and proceeded to inform the committee regarding various accomplishments and progress toward each project objective related to training opportunity provided by MCAMLIS. He noted that in some ways the efforts outlined in the project were somewhat outside the realm of MCAMLIS's traditional role in that MCAMLIS does not have a strict educational mandate e.g., MATC and that perhaps it would be preferable to address more specific training requirements rather than becoming a considerably broadened source of training opportunity.

Nehmer: commented that he thought that the project performance was very close to his understanding and expectations as these were described in the 2014 Workplan. He further stated that he felt that the project was much closer to completion than what Mr. Shaw had characterized as perhaps not meeting the full range of expectations originally envisioned.

Shaw: agreed with Mr. Nehmer in so far as he felt that there was excellent progress toward the overall objectives. Nonetheless there were missing components that needed to be addressed in the coming quarters. Principally he intends to introduce on-line documentation tutorials in the form of video and webinar type offerings to assist users of common tools and workflows.

High: inquired about the level of interaction with outside entities and events e.g., the State Cartographers Office

Shaw: replied that through tools located on the revamped website there were many opportunities to inform people about events that are outside the county and that he and his staff among others in the community do attend and participate in many of these events.

Nehmer: commented that he thought we were approaching the target of providing a one-stop shop where people could go if they didn't know where they could locate the information about events, data and applications.

Shaw: continued regarding the MCAMLIS Business Planning project that is intended to address the way that the Committee will formally introduce, evaluate and approve projects in the future. He stated that he was expecting to be able to provide a policy and procedure for consideration by the Committee at the December meeting.

Booth: asked if there were interviews being conducted to gather input from the MCAMLIS partner organizations.

Shaw: replied that a few interviews had been conducted but that he intended to conduct further interviews once he had a chance to draft a set of criteria so that the partner organizations would have something more concrete to respond.

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

4. WEBSITE

Shaw: directed the Committee to the report included with the meeting materials. He then described various methods that are now available through the re-architected website used to access data and information regarding MCAMLIS and the Milwaukee County Land Information Office (MCLIO).

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

5. DATA

Shaw: directed the Committee to the report included with the meeting materials. He then highlighted various exhibits attached to the report regarding Non-Vector data acquisitions including the addition of 1937, and 1990 into the historical aerial photo series and explained how staff was proceeding to acquire and index historical imagery dating back to 1963. He noted that if anyone knew of any large-scale images that there's a possibility that these could be added to the library e.g. 1961 Oak Creek images where added last year.

Bauer: commented that imagery collected in 1961 for City of Oak Creek was used to produce the 1st large scale ~~digital~~ topographic maps in Milwaukee County.

Shaw: continued with his report regarding Vector Data Improvements. He then highlighted the status of the Planimetric Polygon processing project that is underway to condition planimetric feature lines into discreet classified areas. He added that this is the final phase of the polygonalization project and will be completed through the early part of next year.

Bauer: commented that early on it was envisioned that when the planimetric data was first compiled it would one day be used to complete an accurate impervious surface analysis and that the work being completed today will provide the products necessary to complete the original vision.

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

B. MAINTAIN CORE FOUNDATIONAL ELEMENTS

No report

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

Bach: directed the Committee to the report included with the meeting materials. She noted that there were 42 CSM and 15 Subdivision plats recorded to date.

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. Further reporting that during this period there were 98 parcel updates with an addition 63 updates pending.

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

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

Shaw: directed the Committee to the report included with the meeting materials, noting that staff had facilitated the 9th & 10th meeting of the Metro Milwaukee GIS Users Group (MMGUG) held on 4/8/14 at the City of Cudahy and 7/22/2014 at the City of Greenfield further noting that the next meeting is scheduled to be held at the Lincoln Park – Blatz Pavilion on 10/28/2014.

Shaw: continued reporting that he had an opportunity to present the MCAMLIS Business Needs Assessment findings to the Milwaukee County Board Economic and Community Development Committee at their June meeting. 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: further reported activities to coordinate support for various municipalities and their select vendors e.g., MSA – Village of Shorewood and R&M – Wauwatosa.

Booth: asked if there would be an opportunity for the Committee e to review any Memorandum of Understanding that may evolve out of these discussions prior to any signatures.

Shaw: replied that discussion with vendors in this regard is intended to serve to be included in policy decisions by the Committee and that staff would not enter into a formal agreement that commits MCAMLIS resources unless the Committee had approved that action.

Shaw: continued by highlighting work performed to assist the North Shore Fire Department's effort to gain national certification and efforts using a community Analysis tool that assesses economic indicators for selected geographies e.g. City of Franklin retail leakage.

High: commented that a similar community analysis report was used by the County's Economic Development Director to engage local participation in a near west side project he attended.

Shaw: added that the service was being promoted for anyone who would find it useful.

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

E. COUNTYWIDE INITIATIVES

1. REPORT BY MCAMLIS STAFF REGARDING ~~2013~~ 2014 COUNTYWIDE INITIATIVES AND PROGRAM ACTIVITY STATUS

Shaw: directed the Committee to the report included with the meeting materials. Noting the deployment of the 2nd 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.

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

~~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 include coordinated responses to the State Department of Administration by the Land Information Officers Network (LION) extending support for the proposed increase to the WLIP base budget grants from \$50,000 to \$100,000, the Statewide Parcel Project – requesting that the state provide an annual report and the opportunity for County's to apply for project grants up to \$50,000 to assist locals in reaching their LRM goals.

Nehmer: commented that the materials presented suggested that the State was very early in its planning stage for how it will proceed.

Shaw: concurred noting that there were challenges that remained to be overcome e.g., county contributions are extremely varied where basically five counties – Milwaukee among these are disproportionately subsidizing the state’s program.

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

B. 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 regional LIO’s met with SEWRPC staff where they observed presentations by two vendors – Pictometry International and Quantum Spatial gave presentations regarding their respective offerings. Mr. Shaw noted that the Regional Planning Commission assessed the vendors and selected Quantum Spatial as the vendor that would best provide products meeting the Commission’s planning and pricing needs. He further added that each County would be responsible to negotiate with either vendor to identify the products that would be delivered wherein selecting other than the Commission’s selection of baseline product or vendor would likely require additional funding from the county to cover any unsubsidized costs for products different from the Commission. He noted that the Commission would be responsible for managing the overall project regardless of the County’s selected product alternatives e.g., higher resolution, oblique imagery or LiDAR.

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

VI. NEW BUSINESS

A. MCAMLIS STAFF RECOMMENDATION REGARDING THE 2015 MCAMLIS ORTHOPHOTOGRAPHY PROJECT FOR CONSIDERATION BY THE MCAMLIS STEERING COMMITTEE

Shaw: directed the Committee to the report items included with the meeting materials. He provided a narrative background of the project dating back to September 2009 leading to the selection by the Steering Committee of Pictometry International to both provide ortho and oblique imagery. He noted that the Pictometry AccuPlus ortho imagery product went through a rigorous testing and certification process conducted jointly by MCAMLIS Staff and the Commission among others which ultimately concluded with AccuPlus being certified by both the Commission and USGS as meeting these agency’s imagery and accuracy requirements. Consequently the County entered into a 6 year three flight agreement with Pictometry International to provide countywide AccuPlus orthophotography in 2010 and 2013 and ostensibly 2015.

Shaw: further noted that staff has recommended that the Steering Committee select Pictometry based on the combined cost of ortho and oblique imagery. He justified this as the best option as well as the least costly for Milwaukee County over selecting these

products separately given the County's longstanding use of Pictometry and its commitment to quality ortho/oblique imagery. He proceeded to describe the various pricing scenarios leading to the staff recommendation ranging from a low of \$2,089 for baseline 6" orthophotography to a high of \$126,158 for the recommended 3" orthophotography and oblique imagery from Pictometry. He also described the staff considerations leading to this choice rather than a less expensive option having 4" resolution which was based upon the differential cost between these two options amounted to less than \$17,000 and the quality of the images was visually significant enough to sway staff to recommend the 3" approach.

Bauer: commented that 6" resolution was adequate for most purposes but that by increasing the resolution there would be an enhanced capability to enlarge the image to be able to view features beyond the publication scale of the 1inch equals 100 feet scale maps used to overlay the photos. He further noted that the recommendation from staff could be viewed as acquiring better photographs.

Nehmer: asked Mr. Shaw the cost of the 2013 4" resolution flight.

Shaw: replied that the unsubsidized cost of the 2013 flight was \$134,000 and was roughly \$10,000 greater than the equivalent cost today for the same 4" product.

Nehmer: noted that by accepting the proposed 3" recommendation that this would mean that MCAMLIS would actually pay marginally less than in 2013 for 4" – the difference between \$134k and \$126k.

Seymour: inquired why there was a difference in the project areas for the various proposals.

Shaw: replied that the project area of 242 sq. mi/ was based on a continuous flight over the entire seven county region and the 269 sq. mi. figure was based on having to collect imagery outside of the county to fully rectify the targeted area. The Commission's proposal does not include a need for buffered area for Milwaukee County whereas Pictometry would need to buffer the county to prepare the edges required to mesh their imagery with adjacent imagery obtained from other counties e.g., Waukesha, Ozaukee, Washington and Racine.

High: noted that the Quantum Spatial product cost of \$117,492 was less than the Pictometry cost of \$126,158 for the listed 3" products. He wanted to know what differentiated these costs and why if Quantum was less expensive did staff recommend Pictometry.

Shaw: acknowledged that there appeared to be a \$9k differential but that the associated savings related to software integration products included from Pictometry far exceeded any cost advantage listed with the raw products themselves. He further described the lack of capabilities exhibited by Quantum Spatial versus what has been delivered by Pictometry is considerable and that MCAMLIS staff and others using the current Pictometry products would be consumed by having to develop an equivalent level of functionality and utility in the offering from Quantum Spatial.

Nehmer: stated that the Committee received a MCAMLIS Staff recommendation to approve the purchase of 3" resolution ortho/oblique imagery from Pictometry for a total cost of \$126,158. He requested a motion to accept the recommendation.

Motion: Bauer moved to approve the purchase of 3" resolution ortho/oblique imagery from Pictometry for a total cost of \$126,158

Second: Kahle, motion carried unanimously

B. MCAMLIS STAFF REPORT & RECOMMENDATION REGARDING THE SE WISCONSIN 2015 LIDAR ELEVATION DATA PROJECT

Shaw: directed the Committee to the report items included with the meeting materials. He further described a project proposal submitted by the Regional Planning Commission that included the collection and production of elevation products using LiDAR covering five of the seven county region. The proposed project recommends that specifications for the project adhere to the USGS 3DEP project requirements for certain LiDAR point density and hydro-enforced break-lines to qualify for a 50% match obtained from USGS. The total cost of the project if a matching grant is secured would be \$34,795. Alternatively if a grant is not secured a project cost of \$62,343 is anticipated. He stated that MCAMLIS staff is recommending approval of this project in an amount of not-to-exceed \$62,343.

Shaw: continued by noting that the proposed elevation products included in this project are essential for MCAMLIS to continue the process of accurately maintaining planimetric features throughout the county.

Nehmer: summarized that the recommendation before the committee would be for the full amount of \$62,343 with the possibility that this would be reduced to \$34,795 if USGS participates in the cost sharing proposal submitted by the Commission.

Bauer: noted that the proposed elevation products would be compiled using the 1988 vertical datum which varies by .22 feet from the 1929 vertical datum that is in use historically throughout the region. He further stated that for most purposes e.g., mapping would not be a concern but that unless it was commonly understood and clearly published it may introduce confusion especially as it may relate to survey work. He added that federal specifications have made the 1988s datum a requirement and that grant funding would be contingent on its use.

Shaw: commented that there would be a chance to reconsider which vertical datum would be employed if grant funding was not made available and MCAMLIS has to pick up the total cost of the project. He also noted that the 2010 LiDAR elevation project funded by HUD had a similar datum requirement and that the products produced therein have not introduced any real problems excepting that they are used outside of survey work.

Nehmer: questioned whether project completion was contingent on grant funding and if the project would proceed in the absence of USGS cost share.

Shaw: replied that the five counties had agreed to budget the full amount and that if grant funding fell through each of the counties would be positioned to fully fund the project.

Nehmer: stated that the Committee has received a MCAMLIS Staff recommendation to approve a 2015 LiDAR Elevation Data Project with a proposed cost Not-to-Exceed \$62,343. He then requested a motion to accept the recommendation.

Motion: High moved to approve the recommended 2015 LiDAR Elevation Data Project with a proposed cost Not-to-Exceed \$62,343

Second: Seymour, motion carried unanimously

C. MCAMLIS STAFF REPORT REGARDING THE 2015-2019 SURVEYOR COST RECOVERY PLAN

Shaw: referred the Committee to an informational item regarding County Surveyor costs included with the materials. He further noted that the Regional Planning Commission has recommended that the County Surveyor annual cost to Milwaukee County would be increased from \$78,719 per year to \$82,916 per year over the next five years and that Milwaukee County has communicated its acceptance of this change to the Commission

VII. CORRESPONDENCE

Nehmer: asked if there was any correspondence.

Shaw: replied that there was no correspondence but that he would like to make an announcement regarding his plans to retire from service to the Committee effective April 3rd, 2015. He added that he planned to continue in his capacity as MCAMLIS Project Manager through that period. He also urged the Committee to use the time available to develop a recruitment plan and coordinate this with the County's Director of Economic Development.

Bauer: commented that he considered the work that Mr. Shaw has performed for the Committee among the best that he has had an opportunity to participate and that in his view the Committee will greatly miss his contribution. He then inquired how Mr. Shaw thought the Committee should proceed with finding his replacement.

Shaw: recalled that when he was hired that Ms. Olson had been involved to represent the Committees interests and he recommended that the Committee look to Teig Whaley-Smith the Milwaukee County Director of Economic Development to similarly coordinate recruitment.

Nehmer: agreed that the Committee should reach out to the County to assure its interests will be considered in the recruitment and hiring of a new Project Manager.

Bauer: added that he considered the work of the Project Manager to be critical to the success of the Committee and that he thought that finding a replacement for Mr. Shaw would be difficult. He then asked if the hiring process would follow the normal civil service practices of the County.

Shaw: noted that he currently holds a civil service position and that he expected that would be the route taken for his replacement.

Bauer: recalled numerous appointment committees that he had participated in – wondering if this is still the practice and felt that the Steering Committee should have a voice in making this appointment. He also noted that he felt that the high level of efficiency that the Steering Committee is able to conduct its business may be a factor that is unknown to many and that the unique character of the Steering Committee must be considered when selecting an appropriate candidate to replace Mr. Shaw.

Shaw: committed that he would do whatever he could over the next six months to make the Steering Committee's transition to a new Project Manage successful.

VIII. DATE, TIME, AND PLACE OF NEXT MEETING

Mr. Nehmer opened the discussion of the next meeting by offering December 16th, 2014 @ 9:00 am, MMSD (next regular meeting)

IX. ADJOURNMENT

Motion: Bauer, moved to adjourn

Second: Nehmer, 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: December 1, 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 Silverlight Viewer replacement has been in production for 5 months. Feedback on the new viewer has been 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. There are no current plans to abandon this Viewer at this time.

Work continues on the 'Extract' Services functionality. We have taken a different path to perform extractions. Rather than having the extraction completed in a live environment controlled by the user we now prefer a method that allows users to download a set of fixed files compiled to section boundaries. This method will be easier to use and support as technologies change in the future. We expect to have this capability released in the 1st quarter of 2015.

ACTIVITIES THIS PERIOD: 9/14 – 12/14

- MCLIO Web Silverlight Viewer upgraded to Essentials 4.2 and Silverlight 2.3
- Released video training materials on YouTube (Parcel surveys and Markups)

NEXT

- Continue deployment of Silverlight Viewer enhancements
- Develop and deploy Extract capability in the 1st quarter of 2015
- Continue to prepare and deploy help and training videos

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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: December 1, 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: 9/14 – 12/14

- NA

NEXT

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

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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: December 1, 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 continues to be limited consensus on how MCAMLIS can effectively address this need. For now staff efforts have concentrated 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: 9/14 – 12/14

- Included a LiDAR Introduction at the MMGUG Meeting 10/28/2014.
- MCLIO Newsletter and website announcements: Pictometry ConnectExplorer, 1985 Historical Photo coverage etc.
- MCLIO website calendar events: MMGUG 12 January 13th, 2015
- MCLIO website improvements

NEXT

- Develop criteria and guidelines featuring MCAMLIS supported services

* * * * *



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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: December 3, 2014

SUBJECT: MCAMLIS BUSINESS PLANNING

BACKGROUND

This task establishes the process and procedure 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: 9/14 – 12/14

COLLABORATION

- Continued to utilize the services of Spatial Data Systems to conduct interviews documenting similar organizational approaches
- Drafted a policy and procedure document.

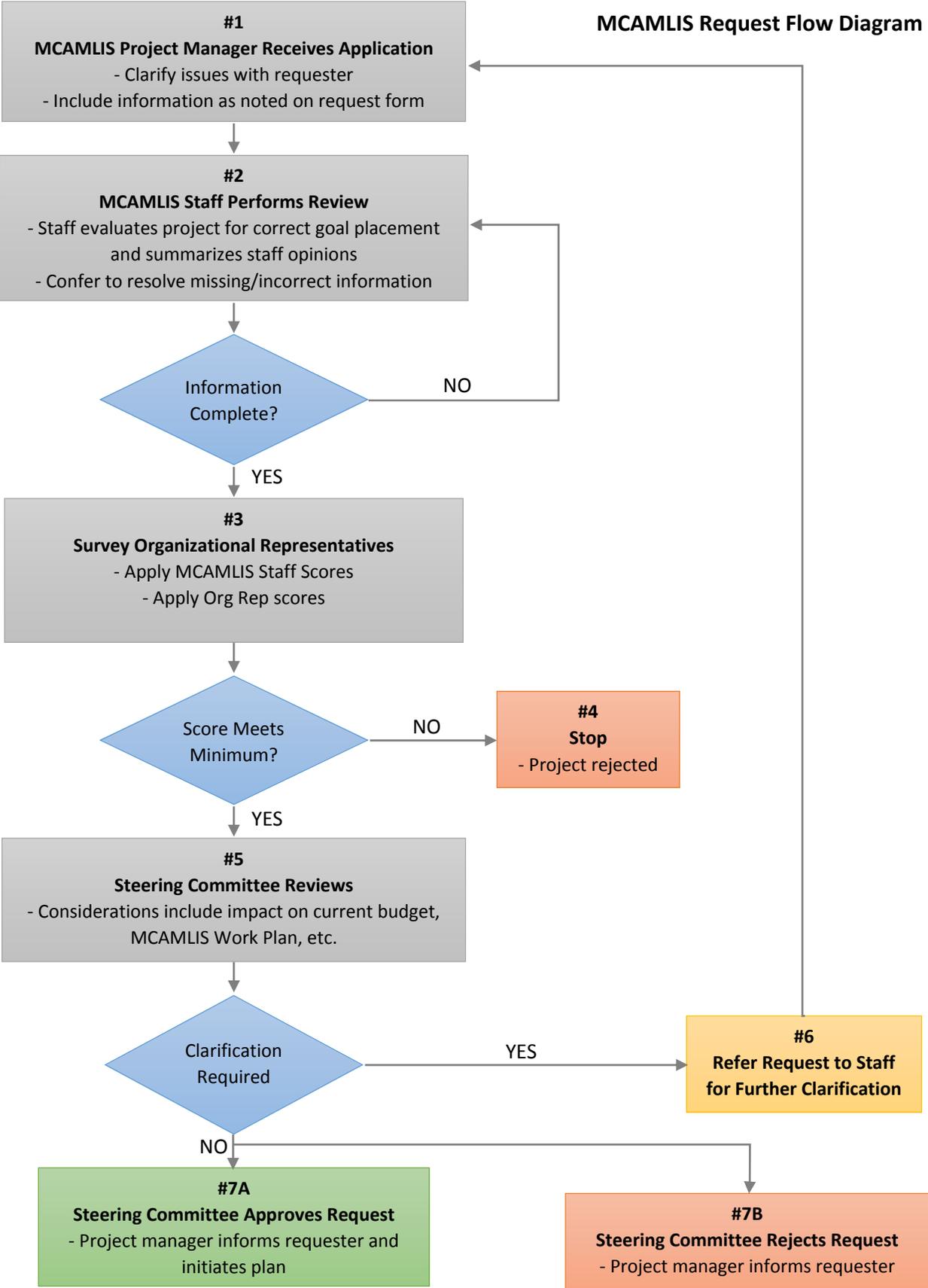
NEXT

- Present proposed MCAMLIS Business Planning Procedure and Guidelines to the Steering Committee for consideration

Attach: Planning Procedure and Guidelines

* * * * *

MCAMLIS Request Flow Diagram



Adapted from Spatial Data Solutions, Inc.

Flow Diagram Narrative

#1 MCAMLIS Project Manager Receives Application:

The Steering Committee's intention is to encourage a best effort submittal of the project request on the MCAMLIS Business Planning New Project Request form. A completed new Project Request should be forwarded to the MCAMLIS Project Manager, Milwaukee County Land Information Office for evaluation.

The expectation is that the Project Manager and Staff is best positioned to perform a cursory review of the request and to confer with the individual making the request to provide missing information:

- Evaluate the total scope of the request
- Estimate cost of project
- Estimate level of work (number of personnel on team to implement project)

Project requests could come from, but not necessarily be limited to, the following:

1. Individual Communities
2. The County
3. Federal and State Agencies
4. Utilities
5. Milwaukee Metropolitan Sewerage District (MMSD)
6. Regional Planning Commission
7. Private Sector organizations in partnership with any of the above
8. Target Areas from Aforementioned which could include:
 - Organization Services
 - Public Safety
 - Public Works
 - Water/Wastewater
 - Enterprise IT/GIS
 - Administration

It is important that the requests should concisely identify overall and specific benefits of the project such as:

- Meet existing MCAMLIS goals
- Cost savings to the existing Program and/or the MCAMLIS Work Plan
- How project will add to, replace, or integrate with requests on the MCAMLIS Work Plan
- Application of new technologies that will benefit multiple MCAMLIS Members

#2 MCAMLIS Staff Performs Review

There will be a cursory review by the MCAMLIS staff to determine completeness of the request and, determine whether any portion requires clarification (e.g. contact person identity, general completeness and clarity of the request). If all of the pertinent information is provided, request forwards to Step 3. If additional information is required, Staff returns to the requester to complete. Review will also be made to determine any duplication of efforts identified in the MCAMLIS Work Plan.

It should be noted that the request should be as short and concise as possible. The request process is not intended to be an exercise in writing. Rather, approval will be determined based on the following criteria and as noted on the MCAMLIS Goal Breakdown (see Appendix 1):

- Ensuring the project meets the criteria for MCAMLIS goals
- Benefits should be quantifiable and documented, especially if the request will substantially impact the current Business Plan and/or MCAMLIS Budget.
- The project request will need to identify who is making the project request and who will or could partner or collaborate. While every request will be reviewed, project requests that will benefit multiple communities or users throughout the County will likely receive a higher ranking. The request should identify all of the personnel who will support the request and who would be available to assist with implementation.
- While the new project request form should be clear and concise, the expectation is that there may need to be a meeting with MCAMLIS Staff to provide clarification and more detailed information concerning the entirety or full scope of the project request. The intention is to minimize the amount of writing that will be required in order to promptly move the request along.

Should there be a need for clarification; MCAMLIS Staff will follow-up with the contact person so as to get a better description of the project and eliminate any questions. Based on the review and understanding, Staff may also suggest that the request be altered to provide the most benefits to MCAMLIS. For example, it could be suggested that the request be combined with another request that may already be pending. In combination, both requests may improve the likelihood of approval.

Finally, and because of limited MCAMLIS Staff resources, the contact person or requesting party will need to provide resources to complete the changes and the task of refining the request before submitting again to Staff for review and consideration.

#3 Prepare Preliminary Staff Findings and Survey Organizational Representatives

MCAMLIS Staff will use the form submission to create the MCAMLIS Organization Representative Survey. The initial MCAMLIS review will be supplied to representatives as additional information, but will not include scoring. Additional information includes the MCAMLIS Goal Description (Appendix 1) and the Scoring Rubric (Appendix 2).

MCAMLIS Staff reviews the project again, this time providing a quantitative score in regards to the MCAMLIS Staff evaluation. This score, along with the Representative Survey and response rate, are entered into the Scoring Rubric to determine a final result and make a recommendation.

#4 Steering Committee Consideration

If the score does not meet the minimum of 25%, the Request Form will be returned and noted as rejected/has not satisfied the project criteria.

#5 Steering Committee Reviews Request and Recommendation

Steering Committee will review recommendations from Staff. Should additional questions arise, the Steering Committee will direct Staff to clarify and bring Request back to Committee. At the discretion of the Steering Committee members, the Committee may choose to consult with the Primary Project Liaison and/or the Target Area Representatives concerning their perspective on the Project Request and agreement as to the benefits that the request will bring to MCAMLIS.

#6 Staff Clarifies Questions and Issues

After all issues have been resolved, request is returned to Steering Committee for consideration.

#7A or 7B Steering Committee Action

After all issues have been resolved and any necessary clarifications are documented and included with the Project Request, the Steering Committee will take one of the following actions:

- **#7A** Approve the request and inform Staff to initiate whatever effort is necessary to implement the request. Staff will notify Requestor(s) that the request has been approved.
- **#7B** Reject the request. Based on the documented discussion by the Steering Committee, Staff will notify Requestor(s) that the request wouldn't be valid at this time.

Flow Diagram Documents

#1 MCMALIS Project Manager Receives Application

MCAMLIS Business Planning New Project Request Form [Example]

Project Name: Mobile Property Locator Application

Project Applicant: GIS Supervisor

Applicant Telephone: 414-555-1212

Applicant E-mail: applicant@email.com

Applicant Organization: MMSD

Organizational Champion

Please provide the contact information for the individual at your organization that will be the primary liaison to MCAMLIS staff for the duration of the project, if it differs from the applicant.

Same as applicant.

Project Summary

Please give a brief summary of the project, describing the general purpose and desired results of the project.

This project will allow access to MCAMLIS parcel data using mobile devices such as tablets, cell phones, toughbooks, etc. The application will allow users to locate properties and retrieve addresses.

Project Detail

Please provide a detailed description of the project, including any historical information that may be of relevance, an indication of the urgency of the project, funding considerations, policy/legislative mandate requirements, and information regarding any action that has been taken to begin the project to date.

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.

MCAMLIS Goal Breakdown

Using the descriptions in Appendix 1, please describe how this project meets one or more of the goal requirements needed for MCAMLIS consideration.

Goal 1: Maintain Core Foundational Elements

N/A

Goal 2: Promote the Integration of Parcel Based Land Information

(b) This project will help integrate parcel based land information with public works management systems by allowing utility and other agencies to quickly locate parcels in the field.

(c, d) This information will be disseminated to the public via interactive website, and as data service feeds that can be used for analysis by interested parties.

Goal 3: Educational Outreach

(a) This application will include online help and tutorials.

Goal 4: Countywide Initiatives

(b) By providing better access to Milwaukee County enterprise address system data, it is expected that the data will be improved upon based on information collected in the field. This will increase the quality of the data over time.

(f) This application will be available within all municipalities of Milwaukee County.

Additional Information (If Applicable)

This information is optional, but it may be used by MCAMLIS staff during evaluation of the project.

Does your organization have additional staff and/or resources available to assist with this project? *If so, please describe the level of assistance that could be provided for this project.*

Our GIS staff can help prepare data and provide feedback during the course of the project.

Is this project mandated? *If so, please provide information regarding the mandate as well as any deadline requirements.*

Do you have a cost estimate for this project? *If so, please provide that information.*

There is no cost estimate outside of mobile hardware, which is already purchased.

Is there a deadline or time frame that is critical to his project? *If so, please describe.*

Our hope was to have this operational by fourth quarter 2015.

#2 MCAMLIS Staff Performs Review

MCAMLIS Staff Evaluation of Project, Without Scores [EXAMPLE]

- a. Project applicant/organization has additional resources dedicated to this project, whose participation can positively contribute to project completion. *For example, there are GIS Analysts who can prepare data and/or manage aspects of the project independently from MCAMLIS staff. Projects that shift more of the project work and management onto MCAMLIS staff would score low, whereas projects that will predominantly rely on applicant efforts would score high.*

MMSD has a team of GIS users who can be relied upon to contribute data and constructive feedback pertaining to application development. However, since the applications will be housed in the MCAMLIS system, the majority of efforts will be performed by MCAMLIS staff.

- b. Project is a natural extension or continuation of an existing or recently completed project, such that a considerable amount of project management effort can be saved. *For example, the project is merely an extension on a contract, and therefore does not require the usual time and effort require for preparing RFPs, data, infrastructure, etc. Projects that are new and unrelated to any other projects would score low, whereas add-on or ancillary projects would score high.*

Most of the parcel services are already prepared and include the necessary data for this project. Moreover, there are some existing mobile parcel applications that are being used on a limited basis within MCAMLIS, however this project is, for the most part, brand new.

- c. Additional funding is available (via grants, etc.) to complete this project by contracting a substantial amount of the work to consultants, which can increase efficiency by taking pressure off applicant/MCAMLIS staff. *A project that has limited funding outside of MCAMLIS, thus requiring work to be funded by MCAMLIS only, would score low, whereas projects with significant outside funding would score high.*

There is no dedicated source of funding for this project as of yet, however, MMSD is providing their own mobile devices, which takes some of the financial burden off of MCAMLIS in terms of providing hardware for this project.

- d. Project is of critical importance to the MCAMLIS technological infrastructure, such that delaying the project may endanger the operation of MCAMLIS applications, websites, and services. *A project that does not endanger MCAMLIS functions would score low, whereas a project that is crucial to the continued operation or improvement of functionality would score high.*

Although this project does not directly affect existing infrastructure at MCAMLIS, it has been identified as a core application to be developed. Essentially, it WILL be a vital function at the conclusion of this project.

- e. Project is a critical update to existing foundational MCAMLIS data, such that delaying the project may result in a lapse of collecting data in a periodic fashion (e.g., 5 year update cycles). *A project*

that is collecting new data, or is localized, and is not part of a periodic update of core MCAMLIS data would score low, whereas a project that is updating county-wide data as part of an update cycle would score highly.

This project does not pertain to periodic updates of foundational MCAMLIS data.

- f. The project is technologically feasible and demonstrably realistic using today's technology, even if MCAMLIS does not currently use such technologies. *For example, the technology to achieve the project exists and has been applied elsewhere, rather than from-scratch coding or development. A project that requires new software or technologies would receive a low score, whereas out-of-the-box solutions would receive a high score.*

All of the hardware and software necessary to complete this project exists in an out-of-the-box-option. The data would need to be prepared and configured within the application, however the process is well documented and a proven technology.

- g. There are no significant technological or policy roadblocks that prevent the implementation of the project, or conversely, the project is mandated through public policy or is considered as extremely favorable to public interests. *For example, a project that requires significant effort to gain approval or alter public policy would receive a low score, whereas a project that is required to be completed because of a mandate would score high.*

This project is not subject to policy roadblocks, not is it statutorily required. However, as a core project it is identified as being of great importance to the public good.

#3 Survey Organizational Representatives

MCAMLIS Organizational Representative Survey [EXAMPLE]

Project Name: Mobile Property Locator Application

Project Applicant: GIS Supervisor

Organization: MMSD

1. MCAMLIS Project Requirements

Purpose: The purpose of this survey is to evaluate the relative importance of projects submitted for MCAMLIS consideration, and to prioritize projects within the 5 year plan.

Prerequisite: In order to be considered, projects must qualify in one or more of the four MCAMLIS goal categories. The project applicant(s) have identified one or more of these goals as being met, which is described in Section 4. The goals correspond to the goal categories and subcategories defined in Appendix 1.

Response: Your response is important. The relative response rate to this survey will be used as an indication of the general level of interest in the project. Twelve (12) responses to this survey will be used as the benchmark for excellent survey responsiveness, so if you do not foresee any immediate impact to your organization, your input is still valuable. Planning and prioritization of projects will be determined using survey responses in conjunction with MCAMLIS Staff input, Steering Committee approval and other factors, such as budgeting and project timing. See Appendix 2 for the rubric that will be used to determine an advisory score for the project. MCAMLIS Staff Input is also attached to provide better clarification as to the planning, context, and technological requirements needed to complete the project.

2. Project Summary

This project will allow access to MCAMLIS parcel data using mobile devices such as tablets, cell phones, toughbooks, etc. The application will allow users to locate properties and retrieve addresses.

3. Project Detail

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.

4. MCAMLIS Goal Breakdown

a. Goal 1: Maintain Core Foundational Elements

N/A

b. Goal 2: Promote the Integration of Parcel Based Land Information

(b) This project will help integrate parcel based land information with public works management systems by allowing utility and other agencies to quickly locate parcels in the field.

(c, d) This information will be disseminated to the public via interactive website, and as data service feeds that can be used for analysis by interested parties.

c. Goal 3: Educational Outreach

(a) This application will include online help and tutorials.

d. Goal 4: Countywide Initiatives

(b) By providing better access to Milwaukee County enterprise address system data, it is expected that the data will be improved upon based on information collected in the field. This will increase the quality of the data over time.

(f) This application will be available within all municipalities of Milwaukee County.

5. Questionnaire

- a. Is this project an urgent need or of great value/benefit to your organization or stakeholders? (If no, please skip to question c.)**

[YES] / NO

Please describe why this project is or is not applicable to your organization or stakeholders. (If so, please describe any mandates and the level of urgency regarding this project.)

This has been a core need for a while at our organization. When workers are out in the field they frequently need information regarding parcels in the vicinity, but without a mobile option they are limited to old paper maps which are out of date. This causes a great deal of confusion and is not efficient.

- b. Does your organization have an individual that could be a champion for this project and act as the primary liaison to MCAMLIS Staff for the duration of the project?**

[YES] / NO

If yes, please provide contact information for the person(s) who may be interested in championing this project.

GIS Supervisor, MMSD

- c. Do you foresee this project having benefit outside of your organization that would make of greater value to MCAMLIS constituents?**

[YES] / NO

Please describe why this project may be beneficial to other organizations, or conversely, why you believe it is not of value or applicable beyond the requesting organization.

Most local organizations rely on parcel based data for their processes. Getting that data out into the field can only benefit organizations and increase efficiency.

Appendix 1: MCAMLIS Goal Descriptions

| <u>GOAL 1: Maintain Core Foundational Elements</u> | | <u>GOAL 2: Promote the Integration of Parcel Based Land Information</u> | |
|--|---|--|---|
| <p>Objectives - Provide for the maintenance of the USPLSS; Maintain high-order vertical and horizontal control systems; and Maintain large-scale topographic and Cadastral mapping products.</p> | | <p>Objectives - Integrate attribute data having broad utility within parcel products; Provide technology that fosters integration of parcel information across jurisdictions; Prepare parcel data for easy access via common formats and via on-line systems; and include enabling technology and platforms consistent with a wide variety of capabilities and use for purposes of accessing and distributing GIS via on-line web-based systems.</p> | |
| a. | <p>Ongoing maintenance of the location and re-monumentation of all U. S. Public Land Survey corners in the County, including the centers of the sections.</p> | a. | <p>Develop and integrate carefully selected attribute data having broad utility, including current land use, zoning, flood hazard, wetland, and assessment data, among others</p> |
| b. | <p>Maintenance of high-order horizontal and vertical control surveys to establish the State Plane Coordinates and elevations of the U. S. Public Land Survey corners.</p> | b. | <p>Provide technology and services used to foster the integration of parcel based land information within Public Works management systems throughout Milwaukee County</p> |
| c. | <p>Maintenance of large-scale topographic base maps in digital form at a scale of one-inch equals 100 feet with two-foot contour intervals.</p> | c. | <p>Provide that the information assembled under the program is readily translatable and available for use by state, county, and municipal units and agencies of government and public utilities and by private entities, including, importantly, interested citizens. This requires making the information available via the Internet for viewing and retrieval of base map and land-related information;</p> |
| d. | <p>Maintenance of companion cadastral maps to the topographic maps in digital form at a scale of one inch equals 100 feet providing detailed information on the location and configuration of all real property boundaries, including the boundaries of all streets and public ways and other public land holdings; and assigning a parcel identification number (tax key number) to each ownership parcel to enable the linking of geographic with non-geographic data files</p> | d. | <p>Provide enabling technologies and platforms including; general purpose interactive internet based land information mapping, standardized client selectable on-line map services, and Representational State Transfer templates for implementing a wide variety of web based applications including public works asset inventory and management systems.</p> |

| <u>GOAL 3: Educational Outreach</u> | | <u>GOAL 4: Countywide Initiatives</u> | |
|--|--|---|---|
| Objectives - Conduct educational outreach programs and forums. Solicit local governmental GIS support requirements. Introduce opportunities for local government introduction to GIS Best Practice processes and procedures. | | Objectives - 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. | |
| a. | Conduct educational outreach programs through the use of technical and non-technical forums e.g., annual MCLIO open-house, custom training, documentation and best practice presentations; | a. | Develop a methodology for prioritizing project requests to ensure projects are aligned with MCAMLIS strategic objectives and ensure the efficient use of scarce resources; |
| b. | Solicit input from local governmental units with regard to supporting their mapping requirements; | b. | Continue to develop and maintain an Enterprise Address System (EAS) capable of integrating process, data, technology and organizational components across Milwaukee County municipalities, law enforcement, emergency management and land development interests. This objective strives to remedy current operational constraints while enhancing access to and usability of street name and address data countywide; |
| c. | Introduce local governmental units to organizations and speakers that exhibit best practice solutions that meet countywide land information requirements. | c. | Complete the mapping of the 100-year recurrence interval flood hazard areas within Milwaukee County, integrating the mapping into the automated land information system; |
| | | d. | Automate the access to and maintenance of address information providing location-based, current, complete and standardized address information across the county via web-based technologies; |

Appendix 2: Scoring Rubric

Projects which receive a score of 25% or higher will be deemed as **accepted** by this process, and will move on to the MCAMLIS Steering Committee for consideration.

| | | Numeric Score Range (min-max) | Maximum Percentage |
|-----------------------------|--|----------------------------------|-----------------------|
| Survey Questions | | 0-3 | 40% |
| Value Within Org | a. Yes/No: Average of total respondents | 0-1 | 13.3% |
| Champion | b. Yes/No: Average of total respondents | 0-1 | 13.3% |
| Value Outside Org | c. Yes/No: Average of total respondents | 0-1 | 13.3% |
| | | | |
| Survey Response Rate | 12 Is Identified as "Excellent" Response Rate | 0-1 | 10% |
| | Percentage of responses, out of 12 | 0-1 | 10% |
| | | | |
| MCAMLIS Input | | 0-25 | 50% |
| Resources | a. Disagree (0) to Agree (5) | 0-5 | 10% |
| Extension | b. Disagree (0) to Agree (5) | 0-5 | 10% |
| Funding | c. Disagree (0) to Agree (5) | 0-5 | 10% |
| Infrastructure | d. Disagree (0) to Agree (5) | 0-5 | 10% |
| Data | e. Disagree (0) to Agree (5) | 0-5 | 10% |
| Feasibility | f. Disagree (0) to Agree (5) | 0-5 | 10% |
| Roadblock/Mandate | g. Disagree (0) to Agree (5) | 0-5 | 10% |
| | | | |
| Grand Total Score | | 29 | 100% |

#3 Apply MCAMLIS Staff Scores

MCAMLIS Staff Evaluation of Project, With Scores [EXAMPLE]

- h. Project applicant/organization has additional resources dedicated to this project, whose participation can positively contribute to project completion. *For example, there are GIS Analysts who can prepare data and/or manage aspects of the project independently from MCAMLIS staff. Projects that shift more of the project work and management onto MCAMLIS staff would score low, whereas projects that will predominantly rely on applicant efforts would score high.*

MMSD has a team of GIS users who can be relied upon to contribute data and constructive feedback pertaining to application development. However, since the applications will be housed in the MCAMLIS system, the majority of efforts will be performed by MCAMLIS staff.

0 1 [2] 3 4 5

- i. Project is a natural extension or continuation of an existing or recently completed project, such that a considerable amount of project management effort can be saved. *For example, the project is merely an extension on a contract, and therefore does not require the usual time and effort require for preparing RFPs, data, infrastructure, etc. Projects that are new and unrelated to any other projects would score low, whereas add-on or ancillary projects would score high.*

Most of the parcel services are already prepared and include the necessary data for this project. Moreover, there are some existing mobile parcel applications that are being used on a limited basis within MCAMLIS, however this project is, for the most part, brand new.

0 1 [2] 3 4 5

- j. Additional funding is available (via grants, etc.) to complete this project by contracting a substantial amount of the work to consultants, which can increase efficiency by taking pressure off applicant/MCAMLIS staff. *A project that has limited funding **outside of MCAMLIS**, thus requiring work to be funded by MCAMLIS only, would score low, whereas projects with significant outside funding would score high.*

There is no dedicated source of funding for this project as of yet, however, MMSD is providing their own mobile devices, which takes some of the financial burden off of MCAMLIS in terms of providing hardware for this project.

0 [1] 2 3 4 5

- k. Project is of critical importance to the MCAMLIS technological infrastructure, such that delaying the project may endanger the operation of MCAMLIS applications, websites, and services. *A project that does not endanger MCAMLIS functions would score low, whereas a project that is crucial to the continued operation or improvement of functionality would score high.*

Although this project does not directly affect existing infrastructure at MCAMLIS, it has been identified as a core application to be developed. Essentially, it WILL be a vital function at the conclusion of this project.

0 1 [2] 3 4 5

- i. Project is a critical update to existing foundational MCAMLIS data, such that delaying the project may result in a lapse of collecting data in a periodic fashion (e.g., 5 year update cycles). *A project that is collecting new data, or is localized, and is not part of a periodic update of core MCAMLIS data would score low, whereas a project that is updating county-wide data as part of an update cycle would score highly.*

This project does not pertain to periodic updates of foundational MCAMLIS data.

[0] 1 2 3 4 5

- m. The project is technologically feasible and demonstrably realistic using today's technology, even if MCAMLIS does not currently use such technologies. *For example, the technology to achieve the project exists and has been applied elsewhere, rather than from-scratch coding or development. A project that requires new software or technologies would receive a low score, whereas out-of-the-box solutions would receive a high score.*

All of the hardware and software necessary to complete this project exists in an out-of-the-box option. The data would need to be prepared and configured within the application, however the process is well documented and a proven technology.

0 1 2 3 4 [5]

- n. There are no significant technological or policy roadblocks that prevent the implementation of the project, or conversely, the project is mandated through public policy or is considered as extremely favorable to public interests. *For example, a project that requires significant effort to gain approval or alter public policy would receive a low score, whereas a project that is required to be completed because of a mandate would score high.*

This project is not subject to policy roadblocks, nor is it statutorily required. However, as a core project it is identified as being of great importance to the public good.

0 1 2 [3] 4 5

#3 Score Meets/Does Not Meet Minimum

Results and Recommendation [EXAMPLE]

Projects which receive a score of 25% or higher will be deemed as **accepted** by this process, and will move on to the MCAMLIS Steering Committee for consideration.

Scoring Breakdown

| | | Numeric Score | Percentage |
|---|--|---------------|--------------|
| Survey Questions (Max Score 40%) | | 1.9 | 25.3% |
| Value Within Org | a. Yes/No: Average of total respondents | 0.7 | 9.3% |
| Champion | b. Yes/No: Average of total respondents | 0.6 | 8.0% |
| Value Outside Org | c. Yes/No: Average of total respondents | 0.6 | 8.0% |
| | | | |
| Survey Response Rate (Max Score 10%) | 12 Is Identified as "Excellent" Response Rate | 0.66 | 6% |
| 8 Responses | Percentage of responses, out of 12 | 0.66 | 6% |
| | | | |
| MCAMLIS Input (Max Score 50%) | | 15 | 30% |
| Resources | a. Disagree (0) to Agree (5) | 2 | 4% |
| Extension | b. Disagree (0) to Agree (5) | 2 | 4% |
| Funding | c. Disagree (0) to Agree (5) | 1 | 2% |
| Infrastructure | d. Disagree (0) to Agree (5) | 2 | 4% |
| Data | e. Disagree (0) to Agree (5) | 0 | 0% |
| Feasibility | f. Disagree (0) to Agree (5) | 5 | 10% |
| Roadblock/Mandate | g. Disagree (0) to Agree (5) | 3 | 6% |
| | | | |
| Grand Total Score | | 17.6 | 61% |

Result

This project **passes** the 25% requirement for project consideration.

Recommendation

Based on the results of the survey and staff analysis, MCAMLIS staff recommends that this project be **accepted** and incorporated into MCAMLIS Work Plan, at the discretion of the MCAMLIS Steering Committee.



**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: December 1, 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: 9/14 – 12/14

- New features are continually added and updated

NEXT

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

* * * * *



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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: December 4, 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

- Generate and deploy 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: 9/14 – 12/14

- MCAMLIS staff has completed geo-referencing the SEWRPC 1985 & 1980 image data and has posted this via the MCLIO website. (attached Historical Aerials Exhibit)
- MCAMLIS staff has partially completed geo-referencing the SEWRPC 1975 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% | 100% | 100% | 87% | 0% | 0% | 0% |
| Web Service Step 3 | yes | yes | yes | yes | no | no | no | no |

NEXT

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

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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: December 3, 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 6 defined areas making up Milwaukee County. Areas will be delivered in successive months with the 1st area delivered EOM July - subsequent deliveries through December.
- 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: 9/14 – 12/14

- Area 3 and 4(a) and 4(b) were delivered through November
- Area 1, 2, 3, 4(a) are QA'd, no Areas have been accepted

| DAT.02.1 –Planimetric Polygon Maintenance - Delivery Status | | | | | | |
|--|----------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|
| % # of polygons | Area 1 5% | Area 2 20% | Area 3 23% | Area 4A 20% | Area 4B 15% | Area 5 17% |
| Production Step 1 | 14-Jul | 26-Aug | 2-Oct | 3-Nov | 12-Nov | |
| QA/QC Step 2 | 20-Aug | 12-Nov | 12-Nov | 5-Dec | | |
| Acceptance Step 3 | | | | | | |

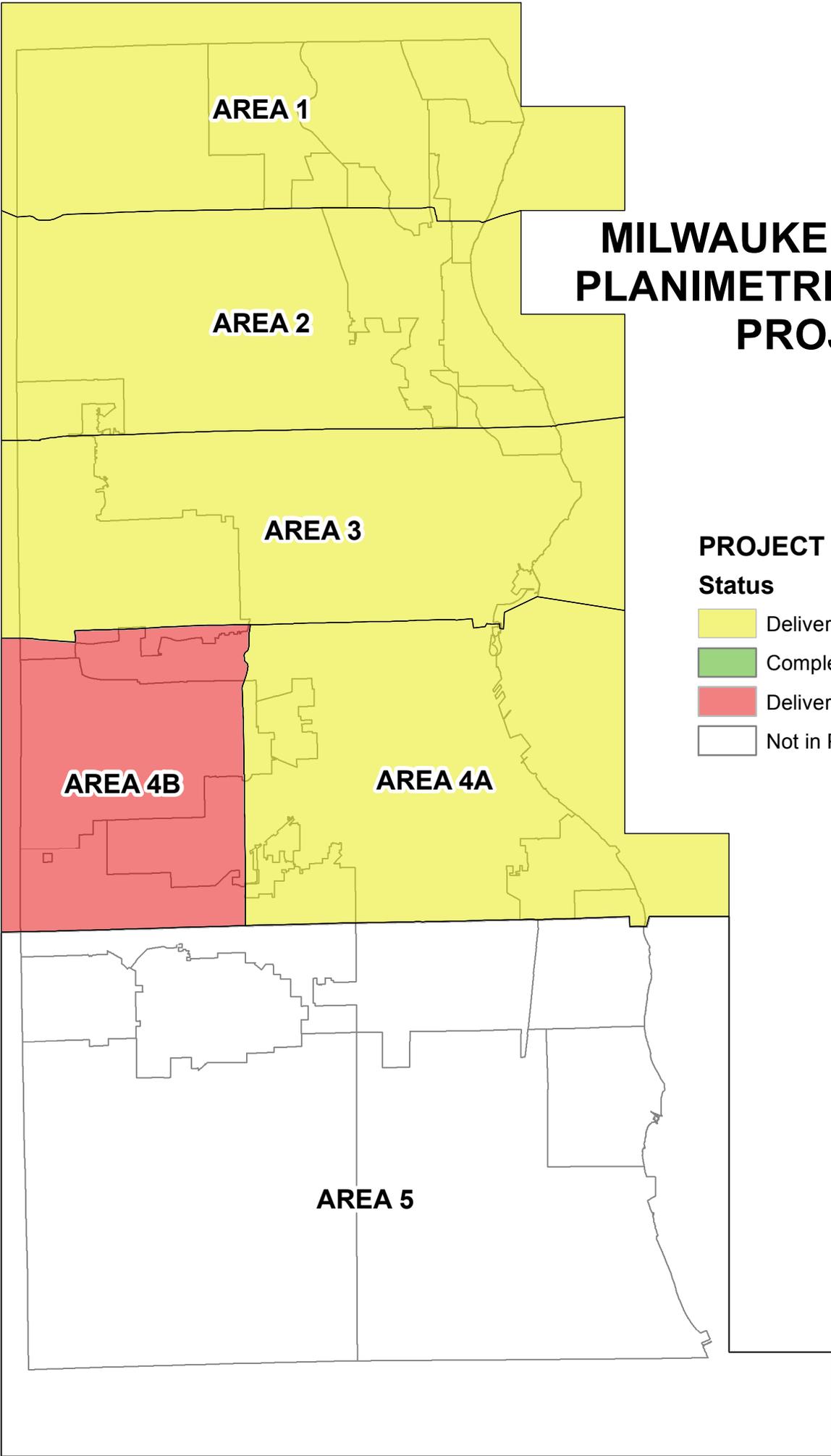
NEXT

- Continue production through acceptance

Attach: Planimetric Polygon Processing Status Map Exhibit

* * * * *

MILWAUKEE COUNTY PLANIMETRIC POLYGON PROJECT



PROJECT AREAS

Status

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



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: December 2, 2014

SUBJECT: 2015 ORTHOPHOTOGRAPHY PROJECT STATUS

BACKGROUND

At its meeting held September 23rd, 2014, the MCAMLIS Steering Committee approved a staff recommendation to proceed with the acquisition of Pictometry International Inc. AccuPLUS certified orthophotography.

Beginning with the 2005 Regional Orthophotography Project, Milwaukee County has acquired 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 in the regional solicitation in addition to more specific products tailored to Milwaukee County needs. These products included 4" resolution imagery (1st available in 2013) and 3" resolution imagery both from Pictometry International.

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 \$137,286. 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 \$137,286 leaving a required Steering Committee contribution of \$121,950.

SPECIFICATIONS

Services to be performed by the Steering Committee:

The Steering Committee shall contract with Pictometry International Corporation of Rochester, New York to acquire aerial orthophotography covering Milwaukee County. The orthophotography will be obtained to support the 2015 Regional Orthophotography Project administered by the Commission and covering seven counties in Southeastern Wisconsin.

Pictometry will also prepare oblique aerial photography to complement the orthophotography to be acquired by the Steering Committee.

The orthophotography shall have the following minimum specifications:

- a. Color imagery collected in the spring of 2015 under leaf-off conditions.
- b. Three-inch (3") pixel resolution orthophotography prepared to meet National Map Accuracy Standards at one-inch-equals-50-feet (1"=50') scale.
- c. The area of orthophotography to be acquired consists of the entirety of Milwaukee County, including a 1,000 foot buffer around the County and additional imagery covering the Milwaukee Bay area of Lake Michigan.
- d. Orthophotography will be delivered in GeoTIFF file format. Each GeoTIFF file will cover a 5,000 by 5,000 feet area or "tile" on the Wisconsin State Plane Coordinate System. There are 323 image tiles in the project area. An accompanying reference or "world" file will be prepared for each GeoTIFF file. The GeoTIFF files will follow a file naming convention that indicates the year, tiling scheme, resolution, and tile location by northing and easting of the orthophoto file. The tiling scheme and naming convention information shall be provided to the contractor upon request.
- e. The horizontal datum to be used is the North American Datum of 1927 (NAD27).

STATUS:

MCAMLIS Staff is preparing materials required to execute the final year of the 3 flight agreement with Pictometry International Corp. The contract authority is being requested from the County Board and will comply with Milwaukee County procurement and Board policy. Staff is also working with Commission Staff to develop an agreement between the Commission

and MCAMLIS that will allow for the Commission to partially subsidized the 2015 Orthophotography project and meet SEWRPC 5-year planning objectives.

ACTIVITIES THIS PERIOD: 9/14 – 12/14

- MCAMLIS staff prepared packet materials requesting County Board authorization to execute the 2015 flight
- County Board Finance and Personnel Committee (FPA) approved project to be included on the 12/11/14 FPA Committee meeting agenda
- Draft 2015 Orthophotography Agreement with SEWRPC

NEXT

- FPA Committee (12/11) and full County Board (12/18)approvals
- Execute amended Pictometry License Agreement
- Complete and execute 2015 Orthophotography Agreement with SEWRPC

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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: December 3, 2014

SUBJECT: 2015 ELEVATION DATA PROJECT STATUS

BACKGROUND

At its meeting held September 23rd, 2014, the MCAMLIS Steering Committee approved a staff recommendation to proceed with a joint project with SEWRPC and five counties located in southeastern Wisconsin to acquire updated Elevation Data for Milwaukee County. The approval of the Elevation Data Project authorizes an expenditure of no more than \$62,343 to collect LiDAR derived elevation data. However, cost-sharing participation from the USGS may significantly reduce the cost. 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.

The USGS based proposal requires that the cost share be approved by USGS and the process for approval is underway. In consideration of the possibility that the USGS cost share would not be approved alternative specifications and cost may be considered by respective counties based on the higher cost alternative but would not exceed \$62,343.

PROJECT

2015 Regional Elevation Data Project - The Southeastern Wisconsin 2015 Regional Elevation Data Project, under the technical guidance of approved vendor 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 1.1*, and deliverable products that meet the current definition of Quality Level 2 (QL2) as specified by the USGS. Five of the seven SEWRPC counties have agreed to participate including Milwaukee, Ozaukee, Washington, Waukesha and Walworth.

Alternatives: One alternative employs a possible 50% cost share from the USGS and requires using a USGS specification. Another option included costs associated with traditional elevation and cartographic products that are typically being delivered in the region.

Basic differences in the two approaches require that certain methods be used e.g., USGS methods would produce hydro-flattened breaklines - a DEM that is produced without bridges and culverts with waterways that are wider than 100 feet and/or possibly require additional enhanced breakline specification - an enhanced breakline DEM would include culverts and

bridges that intersect with waterways that are wider than 20 feet. The enhanced breakline DEM conforms more closely to the familiar elevation products delivered by the Regional Planning Commission Specification.

At a minimum 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 1.1. 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.

STATUS:

SEWRPC received approval of the USGS 3D Elevation Program Grant Pre-Proposal application and MCAMLIS and SEWRPC Staff are coordinating efforts in preparation of Final USGS Grant request materials.

ACTIVITIES THIS PERIOD: 9/14 – 12/14

- Provide input regarding USGS Grant Request
- Pre-Proposal accepted by USGS

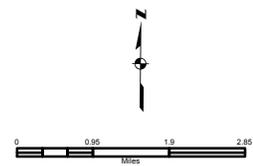
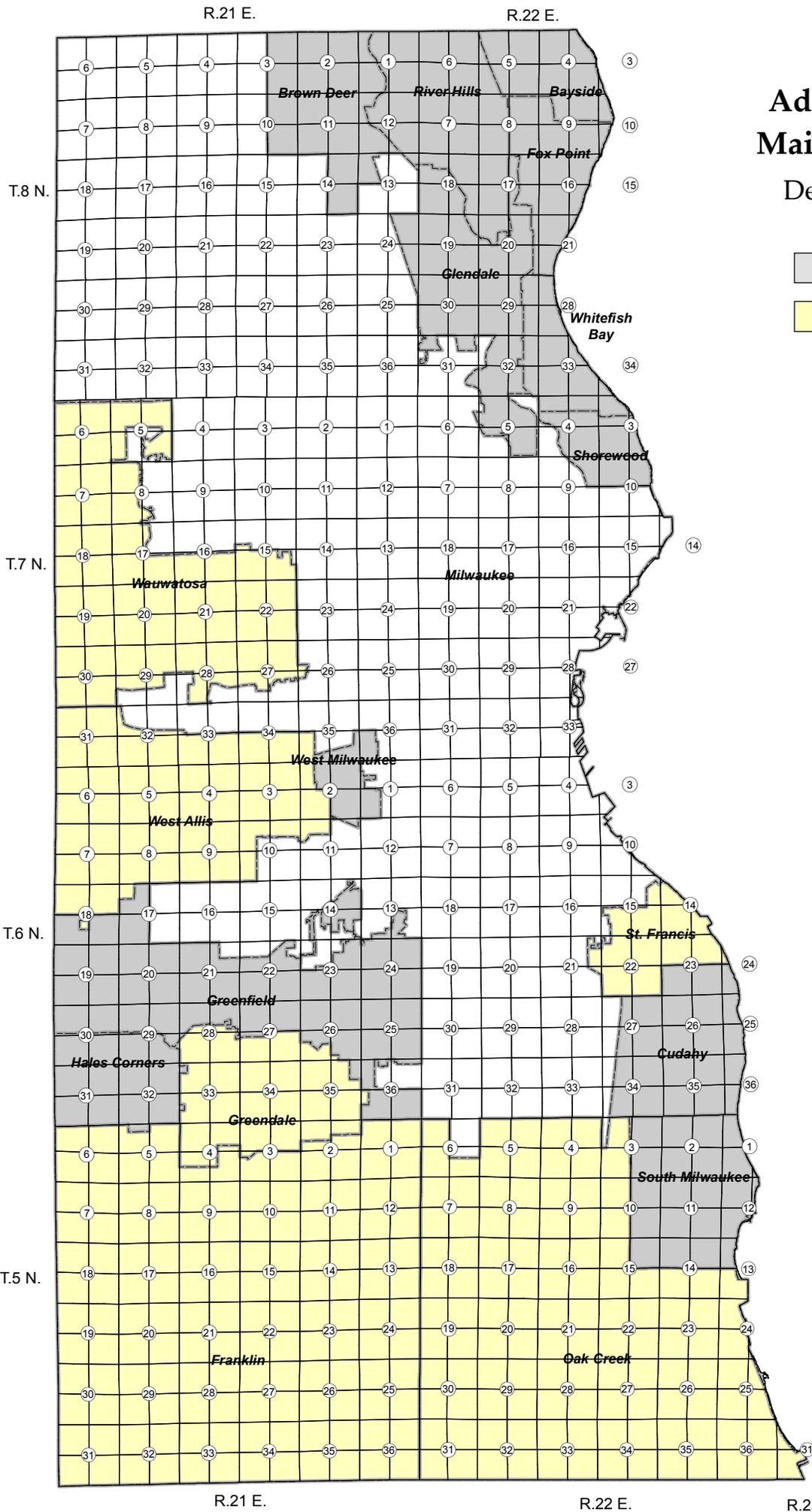
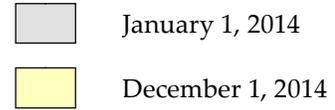
NEXT

- SEWRPC submit final proposal to USGS (12/12/2014)
- Determine direction upon USGS Final Proposal response
- 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 |
| September 15 - December 20, 2015 | Preparation and review of LiDAR and elevation files completed; all deliverable products provided to USGS and participating counties |

MCAMLIS Address Database Maintenance Status

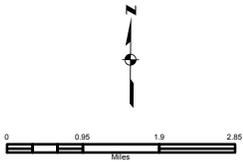
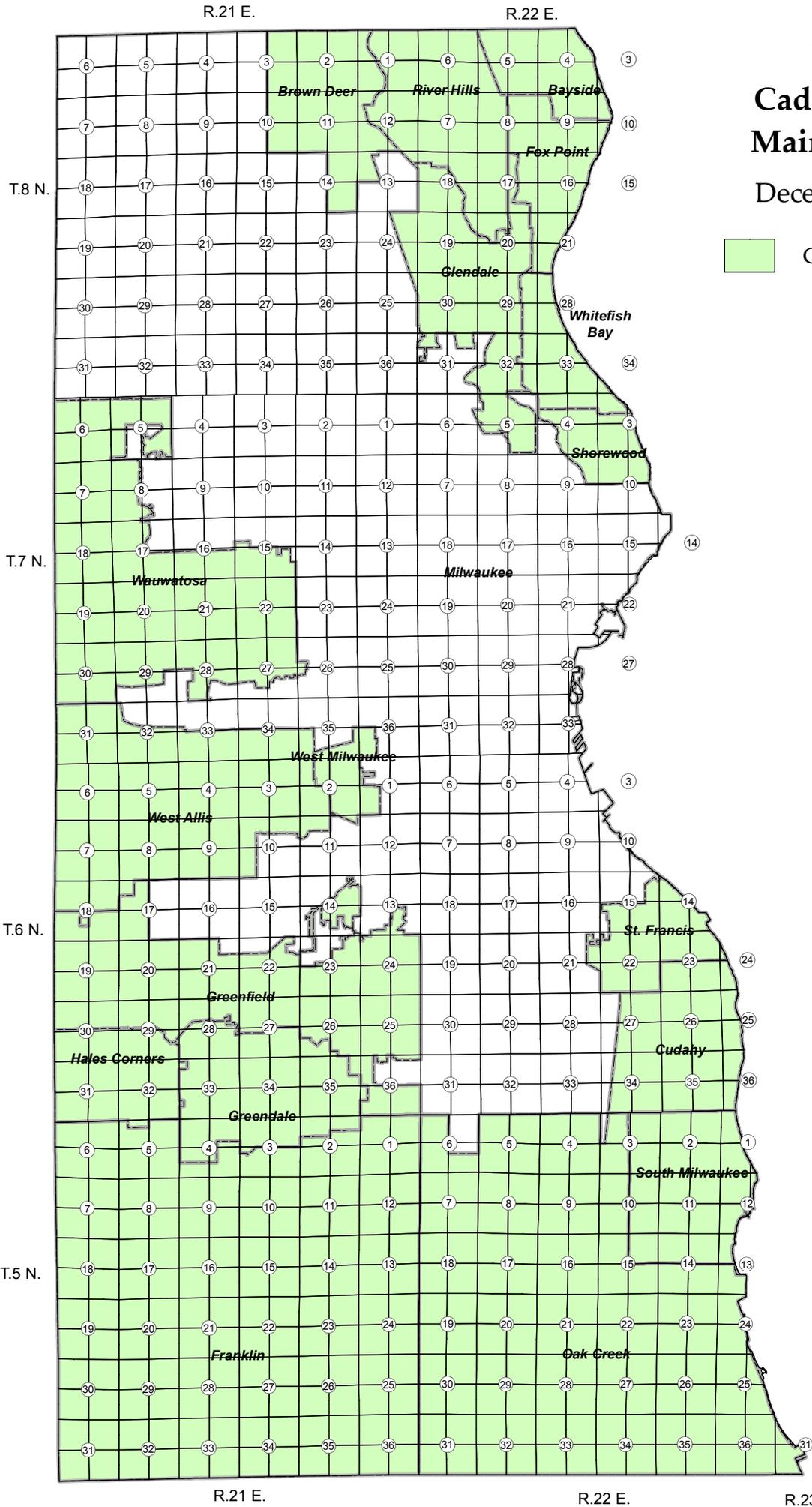
December 2014 Status



Source: MCAMLIS Project Manager

MCAMLIS Cadastral Database Maintenance Status December 2014 Status

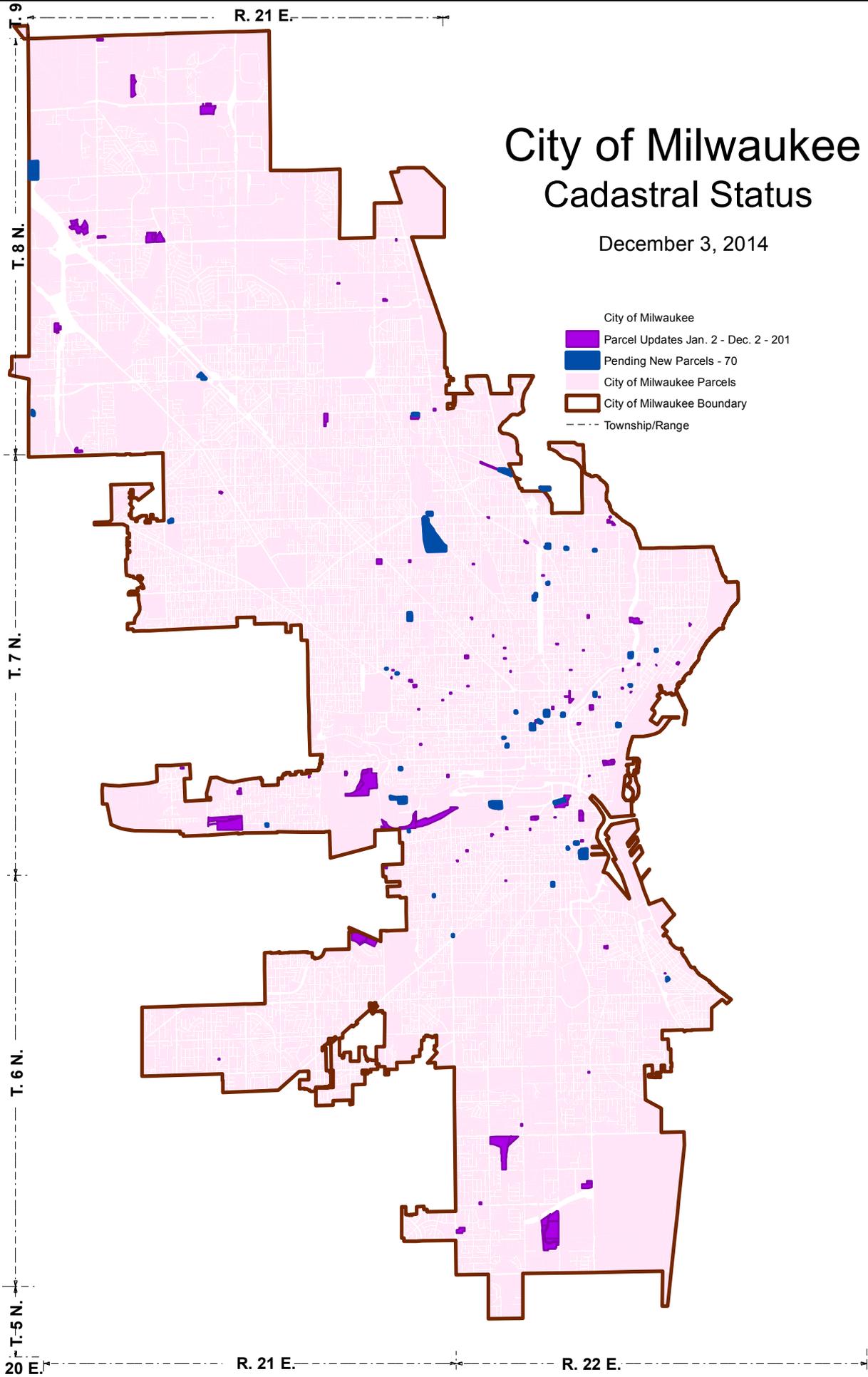
 Current as of November 1, 2014



Source: MCAMLIS Project Manager

City of Milwaukee Cadastral Status

December 3, 2014



City of Milwaukee

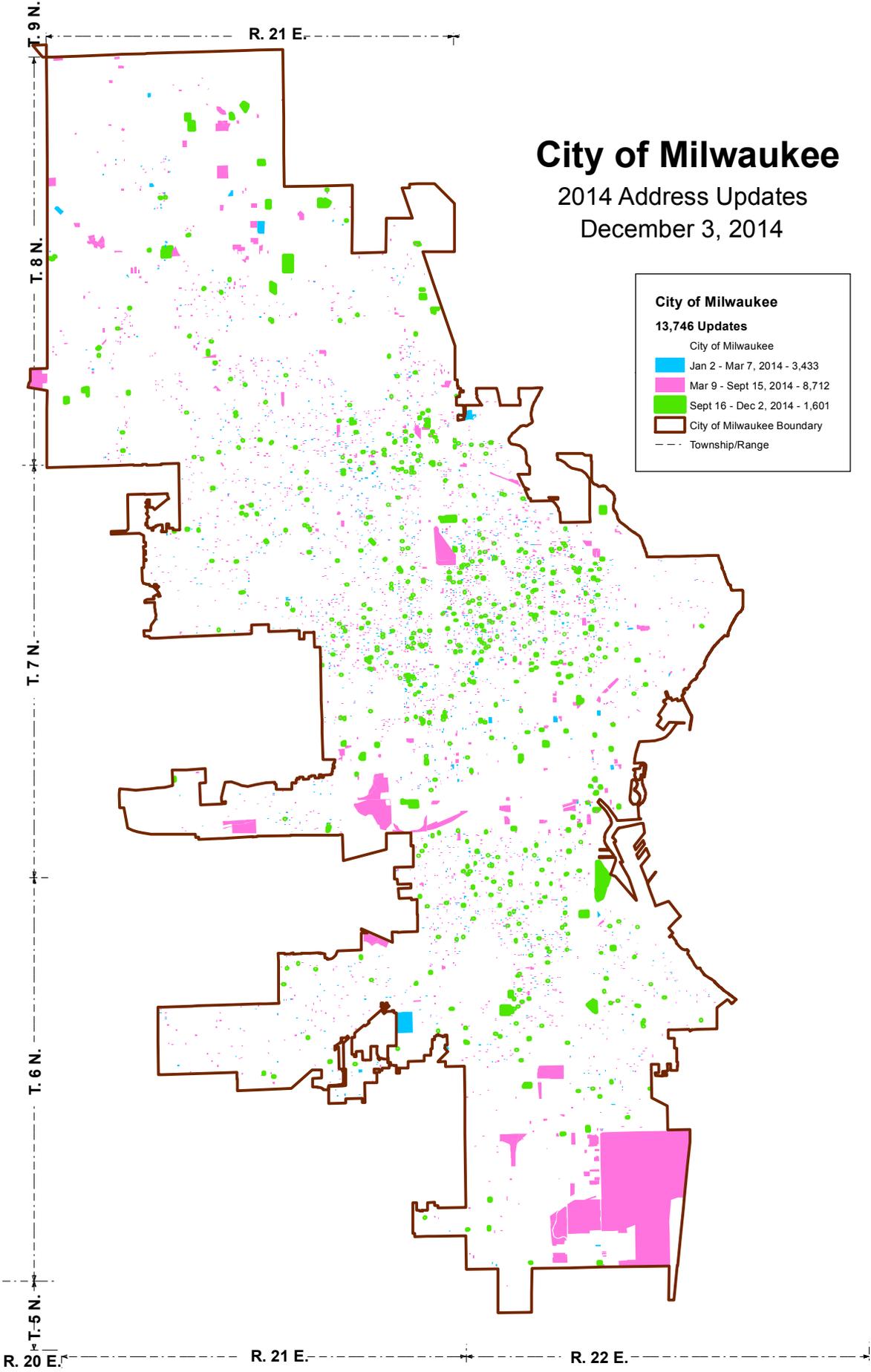
2014 Address Updates
December 3, 2014

City of Milwaukee
13,746 Updates

City of Milwaukee

- Jan 2 - Mar 7, 2014 - 3,433
- Mar 9 - Sept 15, 2014 - 8,712
- Sept 16 - Dec 2, 2014 - 1,601

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: December 3, 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 – 9/14 – 12/14

1. Meetings and Presentations
 - Organized and facilitated the 11th meeting of the Milwaukee Municipal GIS Users Group (MMGUG). Meeting was held on 10/28/2014 @ the Lincoln Park – Blatz Pavillion
 - Scheduled next MMGUG meeting to be held @ the MMSD Headquarters scheduled for January 13^h 2015
2. Maintained production MCLIO web services
3. Incorporated updated tutorial materials and announcements to users of the MCLIO Interactive Mapping Service website including:
 - Posting 3rd Qtr 2014 foreclosure data

NEXT

1. Continue MCLIO website training, data distribution and product enhancements; and
2. Prepare for MMGUG Meeting – Jan 13^h
3. Continue to work with member participants to further their GIS goals e.g., 2014 MCAMLIS Work Plan Initiatives



**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: December 4, 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 – 9/14 – 12/14

1. Address Database Maintenance

- Deployed 3rd 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 96,727 parcel references to 85,582 documents. In 2014 a total of 1,304 documents have been scanned and indexed into the Plat of Survey scanned document library.

2014 MCAMLIS YTD

| | | YTD | YE Projected |
|--------------------------------------|--|---------------------------|---------------------------|
| REVENUES - 2014 YTD | | | |
| 2014 Actual Revenue | | \$690,147 | \$747,489 |
| 2013 Encumbrances Carried Over | | \$315,014 | \$315,014 |
| TOTAL | | <u>\$1,005,161</u> | <u>\$1,062,503</u> |
| OPERATING EXPENSES - 2014 YTD | | | |
| 2014 Actual Expenditures | | \$634,654 | \$687,385 |
| 2014 Encumbrances | | \$375,916 | \$375,916 |
| TOTAL | | <u>\$1,010,570</u> | <u>\$1,063,301</u> |
| 2014 Est. Net Income (Loss) | | <u>(\$5,409)</u> | <u>(\$798)</u> |

| Fund Balance: | | YTD | YE Projected |
|--|----------|---------------------------|---------------------------|
| 2013 Year-End Fund Balance* | | <u>\$1,547,750</u> | <u>\$1,547,750</u> |
| 2014 Operating Revenues (Shown Above) | + | \$1,005,161 | \$1,062,503 |
| 2014 Exp + Enc for \$8 Fee Projects | - | \$1,010,570 | \$1,063,301 |
| 2014 Est Fund Balance** | = | <u>\$1,542,341</u> | <u>\$1,546,952</u> |
| 2014 Reserve Revenue @ 10% | | \$0 | \$0 |
| 2014 Est Fund Balance YTD - Unrestricted | | \$1,372,837 | \$1,377,448 |
| 2014 Est Fund Balance YTD - Restricted | | \$169,504 | \$169,504 |

*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 11-30-2014

| 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 | \$ - | \$ - | \$ 1,011 | \$ 1,011 | \$ 68,989 |
| | 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 | \$ 103,000 | \$ - | \$ 50,043 | \$ 52,607 | \$ 102,650 | \$ 350 |
| SIDWELL INC, RADGOV | DAT: Historical Aerials | \$ 11,000 | \$ - | \$ 2,750 | \$ 8,224 | \$ 10,974 | \$ 26 |
| | TOTAL | \$ 1,030,499 | \$ 269,918 | \$ 375,633 | \$ 215,444 | \$ 591,077 | \$ 169,504 |

FY2014 Project Budget Status

| FY2014 Project Budget Status | | | FY2014 | | | | Original Budget Estimate | FY2014 Revised Estimate | Actual \$ 11/30/2014 | FY2014 Estimate Remaining | Budget Status |
|------------------------------|---------|--|--------|----|----|----|--------------------------|-------------------------|----------------------|---------------------------|---------------|
| Project | Task ID | Task Description | Q1 | Q2 | Q3 | Q4 | | | | | |
| VWR | | Viewer/Pictometry Improvement RollOut | | | | | \$70,000 | 7% | 20% | 80% | Green |
| | 01 | Improve the MCLIO Interactive Mapping Service | | | | | \$70,000 | \$5,000 | \$1,011 | \$3,989 | |
| | 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 | 150% | 54% | 46% | Red |
| | 01 | Make MCAMLIS Non-Vector Data Improvements | | | | | \$10,000 | \$10,000 | \$8,224 | \$1,776 | |
| | 02 | Make MCAMLIS Vector Data Improvements | | | | | \$65,000 | \$102,150 | \$52,607 | \$49,543 | |
| Budget Total | | | | | | | \$260,000 | \$151,152 | \$76,705 | \$74,450 | Green |

Status Key -

Meets Original Budget Estimate

Meets Original Budget Estimate within 10% margin

Exceeds Original Budget Estimate over 10%

Green

Yellow

Red



**WISCONSIN
STATE CARTOGRAPHER'S OFFICE**

October 9, 2014

John La Fave
Land Information Officer
Milwaukee County
901 N 9th St Courthouse Rm 103
Milwaukee, WI 53233

Dear John,

We are pleased to announce the release of the Final Report for the LinkWISCONSIN Address Point and Parcel Mapping Project. The report is enclosed and can also be downloaded from www.sco.wisc.edu/publications.

We would like to thank the Public Service Commission of Wisconsin for providing funding for the project through a federal grant from the National Telecommunications and Information Administration.

We would also like to thank Milwaukee County for your participation! All 72 counties and a handful of independent municipal data stewards contributed parcel data for this project, and all known address points were submitted as well. We know you work hard at the county level to maintain your geospatial data, and without you, it would not have been possible to create these statewide layers.

An individual report for your county, the *Milwaukee County Observation Report*, is also enclosed. It provides observations about the data you contributed to the project. We hope it will be helpful as you continue to modernize and maintain your digital land records. Other enclosed materials include:

- Printed copy of *Final Report: LinkWISCONSIN Address Point and Parcel Mapping Project*
- USB drive with digital files
 - Shapefile showing potential overlaps and gaps in parcel coverage along your county's boundaries
 - Your county's portion of the statewide address point and parcel layers
 - PDF of *Milwaukee County Observation Report*
 - PDF of final report
 - Schema documentation

Through this project, the State Cartographer's Office and Wisconsin Land Information Program staff have gained knowledge and expertise that will be leveraged to benefit the Statewide Parcel Map Initiative. We look forward to working with you in the near future to make the Version 1 Statewide Parcel Map database a similar success.

Please feel free to contact me with any questions.

Sincerely,

Howard Veregin, PhD, GISP
Wisconsin State Cartographer
550 N. Park St., Rm. 384 Science Hall
Madison, WI 53706
(608) 262-6852
veregin@wisc.edu

MILWAUKEE COUNTY OBSERVATION REPORT

ADDRESS POINTS

PARCELS

METADATA

Metadata: present

Data dictionary: not present

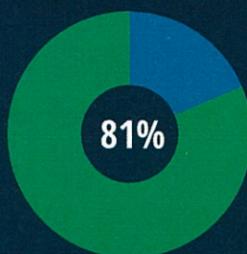
Coded domains: resolved

Point type description: not documented

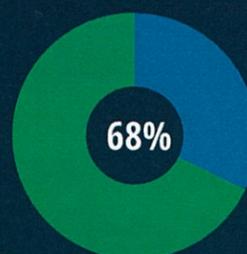
Inferred point type: Structure

Metadata: not present

STATEWIDE METADATA PRESENCE



ADDRESS POINTS



PARCELS

CURRENTNESS

May 12, 2012

Currentness of data is measured relative to the primary call for data date of: November 13, 2013

November 15, 2013

2+ yrs

1+ yrs

<1 yr



Method of determination: Attribute - DATE_CHANGED

Method of Determination describes the method used to infer dataset currentness. Note that this method may be imperfect.

2+ yrs

1+ yrs

<1 yr



Method of determination: FileModDate

COMPLETENESS AND QUALITY

ADDRESS POINT DATASET:

Do your address points have placenames?

→ having placenames allows us to identify in which municipality points exist in your county **1 point without a placename**

Do your address points and parcels share a unique id?

→ being able to directly relate address points to parcels helps us improve the accuracy of our data **Unique id present**

Do your address points have an address number?

→ an address number is a crucial element of having a complete address for each point **2366 points without address numbers**

Do your address points have a street name?

→ another crucial component of having a complete address **543 points without street names**

Is your data free from characters like: ?, *, carriage returns, "n/a", or other nonstandard characters?

→ **Nonstandard characters found include the following:**

<field name>: <character> - <number of occurrences>

ALT_ID: < - 46, > - 46, ` - 1, & - 1

BUILDING_ID: < - 2, > - 2

COMMENT: (- 23,) - 23, ? - 85, # - 13, & - 327, < - 3, > - 3, = - 3,

@ - 1

DATE_CHANGED: : - 552858

FULLADDR: < - 36, > - 36

HOUSENO: ? - 2, < - 4, > - 4

SOURCE: : - 1598, & - 26, (- 2,) - 2, \ - 3

SOURCE_DATE: : - 644602

STREET: < - 2, > - 2

UNIT: CARRIAGE RETURN - 1, NEW LINE - 1

PARCEL DATASET:

Does your parcel fabric appear to be complete?

→ not having gaps helps us create a seamless parcel database **Parcel fabric appears to be complete**

Are all municipalities present in your dataset?

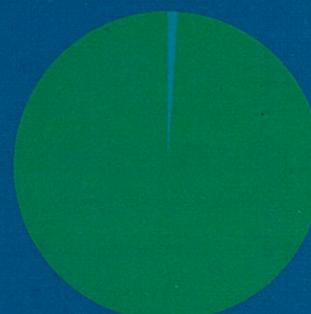
→ fully integrated municipalities helps us create a seamless parcel database **All municipalities present**

COUNTY OVERLAP / UNDERLAP

For a map of boundary overlap and underlap between your county and its surrounding counties, see the BoundaryObservations.shp that exists on the flash drive provided with this deliverable.

Due to the complexity of parcel mapping, the causes of overlap and underlap are hard to determine. As a result, no attempt has been made to compute the magnitude or identify the source of these inconsistencies.

ADDRESS COMPLETENESS



Address completeness measures if a point contains the three elements every address should have: Address Number, Street Name, and Street Type

99% **Score - 3** (All elements present)

1% **Score - 2**

0% **Score - 1**

0% **Score - 0** (No elements present)

(Values rounded to the nearest percentage)

OTHER OBSERVATIONS

A few address points are outside of the county.

Thank you for sharing your data with the LinkWISCONSIN Address Point and Parcel Mapping Project.



REGISTER OF DEEDS

Milwaukee County

JOHN LA FAVE • Register of Deeds

To: MCAMLIS Steering Committee
From: John La Fave – Milwaukee County Register of Deeds
Subject: Milwaukee County Land Information Officer

A handwritten signature in black ink that reads "John La Fave".

WHEREAS, by resolution adopted on September 28, 1989, the Milwaukee County Board of Supervisors, authorized the designation of the Office of the Register of Deeds as the County Land Information Office and further authorized the Register of Deeds to apply for State grant moneys, should they become available; and

WHEREAS, by resolution adopted on November 8, 1990, the Milwaukee County Board of Supervisors, created the MCAMLIS Steering Committee to provide oversight in the implementation of the Milwaukee County Automated Mapping and Land Information System recommended in SEWRPC Community Assistance Planning Report No. 177; and

WHEREAS, the SEWRPC Community Assistance Planning Report No. 177 established that the Milwaukee County Register of Deeds would initially function as the executive officer of the Land Information System and in that capacity has since served to represent Milwaukee County as the Milwaukee County Land Information Officer; and

WHEREAS, the MCAMLIS section within the Department of Administrative Services Economic Development Division serves to staff the Milwaukee County Land Information Office and the MCAMLIS Steering Committee and as directed by the Steering Committee the MCAMLIS Project Manager performs the duties enumerated in Wisconsin State Statute Land Information Office (59.72(3)) in a capacity similar to those of Land Information Officers in most counties located throughout Wisconsin; and

WHEREAS, the Register of Deeds has agreed to transfer the assumed title of Milwaukee County Land Information Officer such that this designation may be assigned to the MCAMLIS Project Manager wherever that position and title may organizationally reside within Milwaukee County; and

NOW, THEREFORE, requests that the MCAMLIS Steering Committee consider a recommendation by the Register of Deeds to further designate the MCAMLIS Project Manager as having the title, duties and responsibilities of Milwaukee County Land Information Officer



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: December 12, 2014

SUBJECT: MCAMLIS TRUST FUND BALANCE RECOMMENDATION

BACKGROUND

At its meeting held September 23rd, 2014, the MCAMLIS Steering Committee requested that the MCAMLIS Project Manager and Milwaukee County Fiscal Staff develop a recommended policy and procedure regarding the management of the MCAMLIS Trust unrestricted fund balance.

No policy is in place today although a related policy was instituted in 2009 whereby the MCAMLIS Steering Committee authorized a fiscal policy regarding annual expenditure limits on budgeted operating revenue. The current policy directs 10% of budgeted annual operating revenue to be held in a restricted Reserve Account to be accessed only if there is a revenue shortfall whereby funds are needed to cover expenses. In years where unrestricted operating revenue (funds designated for MCAMLIS Projects) are sufficient to cover expenses, the reserve account is untouched. At year-end any Reserve Account balance along with any remaining operating revenue is added to the unrestricted balance portion of the MCAMLIS Trust Account – the reserve policy was implemented in 2009 and in every year except 2009 the entire Reserve Account balance resulted in adding to the unrestricted Trust Account unrestricted balance. Thus the overall effect of this policy, with one exception in 2009 is to grow the unrestricted balance portion of the MCAMLIS Trust Account by saving a minimum of 10% of annual revenue.

RECOMMENDED MCAMLIS TRUST ACCOUNT POLICY

The MCAMLIS Steering Committee has authorized withdrawing funds from the MCAMLIS Trust Account unrestricted balance twice – in 2005 and again in 2013 to fund Planimetric Mapping Update projects. The current unrestricted Trust Account balance is estimated at \$1,377, 448 through the end of 2014.

Although 2015 Work Plan project funding has not been fully authorized by the MCAMLIS Steering Committee the following recommendations estimate project funding levels supported by the current MCAMLIS Five-Year Work Plan will continue through 2018.

Recommendation 1: The 10% Reserve Account policy should be dropped and replaced by limiting the Trust Account unrestricted balance to not falling below 20% of the current year budgeted revenue.

Rational: The current Steering Committee policy of restricting 10% of operating revenue as a hedge against an unanticipated shortfall of revenue in a given year amounts to saving this amount to the Trust Account each year that there isn't a shortfall. The Reserve Account balance with the exception of 2009 when there was a shortfall of \$65,575 amount to \$403,081 being rolled into the Trust Account beginning in 2009 when the policy was enacted. An alternative to this policy would be to apply a floor to the Trust Account based on a % of annual budgeted revenue such that this would be available to cover a shortfall in operating expense in a given year, allow for the Steering Committee to meet current budgeted operating expenses and provide time to adjust expenditures in future years.

| | <u>2015</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|---|--------------------|--------------------|------------------|------------------|
| Estimated Recording (ROD 12/10/2014) | 105,000 | 108,000 | 111,000 | 114,000 |
| MCAMLIS Operating Budget | | | | |
| Operating Revenue | \$840,000 | \$864,000 | \$888,000 | \$912,000 |
| Milwaukee County | \$533,000 | \$586,300 | \$644,930 | \$709,423 |
| City of Milwaukee | \$92,000 | \$92,000 | \$92,000 | \$93,840 |
| SEWRPC | <u>\$83,000</u> | <u>\$83,000</u> | <u>\$83,000</u> | <u>\$83,000</u> |
| Total Operating Costs | <u>\$708,000</u> | <u>\$761,300</u> | <u>\$819,930</u> | <u>\$886,263</u> |
| Net Operating Funds | \$132,000 | \$102,700 | \$68,070 | \$25,737 |
| MCAMLIS Project Budget | | | | |
| 5-Year Work Plan | \$260,000 | \$290,000 | \$242,000 | \$122,000 |
| Ortho/Oblique Projects | \$130,000 | \$0 | \$0 | \$142,055 |
| LiDAR Projects | \$62,343 | \$0 | \$0 | \$62,343 |
| Total Project Expenditures | <u>\$452,343</u> | <u>\$290,000</u> | <u>\$242,000</u> | <u>\$326,398</u> |
| Impact on Fund Balance | | | | |
| Add/(Subtract) to Fund Balance | (\$320,343) | (\$187,300) | (\$173,930) | (\$300,661) |
| Unrestricted Fund Balance | <u>\$1,377,448</u> | <u>\$1,057,105</u> | <u>\$869,805</u> | <u>\$695,875</u> |
| End Unrestricted Fund Balance | <u>\$1,057,105</u> | <u>\$869,805</u> | <u>\$695,875</u> | <u>\$395,214</u> |
| Recommended Reserve Balance | \$168,000 | \$172,800 | \$177,600 | \$182,400 |

Recommendation 2: The fund balance should not fall below a fixed amount e.g., \$250,000.

Rational: This balance will allow MCAMLIS to operate, administratively, for one year following a major event, which might result in a significant decrease in revenue.

Upon review of the available information, and upon consultation with MCAMLIS and Register of Deeds DAS-PSB recommends approval of recommendation 1 or 2.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607 • TELEPHONE (262) 547-6721
FAX (262) 547-1103

Serving the Counties of:

KENOSHA
MILWAUKEE
OZAUKEE
RACINE
WALWORTH
WASHINGTON
WAUKESHA



November 19, 2014

Mr. William C. Shaw, MCAMLIS Project Manager
Milwaukee County Land Information Office
Milwaukee County Department of
Transportation and Public Works
City Campus – Room 426
2711 W. Wells Street
Milwaukee, WI 53208

RE: County Surveyor Agreement

Dear Mr. Shaw:

Please find attached one copy of a proposed Agreement for the provision by the Commission of County Surveyor services to Milwaukee County for calendar year 2015.

We trust that you will find the enclosed contract to be in order. If so, we would appreciate your executing three copies of the contract and returning them to the Commission for execution by the Commission Chairman. We will, in turn, return one copy to you for your files.

Thank you for your attention to this matter. If you have any questions concerning the foregoing, please do not hesitate to call me at 262-547-6721.

Sincerely,


Kenneth R. Yunker
Executive Director

KRY/EAL/II/dps
#00221941 v1 – 2015 MilCoSurveyorAgrmt/Shaw

Enclosures

cc: Dr. Kurt W. Bauer
Mr. Robert W. Merry

AGREEMENT

COUNTY SURVEYOR SERVICES: MILWAUKEE COUNTY 2015

THIS AGREEMENT, entered into this ____ day of _____, 2014, by and between the Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as the “Commission”); and the Milwaukee County Automated Mapping and Land Information System Steering Committee (hereinafter referred to as the “Steering Committee”).

WITNESSETH:

WHEREAS, under Section 59.74 of the *Wisconsin Statutes*, the Commission serves as the County Surveyor for Milwaukee County; and

WHEREAS, the County Surveyor is responsible for: (1) perpetuating the corners of the U.S. Public Land Survey which are subject to destruction, removal, and burial through construction and other activities; (2) maintaining the horizontal and vertical control survey networks in Milwaukee County which assign State Plane Coordinate values referred to the North American Datum of 1927, to each monumented U.S. Public Land Survey corner, and elevations referred to the National Geodetic Vertical Datum of 1929 to the monuments and accessory bench marks; (3) preparing records of the U.S. Public Land Survey corners and bench marks as monumented by the County Surveyor (dossier sheets) and attendant control survey diagrams; (4) maintaining a record of the surveys made for such perpetuation; and (5) receiving, indexing, and filing as a public record, a copy of each land survey plat prepared by a land surveyor practicing in Milwaukee County; and

WHEREAS, the activities of the Milwaukee County Surveyor are essential to the development and maintenance of the Milwaukee County Automated Mapping and Land Information System (MCAMLIS); and

WHEREAS, the Milwaukee County Board of Supervisors has determined that the expenses associated with the Milwaukee County Surveyor function should be paid from the annual operating budget of the MCAMLIS project; and

WHEREAS, Sections 66.0309(12)(b) and 66.0301 of the *Wisconsin Statutes* authorize the Commission to enter into contracts with local units of government and their agents to make and implement studies and plans and to otherwise provide advice and services.

NOW, THEREFORE, in consideration of these premises and of their mutual and dependent promises and agreements, the parties hereto contract and agree as follows:

1. Scope of Work

The Commission will provide the professional staff services as necessary to act in the capacity of County Surveyor for Milwaukee County pursuant to the provisions of Section 59.635 of the *Wisconsin Statutes*. More specifically, under this agreement, the Commission, acting in the capacity of the Milwaukee County Surveyor, will perform the following functions:

- a. In cooperation with the MCAMLIS project staff, record and maintain a file of all land survey plats prepared by land surveyors for parcels in Milwaukee County. An estimated 1,000 such land surveys are prepared and filed annually. Such plats of surveys are useful in the maintenance effort required to keep the MCAMLIS cadastral maps up-to-date.
- b. Perpetuate the corners of the U.S. Public Land Survey System throughout Milwaukee County. Such corners frequently are subject to destruction, removal, and burial through construction or other activities. The perpetuation work includes periodic inspection of the system of approximately 1,100 monuments and attendant reference benchmarks and witness marks, the removal and/or replacement of such monuments and reference benchmarks and witness marks either directly or through the supervision of others conducting such activities, and undertaking both horizontal and vertical control surveys to ensure the integrity of the geodetic reference framework that is critical to the maintenance of the automated mapping base established for Milwaukee County.
- c. Provide guidance and counsel to the Milwaukee County Automated Mapping and Land Information System Steering Committee through service on that committee.

- d. Provide technical support and guidance to the staff assigned to develop and maintain the Milwaukee County automated mapping and land information system program.
2. Commission to Organize and Store Information Acquired by County Surveyor

In order to facilitate convenient use of the land survey records concerned by land surveyors, abstractors, assessors, appraisers, attorneys, engineers and other interested parties, the Commission agrees to maintain an orderly filing and retrieval capability for the land surveys by U.S. Public Land Survey township, range, section, and quarter section.

The Commission further agrees to maintain in an orderly manner, records of individual U.S. Public Land Survey Corners (dossier sheets), and records (control survey summary diagrams) of horizontal and vertical control surveys that have been run over the U.S. Public Land Survey corners.
3. Commission to Act as Custodian for all Milwaukee County Surveyor Records

The Commission agrees to maintain for inspection and copying as public documents, all records associated with its functions as the Milwaukee County Surveyor. The Commission further agrees to provide access to these data by U.S. Public Land Survey township, range, section, and quarter section.
4. Steering Committee to Receive Copies of Records

The Commission shall furnish to the Steering Committee, as necessary for the pursuit of its responsibilities, copies of the records created and maintained by the Milwaukee County Surveyor.
5. Timing

The work to be performed under this Agreement shall be carried out from January 1, 2015, through December 31, 2015.

6. Compensation

The Steering Committee, through Milwaukee County, shall pay to the Commission the following sum as payment for the professional services described herein during calendar year 2015: \$82,916.

7. Method of Compensation

The Commission shall submit a single invoice during the first quarter of each year in the amount specified in Article 6 to Milwaukee County. The County, on behalf of the Steering Committee, shall pay to the Commission the amount shown on the invoice upon receipt of said invoice.

8. Annual Report

The Commission shall submit to the County an annual report of services provided under this agreement by January 31, 2016.

9. Indemnity

Except for acts done or taken at the direction of or pursuant to the Steering Committee policy and procedures, the Commission agrees to the fullest extent permitted by law, to indemnify, defend and hold harmless, the Steering Committee, and its agents, officers, and employees from and against all loss or expense including costs and attorney's fees by reason of statutory benefits under Worker Compensation Laws, and/or liability for damages including suits at law or in equity, caused by any wrongful, intentional, or negligent act or omission of the Commission, or its agents which may arise out of or are connected with the activities covered by this agreement.

10. Insurance

The Commission, as an agency of the State, is self-funded for liability under Section 893.82 and Section 895.46(1) of the Statutes. As a result, such protection as is afforded under the respective Wisconsin Statutes is applicable to officers, employees, and agents while acting within the scope of their employment or agency. Since this is statutory indemnification, there is no liability policy as such that can extend protection to any other.

11. Records and Audits

The Commission shall allow Milwaukee County, the Milwaukee County Department of Audit, or any other party that Milwaukee County may name, when and as they demand, to audit, examine, and make copies of, excerpts or transcripts from, any records or other information directly relating to matters under this agreement. Any subcontracting by the Commission in performing the duties described under this contract shall subject the subcontractor and/or associates to the same audit terms and conditions as the Commission. The Commission (or any subcontractor) shall maintain and make available to Milwaukee County the aforementioned audit information for no less than three years after the conclusion of each year of the contract term.

12. Independent Contractor

Nothing contained in the Agreement shall constitute or be construed to create a partnership or joint venture between Milwaukee County or its successors or assigns; the Steering Committee or its successors or assigns; and the Commission or its successors or assigns. In entering into this Agreement, and in acting in compliance herewith, the Commission is at all times acting and performing as an independent contractor, duly authorized to perform the acts required of it hereunder.

13. Authorization

The Steering Committee approved the execution of this Agreement by action taken on _____, 2014.

IN WITNESS WHEREOF, the Commission and the Steering Committee have executed this Agreement, as of the date and year first above written.

ATTESTING WITNESS

By _____
Kenneth R. Yunker
Executive Director

**SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION**

By _____
David L. Stroik
Chairman

ATTESTING WITNESS

By _____
William C. Shaw
MCAMLIS Project Manager

**MAPPING AND LAND INFORMATION
SYSTEM STEERING COMMITTEE**

By _____
Donald R. Nehmer (Date)
Chairman

ATTESTING WITNESS

By _____
William C. Shaw
MCAMLIS Project Manager

MILWAUKEE COUNTY

By _____
Teig Whaley-Smith, Director (Date)
Department of Administration Division
Of Economic Development

Approved with regards to County Ordinance Chapter 42:

**By: _____ Date: _____
Community Business Development Partners**

Reviewed by:

**By: _____ Date: _____
Risk Management**

Approved:

**By: _____ Date: _____
Comptroller**

Approved as to Wis. Stats. 59.42:

**By: _____ Date: _____
Corporation Counsel**

Approved for execution:

**By: _____ Date: _____
Corporation Counsel**

Approved:

**By: _____ Date: _____
County Executive**

PCE/lgh
09/24/14
AgreementCoSurveyor/MCAMLIS (00218690).DOC

AGREEMENT

Between

THE CITY OF MILWAUKEE DEPARTMENT OF ADMINISTRATION, INFORMATION AND TECHNOLOGY MANAGEMENT DIVISION AND THE MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM STEERING COMMITTEE

THIS AGREEMENT, entered into this _____ day of _____, 20__, by and between the City of Milwaukee Department of Administration, Information and Technology Management Division (hereinafter referred to as the " City"); and the Milwaukee County Automated Mapping and Land Information System Steering Committee (hereinafter referred to as the "Steering Committee").

WITNESSETH:

WHEREAS, by Resolution No. 88-379, the Milwaukee County Board of Supervisors requested the Southeastern Wisconsin Regional Planning Commission to conduct a feasibility study pertaining to an automated mapping and land information system; and

WHEREAS, the requested feasibility study was completed and documented in SEWRPC Community Assistance Planning Report No. 177, "Feasibility Study for a Milwaukee County Automated Mapping and Land Information System," published in October 1989; and

WHEREAS, by resolution adopted on November 8, 1990, the Milwaukee County Board of Supervisors, working in cooperation with the utilities concerned, created a public-private partnership to implement the proposed Milwaukee County automated mapping and land information system, including creation of a Steering Committee to provide oversight in the implementation of the system recommended in SEWRPC Community Assistance Planning Report No. 177; and

WHEREAS, the aforementioned Milwaukee County resolution adopted on November 8, 1990, further authorized the execution of a Cooperative Agreement between Milwaukee County and the public and private utilities serving Milwaukee County, whereby the County and such utilities agreed to jointly fund the development of the Milwaukee County automated mapping and land information system), such Agreement delegating to the aforementioned Steering Committee full responsibility for all policy matters relating to the conduct of the work program, including proposed contracts and specifications and the selection of contractors; and

WHEREAS, the City Chief Information Officer serves as a member of the aforementioned Steering Committee and the City actively participates in implementation of the MCAMLIS; and

WHEREAS, the City desires the financial support of the MCAMLIS program to maintain the cadastral maps within the City of Milwaukee to ensure conformance with selected MCAMLIS standards; and

WHEREAS, on August 26, 1999, the City, the Steering Committee, and the Commission, through an assignment, entered into an Intergovernmental Cooperation Agreement (ICA) whereby the City would provide technical services to the Steering Committee; and

WHEREAS, the Steering Committee on September 14, 2004, formally authorized the County to accept the responsibilities of Project Manager for the implementation of the recommended automated mapping and land information system; and

NOW, THEREFORE, in consideration of the mutual promises of each agency made to the other, the fulfillment of the terms and conditions, agreements, and understandings hereinafter set forth,

I. Scope of Work

In general, the City agrees to perform all of the tasks specified herein. Other tasks to be completed by the City not covered herein will be carried out under separate agreements.

The City will provide professional and technical information technology services. This will include maintenance on cadastral maps and the street address database in the adopted Milwaukee County geodatabase format. Copies of the data will be delivered to the MCAMLIS project manager at a minimum bi-annually. This arrangement will allow data collected and housed at the City of Milwaukee to be maintained in the same format that the County of Milwaukee uses to store and retrieve the MCAMLIS cadastral data.

Should software data transfer protocols and standards be developed, the City will work with Milwaukee County staff to deliver the cadastral and street address data on a more frequent basis.

II. Timing

All services to be performed under this Agreement shall be carried out over the period beginning January 1, 2015, and ending on December 31, 2015.

III. Compensation to City

The Steering Committee shall pay to the City the following amounts for those services described above:

| SERVICES PROVIDED | AMOUNT |
|---|-----------------|
| MCAMLIS Cadastral and Street Address Database Maintenance | \$90,280 |
| Annual software maintenance | 1,500 |
| Total | \$91,780 |

IV. Method of Compensation

Compensation is to be provided to the Department of Administration Information and Technology Management Division (ITMD) for services performed through the County Department of Transportation and Public Works Org. 5084. ITMD will request on a quarterly (March 31, June 30, September 30, December 31) basis reimbursement for said services provided.

If, during the course of carrying out the work elements identified herein, additional unanticipated work efforts not identified in the scope of work contained herein become necessary for successful project completion in the judgment of the City or in the judgment of the Steering Committee, then it is agreed that the City can request an amendment to the scope of work, with an attendant increase in the maximum amount payable to the City under this Agreement. Such an amendment would require the approval of both the City and the Steering Committee before becoming effective.

V. Support and Materials to be provided by others

It is assumed that the members of the Steering Committee, on behalf of their respective public agencies and private utilities, agree to make available without charge to the City all existing digital and hardcopy maps, documents, reports, legal records, and related materials deemed by the City to be needed to carry out its responsibilities under this Agreement. If this assumed level of cooperation does not materialize, then it is agreed that the City may, at its discretion, request payment from the Steering Committee for these costs above and beyond the total amount set forth in Section III of this Agreement.

VI. Ownership of Data

As the funds that are to be paid to the City for carrying out the herein described and required work are MCAMLIS project funds, the City agrees to share the data. The City, however, will retain sole ownership of all map files, as they exist in the City digital structure. As a condition of receiving payment from MCAMLIS, the City agrees that MCAMLIS will be free to use, reproduce, modify, display, and distribute the digital map files in the MCAMLIS digital structure.

The City will retain a nonexclusive, irrevocable and perpetual license to use and distribute the digital map files to any parties it desires.

VII. Subcontracts

Although the City does not anticipate use of subcontractors, the City agrees to bring any such subcontracts to the Steering Committee for its approval prior to execution.

VIII. Indemnity

Except for acts done or taken at the direction of or pursuant to the Steering Committee policy or procedures, the City agrees to the fullest extent permitted by law, to indemnify, defend and hold harmless, the Steering Committee, and its agents, officers and employees, from and against all loss or expense including costs and attorney's fees by reason of statutory benefits under Worker Compensation Laws, and/or liability for damages including suits at law or in equity, caused by any wrongful, intentional, or negligent act or omission of the City, or it's (their) agents which, may arise out of or are connected with the activities covered by this agreement.

IX. Termination

This Agreement is subject to termination by the Steering Committee without cause upon at least (7) seven days written notice to the City prior to the end of the then-current contract year.

X. Authorization

The Steering Committee approved the execution of this Agreement by action taken on December 16th, 2014.

IN WITNESS WHEREOF, this Agreement executed the date and year first above written

ATTESTING WITNESS

CITY OF MILWAUKEE

By _____

By _____

Nancy A. Olson
Chief Information Officer

By _____

By _____

Martin Matson, Comptroller

ATTESTING WITNESS

**MILWAUKEE COUNTY
MAPPING AND LAND INFORMATION
SYSTEM STEERING COMMITTEE**

By _____

By _____

Donald R. Nehmer, Chairman (Date)

ATTESTING WITNESS

MILWAUKEE COUNTY

By _____

By _____

Teig Whaley-Smith, Director (Date)
Department of Administrative Services
Division of Economic Development

APPROVED AS TO FORM

By _____

Milwaukee County Corporation Counsel (Date)

REVIEWED AS TO INDEMNIFICATION AND INSURANCE

By _____

Milwaukee County Risk Management (Date)

APPROVED AS TO CHAPTER 42 DBE PROVISIONS

By _____

Milwaukee County Office of Community Business Development Partners (Date)

NORTH SHORE FIRE/RESCUE

December 8, 2014

County Executive Chris Abele
Milwaukee County Courthouse
901 N 9th St. Rm 306
Milwaukee, WI 53233

County Executive Abele,

North Shore Fire/Rescue is currently going through an accreditation process for our agency with the Center for Public Safety Excellence's Center for Fire Accreditation International. Accreditation is a comprehensive self-assessment and evaluation model that enables organizations to examine past, current, and future service levels and internal performance and compare them to industry best practices. This process leads to improved service delivery.

CPSE's Accreditation Program allows fire and emergency service agencies to compare their performance to industry best practices in order to:

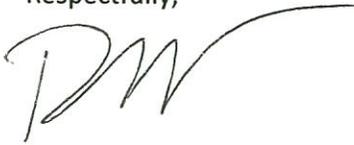
- Determine community risk and safety needs and develop community-specific Standards of Cover.
- Evaluate the performance of the department.
- Establish a method for achieving continuous organizational improvement.

In navigating the process, North Shore Fire/Rescue identified the need to utilize geographic information system (GIS) maps and data. As you know, our agency provides service to seven separate municipalities. With that came a challenge to find a single GIS data set for the project. My staff made contact with Bill Shaw of the Milwaukee County Land Information Office to seek advice on this project. Bill has been a great resource to other mapping projects for our Department in the past. Bill and his staff not only provided advice on how to proceed, but, they have become an active, integral resource in our accreditation process. They have provided countless maps and data sets to meet our needs. When we needed modifications to how the data was presented, they have "been there" to make the needed changes.

As you are well aware, funding for services in government has never been so scarce and demonstrating value in the services we, as government administrators, provide is ever so crucial. Bill and his staff have definitely demonstrated their value to my agency and our stakeholders.

Our accreditation process is heading into the home stretch. This has been a long road. We hope to appear before the accreditation board in August of 2015 to seek approval. We are confident we will meet the requirements of the accreditation board. Contributing to our confidence have been the contributions of Bill and his staff. For their assistance, we are very grateful.

Respectfully,

A handwritten signature in black ink, appearing to be 'RW', with a long, sweeping horizontal line extending to the right.

Robert C. Whitaker
Fire Chief
North Shore Fire/Rescue

cc: Julie Siegel, Whitefish Bay Village President/NSFD Board of Directors President
Michael West, Fox Point Village President/NSFD Board of Directors Vice-President
Robert Brunner, River Hills Village President/NSFD Board of Directors Secretary/Treasurer
Samuel Dickman, Bayside Village President, NSFD Board of Director
Carl Krueger, Brown Deer Village President, NSFD Board of Director
JoAnne Shaw, Glendale Acting Mayor/NSFD Board of Director
Guy Johnson, Shorewood Village President/NSFD Board of Director
Gerry Broderick, Milwaukee County Supervisor
Willie Johnson Jr., Milwaukee County Supervisor
Theodore Lipscomb, Milwaukee County Supervisor
William Shaw, Milwaukee County Land Information Office
Andrew Harris, NSFD Assistant Chief/Accreditation Manager

COPY

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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

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FAX (262) 547-1103

Serving the Counties of:

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MEMORANDUM

TO: Ms. Rebecca Van Regenmorter, Director of Community and Utility Services,
Village of Bayside
Mr. Chris Lear, Village Manager, Village of River Hills
Ms. Kristen B. Lundeen, P.E., City Engineer, City of Mequon
Mr. Gregory G. High, P.E., Director, Architecture, Engineering and
Environmental Section, Milwaukee County
Mr. Thomas W. Chapman, P.E., Watercourse Section Manager, Milwaukee
Metropolitan Sewerage District
Mr. Steven Hoff, P.E., Project Manager, Wisconsin Department of Transportation

FROM: SEWRPC Staff

DATE: December 5, 2014

SUBJECT: **PRELIMINARY DRAFT FLOODPLAIN AND FLOODWAY DELINEATIONS
ALONG FISH CREEK AND TWO UNNAMED TRIBUTARIES TO FISH CREEK**

Preliminary draft floodplain maps for Fish Creek and two unnamed tributaries to Fish Creek are enclosed. These maps were developed under a joint program funded by the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee, the Milwaukee Metropolitan Sewerage District (MMSD), and the Southeastern Wisconsin Regional Planning Commission (SEWRPC). An initial set of preliminary draft maps was provided to each of your municipalities or agencies on October 29, 2009. The maps provided herewith represent an update and revision to the 2009 maps as described below. The maps show floodplain boundaries for the ten-, two-, one-, and 0.2 percent-annual probability (10-, 50-, 100-, and 500-year recurrence intervals, respectively) floods occurring under planned land use and existing channel conditions. They also show one-percent-probability floodway boundaries. The enclosed Table 1 lists the maps that are being provided to each community. A complete set of maps are being provided to MMSD, and a complete set of maps covering areas in Milwaukee County are being provided to Milwaukee County. A set of maps showing the floodplain limits associated with IH 43 are being provided to the Wisconsin Department of Transportation.

These maps provide the communities along Fish Creek with an opportunity to adopt new or revised floodplain maps for local zoning and Federal flood insurance purposes. The reach of Fish Creek in the City of Mequon was not originally included in the MCAMLIS/MMSD/SEWRPC study and it has not been mapped by the Federal Emergency Management Agency (FEMA) for flood insurance purposes, but, because it was necessary to compute flood profiles through that reach to develop information for the HEC-HMS hydrologic model, the floodplain was mapped and those maps are provided for the City's consideration. Because the reach in Mequon has not been mapped by FEMA, the City is not required to

submit the floodplain to FEMA for inclusion on the Ozaukee County FEMA digital flood insurance rate maps (DFIRMs). However, the City should consider adopting the floodplain for local zoning purposes, and should contact WDNR regarding requirements in that regard. The floodplain along the portion of Fish Creek in the Village of Bayside within Ozaukee County is mapped by FEMA as an approximate zone on the 2007 Ozaukee County DFIRMs. Also, the 1976 FEMA flood insurance study (FIS) for the Village of Bayside included flood profiles for Fish Creek and one of the unnamed tributaries in Milwaukee County. The 2008 FEMA DFIRM for Milwaukee County does not show floodplains along Fish Creek, or any of its unnamed tributaries, in the Village of Bayside. Although the most-current FEMA DFIRM for Milwaukee County does not show a floodplain along Fish Creek or its tributaries, because of the past history of FEMA flood profiles having been set forth in the 1976 FEMA FIS for the Village of Bayside in Milwaukee County, and because an approximate floodplain is mapped along Fish Creek in the portion of Bayside in Ozaukee County, FEMA may require that the Village submit the revised floodplain boundaries for flood insurance purposes. The only stream reach in the Village of River Hills included in the current MCAMLIS/MMSD/SEWRPC Fish Creek study is the upper end of one of the unnamed tributaries. The floodplain delineation along that reach is an approximate delineation based on backwater from the east side of IH 43. Neither the 1980 FEMA FIRM for the Village of River Hills, nor the 2008 FEMA DFIRM for Milwaukee County, show any floodplain delineation along that unnamed tributary to Fish Creek within the Village. Thus, while the Village may want to consider the new floodplain boundary for local planning purposes, it appears that they would not be required to submit the boundary to FEMA.

The maps provided to each municipality, Milwaukee County, and MMSD in 2009 were updated to reflect physical changes to the culverts under County Line Road, and, in certain locations, to use 2010 elevation contour information. Specifically:

- The U.S. Army Corps of Engineers (USCOE) HEC-RAS river analysis system model used to compute water surface profiles was updated to account for repair of County Line Road and replacement of the culverts under the road following damage during the July 2010 flood.
- The floodplain limits in Milwaukee County were delineated using 2010 elevation contour information collected under the MCAMLIS program; the limits along the downstream reach of Fish Creek in the portion of the Village of Bayside in Ozaukee County just upstream of the mouth at Lake Michigan were delineated using 2010 elevation contour information, superseding the previous delineations using inadequate contour data collected prior to 2010; and 2010 contour information in areas of the City of Mequon where new development occurred since the previous large-scale topographic mapping in 1998. Those areas in the City of Mequon include the area north of Donges Bay Road and new development in the area east of the Creek and southwest of the intersection of Donges Bay Road and North Port Washington Road.

In general, the floodplain limits in the City of Mequon were based on 2005 large-scale topographic mapping obtained by the County at a scale of one inch equals 100 feet and a contour interval of two feet under a program administered by SEWRPC.

The floodplain information shown on the updated maps is based on 1) flood flows estimated using a USCOE HEC-HMS hydrologic modeling system model initially developed under the MMSD watercourse system planning (WCSP) program and refined by the SEWRPC staff and 2) water surface profiles computed using a USCOE HEC-RAS river analysis systems hydraulic model that was also initially developed under the MMSD WCSP program and subsequently revised by the Commission staff. The maps reflect current bridge and culvert conditions.

Please review the enclosed maps and contact Michael G. Hahn of the Commission staff with any questions or comments. It would be appreciated if comments were provided by January 15, 2015. Following review of these maps, we will incorporate any necessary changes. If requested to do so by one or more of the municipalities affected, we would be pleased to assist in arranging a meeting involving the municipalities and WDNR staff to determine what actions should be taken regarding local adoption of the new floodplain maps.

The efforts of the local staffs that provided data used in preparation of the maps are gratefully acknowledged. We trust that the information provided will be useful to you and we look forward to assisting you with this important project.

* * *

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KRY/MGH/MRB/pk

Enclosures

cc: Mr. William C. Shaw, MCAMLIS Steering Committee (with geodatabase files and data dictionary)
Ms. Kim Tollefson, City of Mequon
Mr. Nathan D. Zoch, WDNR-Waukesha
Mr. Patrick C. Elliott, MMSD (with geodatabase files and data dictionary)
Mr. Curtis R. Hulterstrum, HNTB (with geodatabase files and data dictionary files)
Mr. Lee Traeger, FEMA Region V

Table 1

FISH CREEK FLOODPLAIN MAPS PROVIDED TO COMMUNITIES

| Town/Range | U.S. Public Land Survey System One-Quarter Section | Communities or Agencies Provided Maps |
|---------------------------------|---|--|
| Township 8 North, Range 22 East | Section 4-NW 1/4 | Village of Bayside |
| | Section 5-NE 1/4 | Village of Bayside |
| | Section 5-NW 1/4 | Village of Bayside Village of River Hills |
| | Section 6-NE 1/4 | Village of River Hills |
| Township 9 North, Range 22 East | Section 30-NE 1/4 | City of Mequon |
| | Section 30-SE 1/4 | City of Mequon |
| | Section 31-NE 1/4 | City of Mequon |
| | Section 31-SE 1/4 | City of Mequon |
| | Section 32-NW 1/4 | City of Mequon |
| | Section 32-SW 1/4 | City of Mequon |
| | Section 33-SW 1/4 | Village of Bayside City of Mequon |

Source: SEWRPC.