



**DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
MILWAUKEE COUNTY LAND INFORMATION OFFICE**

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

MEMORANDUM

TO: «prefix» «first_name» «middle_initial» «last_name» «LnameSuffix» «Suffix»
«title»
«organization»
«address1»
«address2»
«city», «state». «zipcode»

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: March 16, 2009

SUBJECT: MCAMLIS 77th Steering Committee Meeting Materials

Enclosed please find a set of materials that the steering committee will take up at its scheduled March 24th meeting.

- I. Meeting Agenda
- II. Materials related to the election of 2009 MCAMLIS Steering Committee Officers
- III. Meeting Minutes of the 76th Steering Committee meeting held December 2nd, 2008
- IV. Reports
 - A. Report materials on the Milwaukee County street address and cadastral map maintenance operations
 - B. Report materials on City of Milwaukee cadastral map maintenance operations
 - C. Report materials related to the MCAMLIS Enterprise Address Project
 - D. Report materials related to the MCAMLIS Pictometry Oblique Imagery Acquisition Project
 - E. Report materials related to the MCAMLIS 2008 LiDAR pilot project.
 - F. Report materials related to the status of actions taken regarding MCAMLIS Copyright protections
 - G. Report materials related to the status of the Regional Water Study (to be distributed at the meeting)
 - H. Report materials related to the status of MCAMLIS Floodland Mapping Project (to be distributed at the meeting)
 - I. Report materials related to the MCAMLIS Fiscal status (to be distributed at the meeting)

V. Old Business

- A. Materials related to a MCAMLIS Staff request to provide internet access to the Milwaukee County Plats of Survey
- B. Materials related to funding the completion of the EAS Project

VI. New Business

- A. Materials related to a proposed 2010 Orthophoto Imaging and Photogrammetric Program (to be distributed at the meeting)
- B. Materials related to a Register of Deeds request to fund Improvements to Computerized System

* * * * *

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

Seventy-Seventh Steering Committee Meeting

AGENDA

Date: March 24th, 2009
Time: 9:00 a.m.
Place: Milwaukee County
City Campus, Room 349
2711 W Wells St.
Milwaukee, WI. 53208

- I. Roll Call
- II. Special Order of Business
 - Election of 2009 MCAMLIS Steering Committee Officers
- III. Meeting Minutes
 - Consideration of the minutes of the 76th Steering Committee meeting held December 2nd, 2008.
- IV. Reports
 - A. Report by Milwaukee County Register of Deeds staff on MCAMLIS street address and cadastral map maintenance operations.
 - B. Report by City of Milwaukee staff on MCAMLIS cadastral map maintenance operations.
 - C. Report by MCAMLIS staff on the status of the Enterprise Address Project.
 - D. Report by MCAMLIS staff on the status of the Pictometry Oblique Imagery Project.
 - E. Report by MCAMLIS Staff on the status of 2008 LiDAR pilot project.
 - F. Report by MCAMLIS Staff on the status of actions taken regarding MCAMLIS Copyright protections
 - G. Report by SEWRPC staff on the status of the Regional Water Study.
 - H. Report by SEWRPC staff on the status of MCAMLIS Floodland Mapping Project.
 - I. Report by Milwaukee County DAS staff on MCAMLIS Fiscal status.
- V. Old Business
 - A. Consideration of a MCAMLIS Staff request to provide internet access to the Milwaukee County Plats of Survey
 - B. Consideration of the MCAMLIS Staff request to authorize additional funding necessary to complete the EAS Project

- VI. New Business
 - A. Introduction by MCAMLIS Staff to a proposed 2010 Orthophoto Imaging and Photogrammetric Program
 - B. Consideration of a Register of Deeds request to fund Improvements to Computerized System
- VII. Correspondence
- VIII. Date, time, and place of next meeting
- IX. Adjournment



MEMORANDUM: FROM ENGINEERING

DATE: March 2, 2009

TO: Milwaukee County Automated Mapping and Land Information System Steering Committee (MCAMLIS)

FROM: *JMB* John M. Bennett, P.E., City Engineer

SUBJECT: NOMINATING COMMITTEE REPORT

Pursuant to the direction of Dr. Kurt W. Bauer, Chairman of MCAMLIS and his selection of a nominating committee consisting of Greg High and John Place and myself as Chairman, please be advised that via telephone the committee has selected the following nomination for officers for the 2009 MCAMLIS Steering Committee:

Chairman: Dr. Kurt W. Bauer
Vice Chairman: Mr. Donald Nehmer

Both candidates have agreed to serve as officers for the calendar year of 2009. It is recommended that the chair appoint Milwaukee County staff as secretary.

Respectfully submitted,

John Bennett
Greg High
John Place

JMB/ag/sg

MINUTES OF THE 76th MEETING
Milwaukee County Automated Mapping and Land Information System
Steering Committee

Date: Tuesday, December 2, 2008
Time: 9:00a.m.
Place: Milwaukee County City Campus
2711 W. Wells Street
Room 349
Milwaukee, WI 53208

Members Present

Kurt W. Bauer, Chairman	Milwaukee County Surveyor
Donald R. Nehmer, Vice Chairman	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
Nancy A. Olson	Chief Information Officer, Information and Technology Management Division, City of Milwaukee
John C. Place	Manager, Gas Engineering and Mapping, We Energies
Gregory G. High	Director, Architecture, Engineering and Environmental Services Division, Milwaukee County Department of Transportation and Public Works, representing the Director, Milwaukee County Department of Transportation and Public Works
Alexandra Kotze	Fiscal Management Analyst, representing Cynthia Archer, Director, Milwaukee County Department of Administrative Services
John L. La Fave, LIO	Milwaukee County Register of Deeds

Members Absent

Donald L. Coe	Supervisor, Facilities Location, Customer Operations, We Energies
Kevin S. Anderson	Area Manager - Design, AT&T Milwaukee Metro South
John M. Bennett	City Engineer, City of Franklin, representing the Intergovernmental Coordinating Council of Milwaukee County

Guest and Staff Present

Gary E. Drent	Fiscal and Budget Manager, Milwaukee County, DTPW/AE&ES
William C. Shaw	MCAMLIS Project Manager, Milwaukee County DTPW/AE&ES

Tammy Bronson

City of Milwaukee, Information and Technology
Management Division

Kathleen Bach

Milwaukee County, Register of Deeds

Hardy Meihnsner

GeoDecisions

Marcia Lindholm

City of Milwaukee

I. ROLL CALL

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

II. MEETING MINUTES

II(a) CONSIDERATION OF THE MINUTES OF THE 75TH STEERING COMMITTEE MEETING HELD SEPTEMBER 30TH, 2008

Bauer: noted that a copy of the minutes was provided with the meeting materials and asked if there were any corrections required?

Motion: Nehmer moved to accept the minutes

Second: Place, Motion carried unanimous

III. REPORTS

III(a) REPORT BY MILWAUKEE COUNTY REGISTER OF DEEDS STAFF ON MCAMLIS STREET ADDRESS AND CADASTRAL MAP MAINTENANCE OPERATIONS.

Bach: directed the Committee to the staff report included with the meeting materials, further stating that the maps are current as of the end of October 2008.

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

III(b) REPORT BY CITY OF MILWAUKEE STAFF ON MCAMLIS CADASTRAL MAP MAINTENANCE OPERATIONS.

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

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

III(c) REPORT BY MCAMLIS STAFF ON THE STATUS OF THE ENTERPRISE ADDRESS PROJECT.

Shaw: directed the Committee to the staff report included with the meeting materials

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

III(e) REPORT BY MCAMLIS STAFF ON THE STATUS OF 2008 LiDAR PILOT PROJECT.

Shaw: directed the Committee to the staff report included with the meeting materials

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

III(f) REPORT BY MCAMLIS STAFF ON THE STATUS OF ACTIONS TAKEN REGARDING MCAMLIS COPYRIGHT PROTECTIONS

Shaw: directed the Committee to the staff report included with the meeting materials. Noting that he had received an email message confirming AT&T's intention to approve the recommended changes from Gerald Fredericks representing AT&T's legal department.

Nehmer: asked whether there would be an item on the next agenda if we received AT&T's signature before the next meeting?

Shaw: replied that once the signatures are received from Wisconsin Bell he would then distribute it to WE Energies for signature and likewise to MMSD and obtain any other signatures that are required on the document. Assuming that could be done within the timeframe, we would then have a completed document.

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

III(g) REPORT BY SEWRPC STAFF ON THE STATUS OF THE REGIONAL WATER STUDY.

Bauer: directed the Committee to the staff report included with the meeting materials

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

III(h) REPORT BY SEWRPC STAFF ON THE STATUS OF MCAMLIS FLOODLAND MAPPING PROJECT

Bauer: directed the Committee to the staff report included with the meeting materials

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

III(i) REPORT BY MILWAUKEE COUNTY DAS STAFF ON MCAMLIS FISCAL STATUS.

Kotze: directed the committee to the staff report included with the meeting materials

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

IV. OLD BUSINESS

V. NEW BUSINESS

V(a) CONSIDERATION OF A MCAMLIS STAFF PROPOSAL FOR UPDATED 2009 ORTHO-PHOTOGRAPHY PRODUCTS COVERING THE MARQUET INTERCHANGE AND ENVIRONS WEST, SOUTH AND EAST OF THE ORIGINAL PROJECT AREA TOTALING 10 SQ. MI

Shaw: directed the committee to the staff report included with the meeting materials

Place: asked if in 2010 would the entire County be flown again?

Shaw: replied that yes, it's anticipated that we would do the whole county at 6" as we did in 2005. He stated that he hoped to also consider at that time including LiDAR as part of the program.

MOTION: LaFave moved to approve the staff recommendation not to proceed with the Ortho-photography as set forth in the memorandum

Olson second, motion carried unanimous

V(b) CONSIDERATION OF A 2009 AGREEMENT FOR MCAMLIS PROJECT MANAGEMENT AND MAP MAINTENANCE SERVICES BETWEEN MCAMLIS AND MILWAUKEE COUNTY DTPW

Shaw: directed the committee to the staff report included with the meeting materials.

MOTION: Nehmer moved to approve the staff recommendation

LaFave second, motion carried unanimous

V(c) CONSIDERATION OF A 2009 AGREEMENT FOR MCAMLIS FISCAL OVERSIGHT BETWEEN MCAMLIS AND MILWAUKEE COUNTY DAS.

MOTION: Nehmer moved to approve the staff recommendation

LaFave second, motion carried unanimous

V(d) CONSIDERATION OF A 2009 AGREEMENT FOR MILWAUKEE COUNTY SURVEYOR SERVICES BETWEEN MCAMLIS AND SEWRPC.

MOTION: Nehmer moved to approve the staff recommendation

LaFave second, motion carried unanimous

V(e) CONSIDERATION OF A 2009 AGREEMENT FOR MAP MAINTENANCE SERVICES BETWEEN MCAMLIS AND THE CITY OF MILWAUKEE

MOTION: Nehmer moved to approve the staff recommendation

LaFave second, motion carried unanimous

V(f) **CONSIDERATION OF THE APPOINTMENT OF A NOMINATING COMMITTEE TO RECOMMEND A SLATE OF OFFICERS TO THE STEERING COMMITTEE AT IT'S NEXT REGULAR MEETING**

Bauer: Appoint Mr. Bennett as chairman, Mr. Place representing the Utilities, Mr. High representing the County

VI. **CORRESPONDENCE**

VII. **DATE, TIME AND PLACE OF NEXT MEETING**

March 24, 2009 @ 9:00am

VIII **ADJOURNMENT**

MOTION: Place move to approve

LaFave second motion carried unanimous

Respectfully submitted,

William C. Shaw
MCAMLIS Project Manager

R.21 E.

R.22 E.

MCAMLIS Address Database Maintenance Status

March 2009 Status

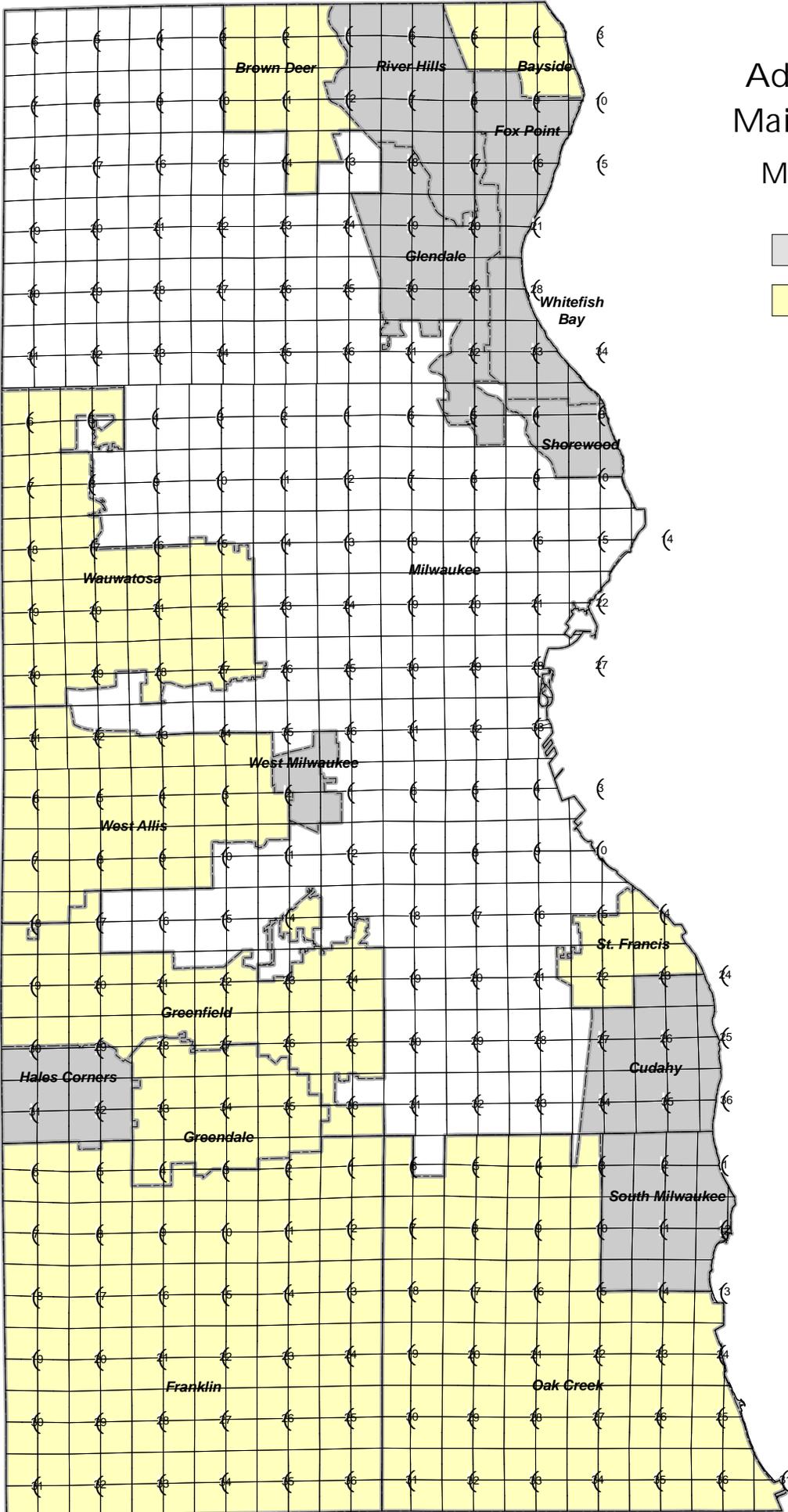
- January 1, 2008
- January 1, 2009

T.8 N.

T.7 N.

T.6 N.

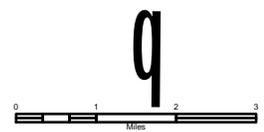
T.5 N.



R.21 E.

R.22 E.

R.23 E.



Source: MCAMLIS Project Manager

R.21 E.

R.22 E.

MCAMLIS Cadastral Database Maintenance Status March 2009 Status

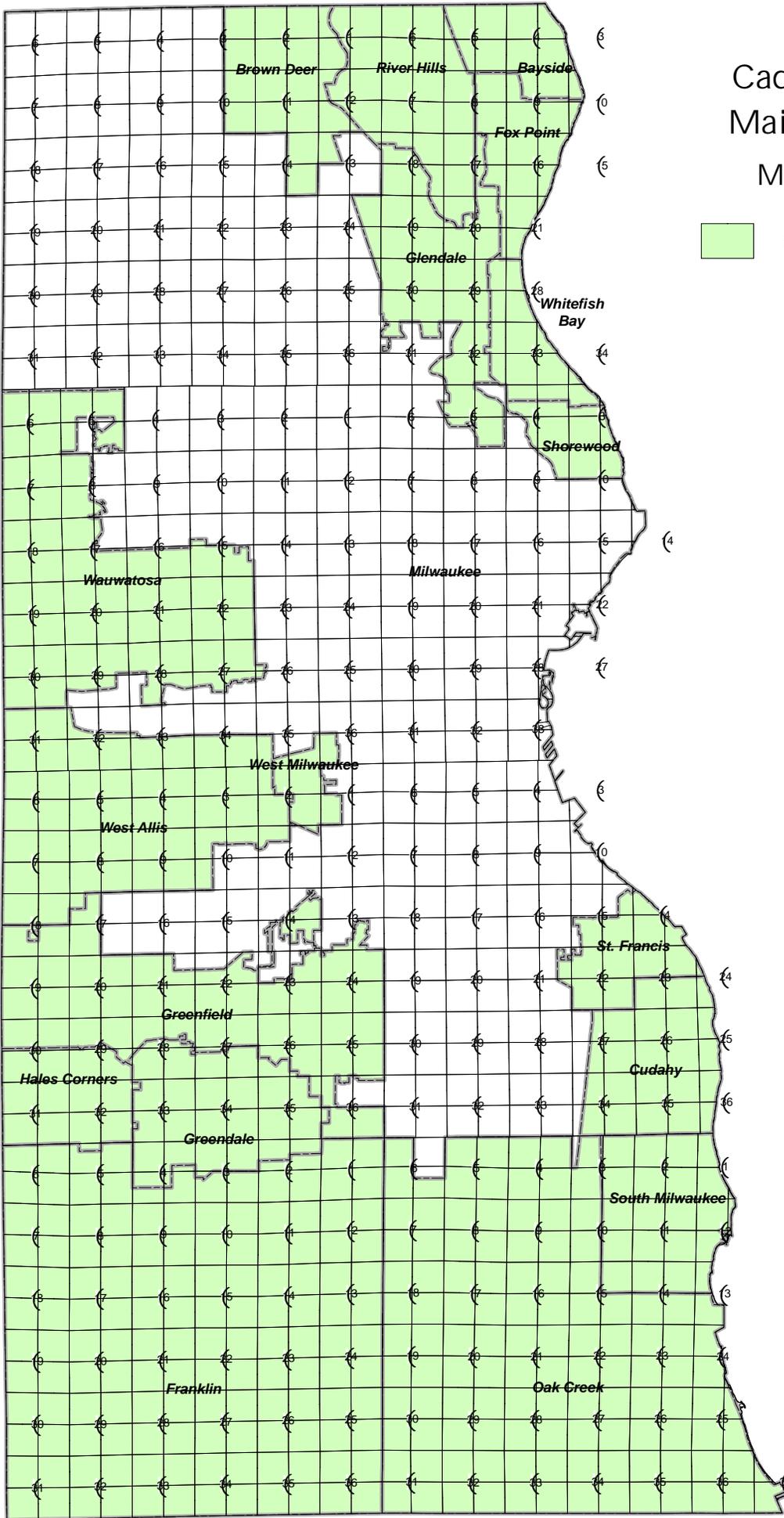
 Current as of February 1, 2009

T.8 N.

T.7 N.

T.6 N.

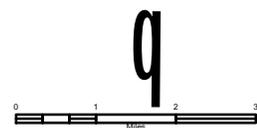
T.5 N.



R.21 E.

R.22 E.

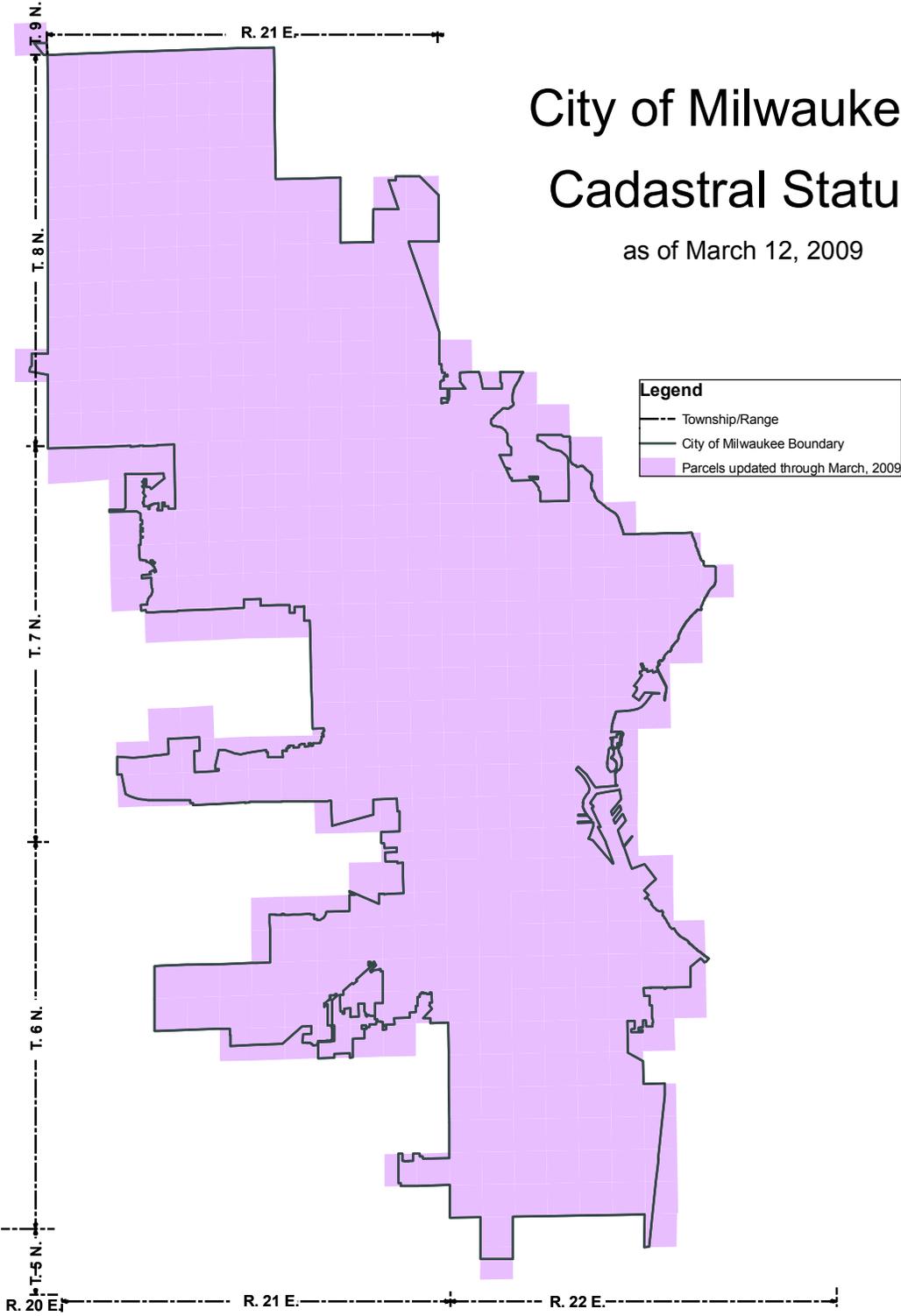
R.23 E.



Source: MCAMLIS Project Manager

City of Milwaukee Cadastral Status

as of March 12, 2009





DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
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: March 4, 2009
SUBJECT: Enterprise Address System Project Status

BACKGROUND

The Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee approved a project to provide for the development of a Countywide "Enterprise Address System" (EAS).

It was determined that a need for an EAS was a result of the many County and Regional services that rely on high quality address information to effectively provide critical services.

To meet this need, the EAS project is designed to provide a comprehensive approach to the management of all Milwaukee County Address information.

The EAS Project focus is on the establishment of data, technology and organizational components required to serve all Milwaukee County units of government as well as the many individual public service agencies that use address information in their day-to-day operations.

ACTIVITIES THIS PERIOD - 12/08 - 3/09

- Develop and deliver EAS street centerline and address point location data in support of the City of Cudahy (Phoenix) and the North Shore Dispatch Center (Positron) CAD system implementation projects
- Deliver countywide street centerline updates to Diggers Hotline
- Develop, build, test and deploy MCLIO Interactive Mapping Service
- Develop, build, test and deploy MCAMLIS Cadastral products (data and maps) integrating the City of Milwaukee digital cadastral map data within the countywide MCAMLIS Cadastral map product
- Completed the North Shore Communities MSAG reconciliation and extended the EAS database to allow dynamic linking of parcels, addresses, units and structures.
- Finalized deployment specifications for the North Shore Fire Department Street Address Atlas
- Complete U.S. Census Bureau 2010 Participant Statistical Areas Program (PSAP). PSAP completion responsibility shared between the City of Milwaukee and MCAMLIS staff. Final delivery to Census by 3/27/2009

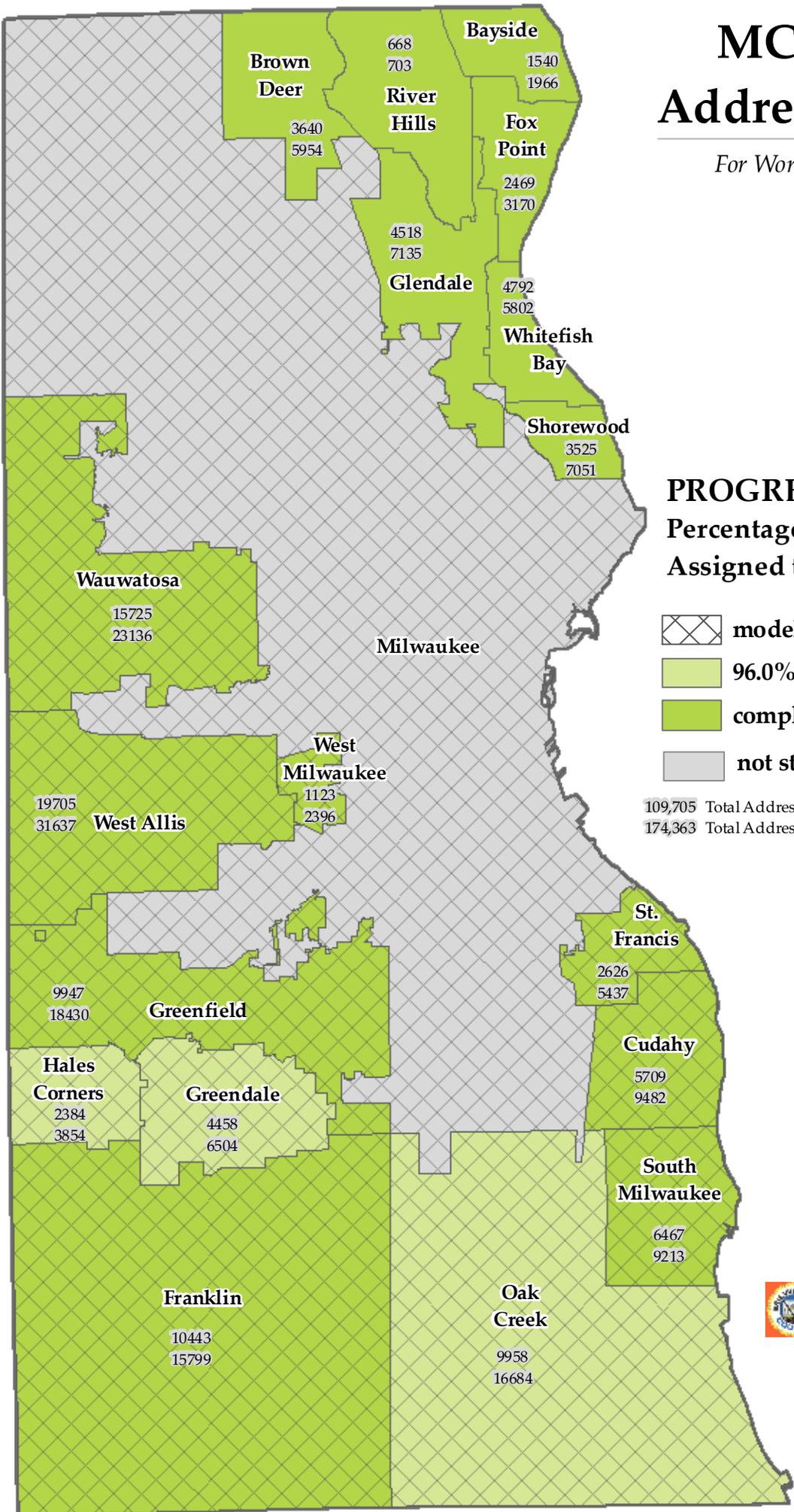
STATUS

- Ongoing progress toward incorporating multiple address source information (see status map)
- Continue MSAG address integration implementing the prototype EAS Address Model for the remainder of the suburban communities

Attach: EAS Addressing Status map
EAS Address Data Relationship Example
MCLIO Interactive Mapping Service Announcement

MCAMLIS EAS Address Model Status

For Work Performed through 3-12-09



PROGRESS Percentage of Addresses Assigned to Structures

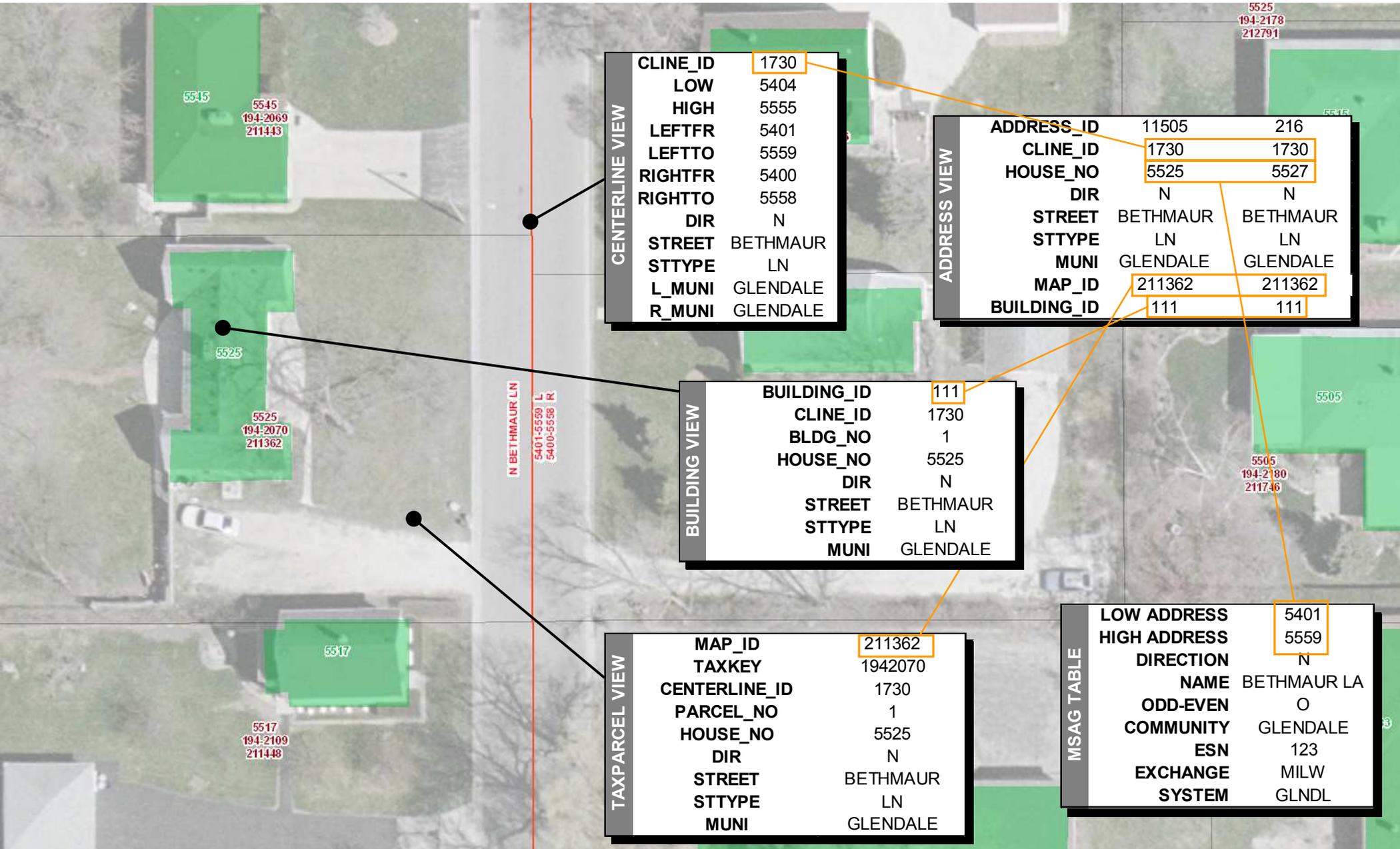
-  model to be constructed
-  96.0% - 98.0% (field collection required)
-  complete / ongoing maintenance
-  not started: 60% complete (est.)

109,705 Total Addressable Building Polygons (excluding Milwaukee)
174,363 Total Address Records (excluding Milwaukee)



**Milwaukee County
Land Information Office**

MCAMLIS EAS ADDRESS MODEL





DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

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: March 6, 2009
SUBJECT: Pictometry Oblique Imagery Acquisition Project Status

BACKGROUND

Oblique Image Technology - Project to acquire multi-resolution oblique image software, Countywide digital imagery, training and professional services as authorized by the MCAMLIS Steering Committee. The imagery, training and software will be made available to Milwaukee County Municipalities and other governmental units for purposes of integrating oblique imagery technology into their operations.

At its regular meeting held December 18th, 2007 the MCAMLIS Steering Committee approved a staff recommendation to proceed with the acquisition of Pictometry International, Corporation's oblique image warehouse and software.

ACTIVITIES THIS PERIOD - 12/08-3/09

- Developed, packaged, delivered and installed Pictometry EFS Software and MCAMLIS data products at multiple Milwaukee County licensed participant sites
- Established 2 additional remote connections via Virtual Private Network (VPN) to the Milwaukee County Pictometry Image Warehouse server (Cudahy, Whitefish Bay) to support sites that elect not to host their own installations
- Investigated options to relieve performance bottlenecks at remote site locations. Identified available options:
 - Utilize higher levels of image compression to reduce file size; and/or
 - Purchase additional licensed access to Pictometry Online (POL)
- Conducted 5 Pictometry EFS End User Training Sessions (Wauwatosa 12/9 & 2/13, Cudahy 2/13, Bayside 12/10, Franklin 12/10). A total of 40 users attended these training sessions

STATUS

Integration with MCAMLIS Products

- Periodically refresh basemap, parcel, property information and street centerline files using MCAMLIS feature data periodically

Deployment

- Continue to notify and promote the public domain user community of product, training and deployment options via MCLIO Sharepoint Website, onsite demonstrations, general mailings and announcements
- Continue to investigate more efficient deployment options

Ongoing Support

- Develop and offer training tailored to Milwaukee County

- Monitor and support connections with remote user sites through onsite visits and MCLIO forums

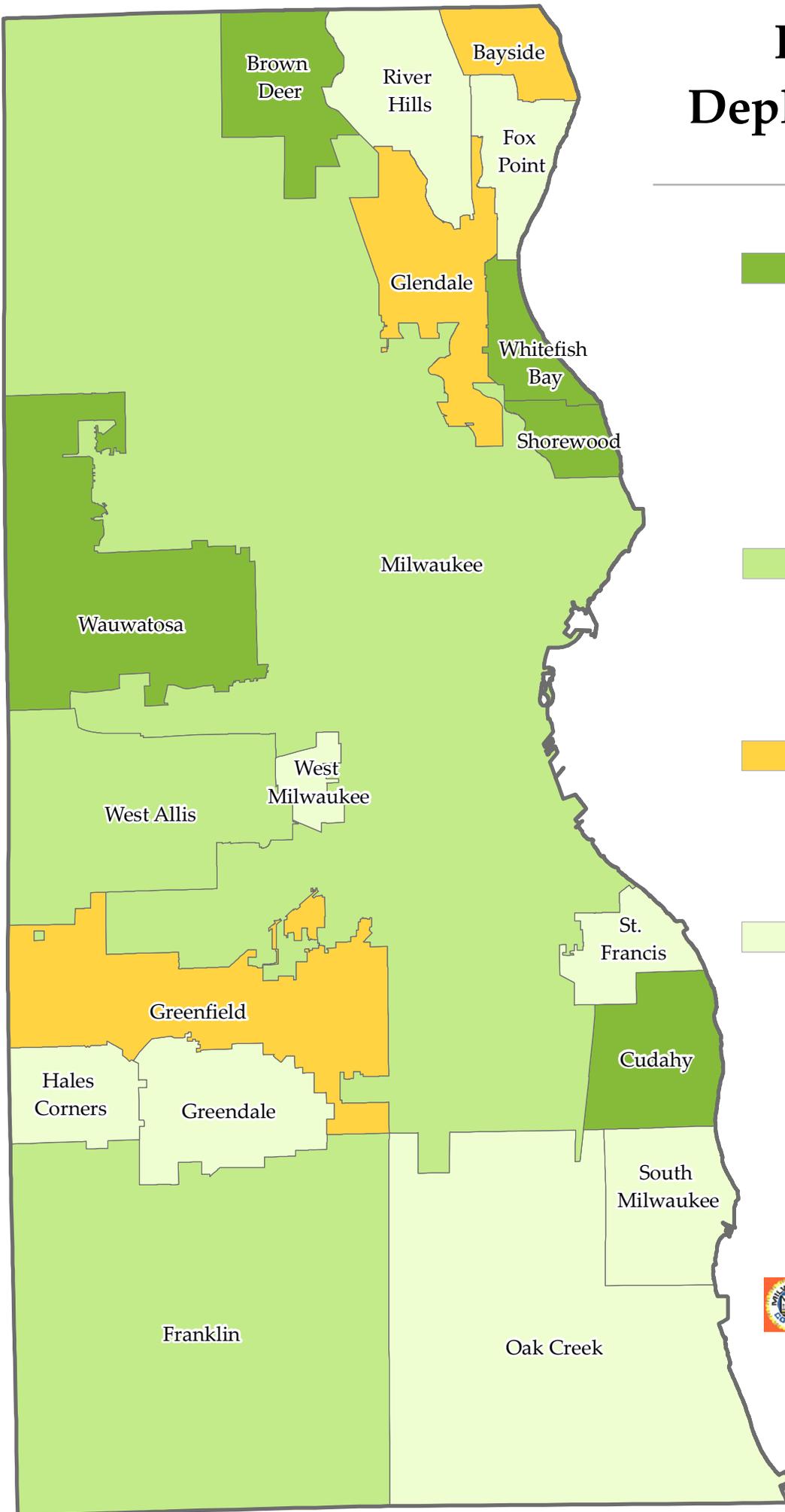
Attach: Pictometry Status Map_030609

Pictometry Image Compression examples

Pictometry Image Integration with Interactive Mapping Service example

Pictometry Deployment Status

March 5, 2009



- REMOTE DEPLOYMENT (57)**
 - City of Wauwatosa (22)
 - City of Cudahy (18)
 - MMSD (12)
 - SEWRPC (3)
 - Village of Brown Deer (2)
 - Village of Shorewood (1)
 - Village of Whitefish Bay (1)

- LOCAL DEPLOYMENT**
 - Milwaukee County (22)
 - City of Milwaukee
 - City of West Allis
 - City of Franklin

- DEPLOYMENT TBA**
 - City of Glendale
 - City of Greenfield
 - Village of Bayside

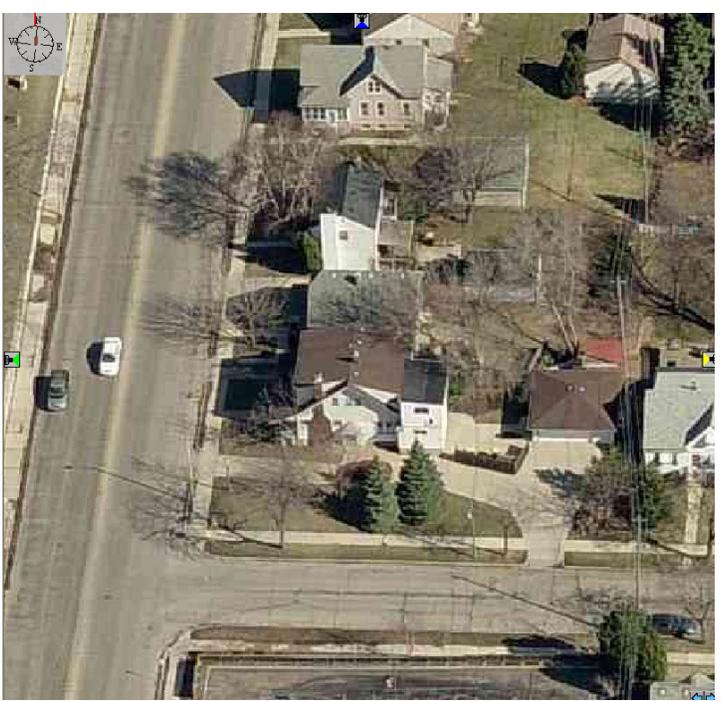
- NO DEPLOYMENT SCHEDULED**



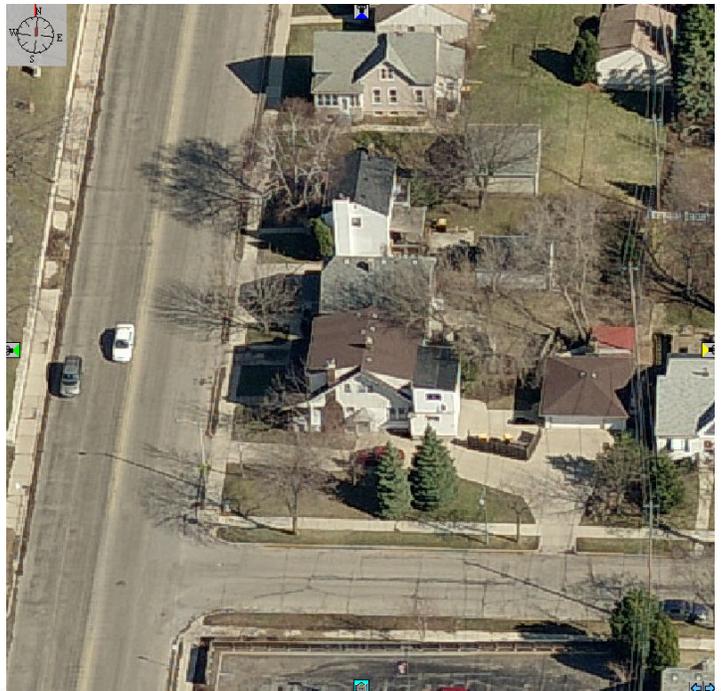
**Milwaukee County
Land Information Office**

Pictometry Oblique Imagery Compression Comparison

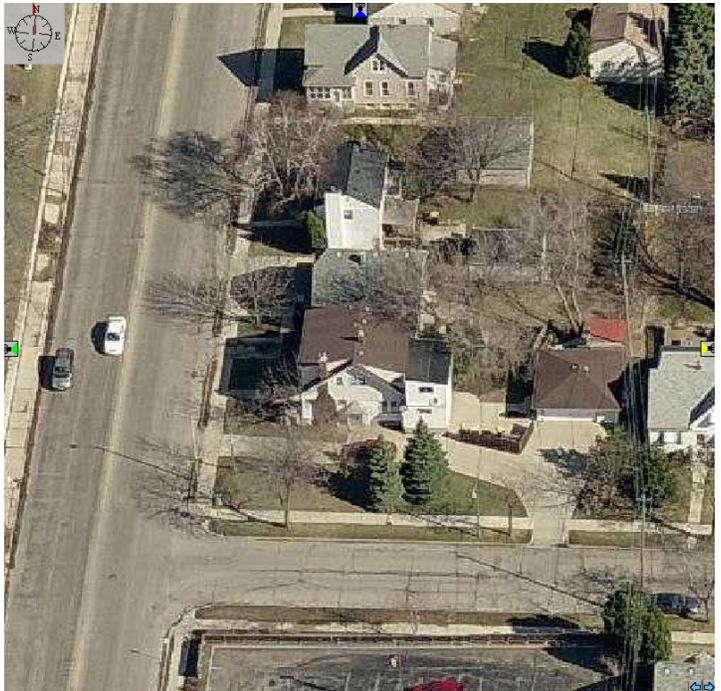
30%



0%



50%



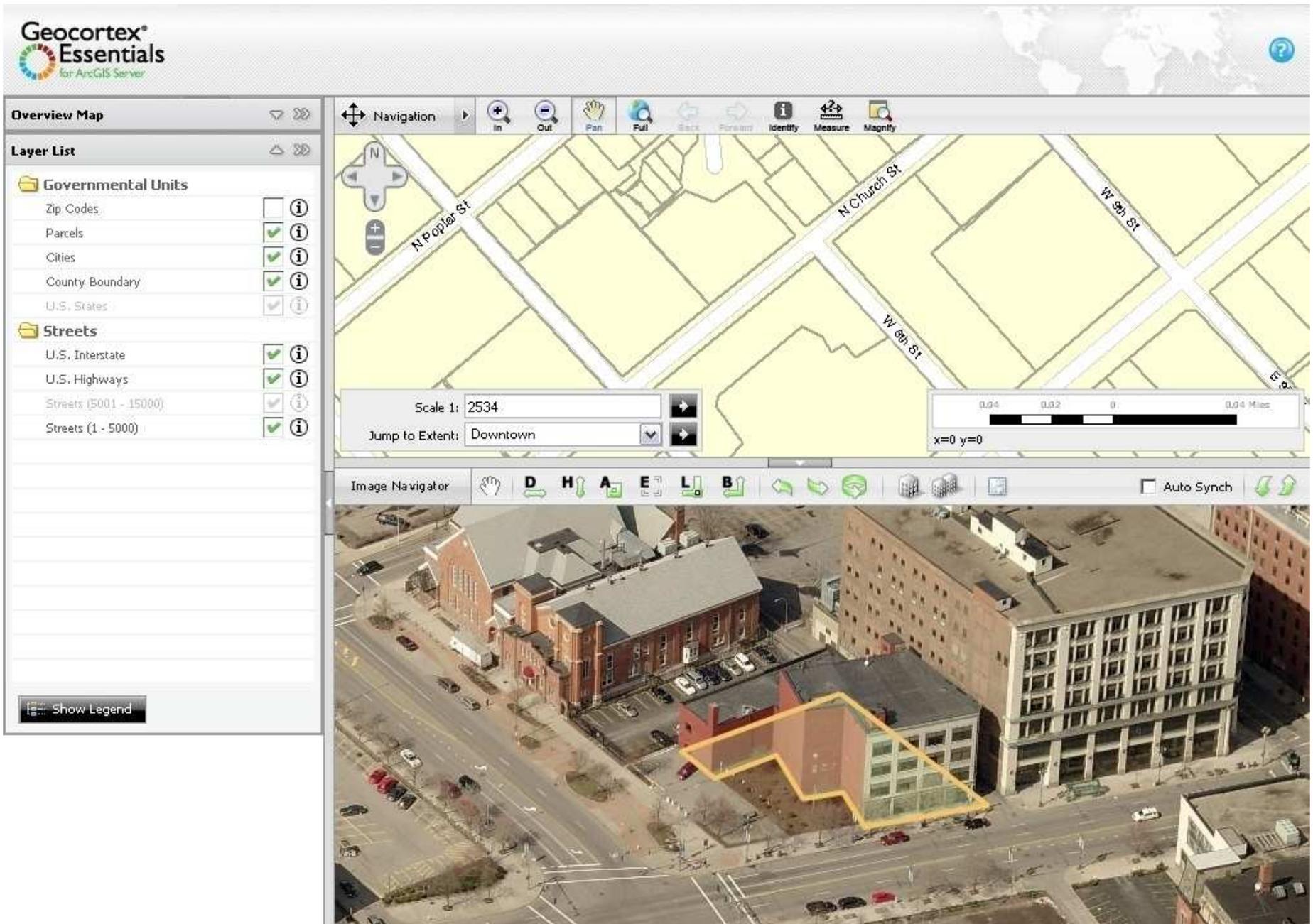


Figure 1: The Pictometry Image Navigator viewer shown beneath the map viewer. As with the left side panel, the Image Navigator is displayed in a collapsible panel. The highlighted parcel in the Image Navigator is a parcel that was identified in Essentials.

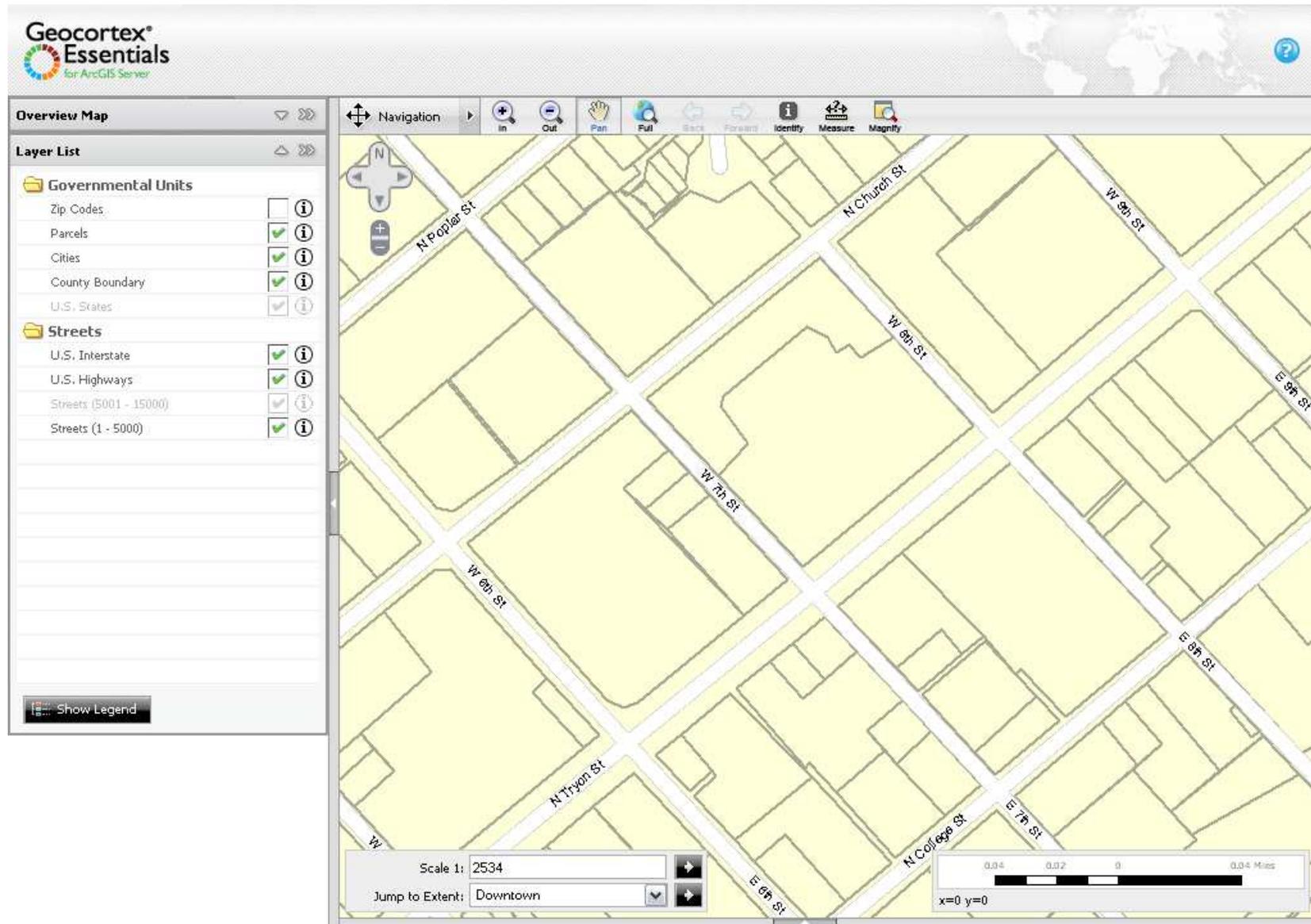


Figure 2: The Pictometry Image Navigator viewer's panel has been collapsed. Clicking the grey arrow at the bottom of the map panel will re-expand the Image Navigator as in Figure 1.



Figure 3: The Image Navigator toolbar. The tools/functions, from left to right, are described below:

- Pan: Move the view around the current image.
- Distance: Measure a distance along the ground.
- Height: Measure the height of a structure.
- Area: Measure ground area.
- Elevation: Measure elevation of a point.
- Location: Display geographic coordinates of a point.
- Bearing: Measure the angle of a line from true north.
- Previous Image: Retrieve the previous image of this location.
- Next Image: Retrieve the next image of this location.
- Rotate Image: Rotates the view clockwise.
- Neighbourhood: View zoomed-in imagery of the current location.
- Community: View zoomed-out imagery of the current location.
- Orthogonal: View orthogonal imagery of the current location.
- Auto Synch: Checking this box will ensure that the map's view and Image Navigator view automatically remain centered on the same point. Un-checking it means that the user needs to manually synchronize the views.
- Center Image on Map: Center the Image Navigator on the map's center point.
- Center Map on Image: Center the map on the Image Navigator's center point.



**DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
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: March 13, 2009
SUBJECT: MCAMLIS Copyright and Data Distribution Policies Status

BACKGROUND

The Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee approved a project directing staff to implement recommended revisions to existing MCAMLIS Copyright and Data Distribution Policies.

This project was formulated as a result of Steering Committee approval of the Utilities Sub-Committee recommendations regarding MCAMLIS Copyright and Data Distribution Policies. The Utilities Sub-Committee recommendations were as follows:

- The Utilities Sub-Committee interest in the MCAMLIS Copyright should be dissolved and that action should be taken to affect this change;
- MCAMLIS Staff should continue to work, assisted by Mr. Schwartz Attorney, Quarles & Brady LLP, to compose an appropriate letter to AT&T requesting a statement from them regarding their continuing interest in the MCAMLIS Copyright;
- MCAMLIS Staff (assisted by Mr. Schwartz) should report the impact of this action and recommend suitable alternative policy to the Steering Committee once action to dissolve the copyright had been taken.

ACTIVITIES THIS PERIOD - 11/08 - 3/09

- Staff assisted by Mr. Schwartz Attorney, Quarles & Brady LLP composed a letter and revised MCAMLIS License Agreement; forwarding these materials to Mr. A. Gerald Friederichs, General Attorney, AT&T dated November 3, 2008;
- Staff initiated periodic communication with AT&T via telephone and email addressed to Mr. Kevin Anderson, AT&T named representative on the MCAMLIS Steering Committee and others within the AT&T organization including Mr. Friederichs during this period;
- Staff obtained signed copies of the revised MCAMLIS License Agreement from Mr. Friederichs office; effectively releasing AT&Ts interest in the existing MCAMLIS Copyright;

STATUS

- Proceed to secure the remainder of MCAMLIS Consortium Member approvals of the revised MCAMLIS License Agreement;

- Proceed with development of alternative policy once action to dissolve the copyright has been finalized

Attach: Letter to G. Friederichs, 11/03/2008

Letter from G. Friederichs, 3/11/2009

Revised MCAMLIS License Agreement

* * * * *



DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

MILWAUKEE COUNTY LAND INFORMATION OFFICE

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

November 3, 2008

Mr. Gerry Friederichs, Esq.
AT&T Legal Department
14th Floor
722 North Broadway
Milwaukee, WI 53202

Re: MCAMLIS Database System

Dear Mr. Friederichs:

Again, I want to thank you for your willingness to accept the Revised License Agreement as proposed. I am herein forwarding, to your attention, copies of the proposed agreement to be executed.

The Utilities "Sub-committee" originally consisting of Wisconsin Electric Power Company, Wisconsin Gas Company d/b/a We Energies, and Wisconsin Bell, Inc. are required to be unanimous in agreement to the proposed copyright revisions. Could you please have an authorized representative of your company execute the attached documents and return these to me. I will then forward copies to representatives of We Energies and the remaining MCAMLIS Steering Committee membership for additional signatures and return to you a fully executed original copy of the Revised Copyright Agreement for your records.

Thank you in advance.

Mr. William Shaw
MCAMLIS Project Manager
Milwaukee County Land Information Office
Milwaukee County Dept. Of Transportation & Public Works
City Campus - Room 426
2711 W. Wells St.
Milwaukee, WI 53208

Attach: original copies of the Revised MCAMLIS License Agreement



Gerald A. Friederichs
General Attorney

14th Floor
722 N. Broadway
Milwaukee, WI 53202
T: 414.270.4559
F: 414.270.4553
gf2959@att.com

March 11, 2009

Mr. William Shaw
Milwaukee County Dept of Transportation &
Public Works
Room 426
2711 West Wells St.
Milwaukee, WI 53208

RE: MCAMLIS Database System License

Dear Mr. Shaw:

Enclosed please find seven originals of the Revised License Agreement for the MCAMLIS Database, all of which have been executed by Wisconsin Bell, Inc.

Per your letter of November 3, 2008, please return a fully executed original of the Revised License Agreement to me after all parties have signed.

Sincerely yours,

Dextra Hadnot
Kevin Anderson

REVISED LICENSE AGREEMENT

WHEREAS, the Southeastern Wisconsin Regional Planning Commission, Milwaukee County, Wisconsin Bell Inc. d/b/a AT&T Wisconsin, Wisconsin Electric Power Company and Wisconsin Gas LLC both d/b/a We Energies, the City of Milwaukee, the Milwaukee Metropolitan Sewerage District, and the Intergovernmental Cooperation Council of Milwaukee County are currently members of the Milwaukee County Automated Mapping And Land Information System Steering Committee (the "Steering Committee"), a committee that maintains an automated mapping and land information system covering Milwaukee County, including, among other things, information and materials relating to corner monumentation, control surveys, digital planimetric and topographic maps, digital cadastral map overlays, parcel identifiers and other related documents and materials (all collectively the "Materials");

AND WHEREAS, in order to obtain certain financial support of Wisconsin Bell, Wisconsin Electric Power Co., and Wisconsin Gas Company (the "Utilities") in connection with those activities the Steering Committee entered into in 1993 a "License Agreement" governing ownership, access, and use of the Materials;

AND WHEREAS, the Steering Committee (including the Utilities) wish to revise that License Agreement;

NOW THEREFORE, the License Agreement is hereby revised (effective November 1, 2008) to read as follows:

1. Copyright Ownership. The Steering Committee shall own copyright title to all of said Materials. Thus, to the extent the Utilities currently own any copyright or other rights to the "Materials" in digital form (the "Digital Materials") they hereby transfer those rights to the Steering Committee. Hence, copyright title to all the Materials shall therefore be owned by the Steering Committee, or its future designee(s) if any.

2. License. All members of the Steering Committee and their affiliates are hereby irrevocably and perpetually licensed (and granted the right to license others) to use, reproduce, modify, distribute, perform, and display the Materials (other than the Digital Materials) without restriction. With respect to the Digital Materials, all members of the Steering Committee and their affiliates are hereby irrevocably and perpetually (albeit just for their own, including corporate affiliates, internal purposes), licensed to use, reproduce, modify, perform, and display the Digital Materials. This shall include the right to prepare and distribute non-digital form reports on one or more land parcels using the Digital Materials, and to distribute the reports to the public. However, absent the consent of a majority of the Steering Committee (directly or through adopted policies), none of the Steering Committee members may authorize distribution of copies of the Digital Materials (or digital form materials substantially based thereon) to others for the commercial purposes of those besides the Steering Committee and their affiliates.

3. Notwithstanding the above, nothing herein shall preclude Milwaukee County from complying with its obligations under grant agreements with the State of Wisconsin, or restrict rights granted to the State of Wisconsin there under.

4. Also, nothing herein shall preclude a member of the Steering Committee from complying with a court order that it has not stipulated to.

5. All members of the Steering Committee hereby agree that in deciding whether to assert the Steering Committee's power to restrict use of the Digital Materials by third parties they will not unreasonably refuse to provide access to the Digital Materials via their vote where the intended use is for a non-profit purpose (e.g. a University of Wisconsin researcher). Also, if some third party should be interested in having access to the Digital Materials for a commercial purpose, the Steering Committee members also hereby agree not to unreasonably refuse such access where the requester satisfies then applicable Steering Committee policies that have been adopted by a majority of the Steering Committee.

AT&T (WISCONSIN BELL INC.)

Date 2/13/09 By Paul Wilson

Attest Andrew Shaw

WISCONSIN ELECTRIC POWER CO.

Date _____ By _____

Attest _____

WISCONSIN GAS COMPANY

Date _____ By _____

Attest _____

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

Date_____ By _____

Attest _____

SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION

Date_____ By _____

Attest _____

CITY OF MILWAUKEE

Date_____ By _____

Attest _____

INTERGOVERNMENTAL COOPERATION
COUNSEL OF MILWAUKEE COUNTY

Date_____ By _____

Attest _____

MILWAUKEE COUNTY

Date_____ By _____

Attest _____

6565830

* * * * *



**DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
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: March 13, 2009
SUBJECT: LiDAR IMAGE PILOT PROJECT STATUS

BACKGROUND

The MCAMLIS Steering Committee authorized staff to enter into a partnership agreement with UWM to co-sponsor acquisition of LiDAR data within a pilot designated test area(s). The products developed within the proposed pilot test areas will be used in determining the suitability of using LiDAR to guide the maintenance of topographic and planimetric features data managed by MCAMLIS.

The value of the MCAMLIS 2005 Topographic Mapping (an investment of over \$3.2 million) is depreciating as changes are made on the ground. Identifying those changes are difficult without a method of detecting where features have been modified, added or removed. LiDAR is thought to provide a mechanism to highlight and direct maintenance activities, thus allowing staff to incrementally maintain rather than conduct wholesale replacement of topographic mapping features, as has been done in the past.

A MCAMLIS Staff Report regarding the feasibility and value of using this technology in support of detecting topographic maintenance requirements will be delivered to the MCAMLIS Steering Committee within the 2nd Quarter of 2009. A staff recommendation regarding future use and direction of LiDAR technology will accompany the report.

ACTIVITIES THIS PERIOD - 11/08 - 3/09

- Executed a Scope of Work (SOW) between Milwaukee County and NCDC
- Received preliminary data and project status from NCDC
- Conducted preliminary review of early stage Digital Surface Model (DSM) and tree locations

STATUS

- Develop, build and test feature detection process leading to final analysis, report and recommendation
- Awaiting final delivery of digital products from NCDC

Attach: NCDC, Milwaukee County SOW

Letter regarding NCDC Project Status and preliminary data description

Series of preliminary exhibits showing existing topo features with LiDAR detected features

SCOPE OF WORK

LiDAR Analysis Pilot Project, Milwaukee, Wisconsin

1. Introduction

This Scope of Work (SOW) involves geospatial analysis to map and evaluate the accuracy & cost efficiency of airborne LiDAR-derived elevation products in three locations within the city of Milwaukee, WI ranging from 1-5sqmi. Partners contributing financially include the University of Wisconsin-Milwaukee and Milwaukee County.

2. Deliverables

New LiDAR data was captured in late August 2008 throughout the cities of Milwaukee and Mequon, WI with the following specifications:

- Average of 1-meter resolution, i.e. 1 point per square meter, with the exception of slightly coarser resolution adjacent to Mitchell International Airport near one of the pilot's three test sites
- Frequency; 50 kilohertz
- Collection of multiple echoes per pulse, with minimum of a first return and a last return

Raw, unfiltered point-cloud LiDAR data (including intensity value) is being orthorectified and processed with an expected delivered to NCDC in December 2008. All products will be delivered on DVD media to both parties in shapefile or ERDAS .img format in NAD83 & NAD27, State Plane Coordinate System, WI South. All geospatial data will be accompanied by metadata approved by the Federal Geographic Data Committee (FGDC). Included with this delivery will be the following files:

- LiDAR-derived GIS-ready polygon shapefile of buildings including height, roof angle (flat, pitched or multi-variant) and area (sq.ft.) in the associated attribute table
- LiDAR-derived GIS-ready bare earth digital elevation model (DEM)
- LiDAR-derived GIS-ready digital surface model (DSM)
- LiDAR-derived GIS-ready contours
- LiDAR-derived GIS-ready point & polygon shapefile databases of trees including height and x/y coordinate in the associated attribute table
- 1-meter resolution intensity image
- Raw, unfiltered point-cloud LiDAR data for each area
- Evaluation of cost to complete & deliver identical tasks/products for the entire city of Milwaukee

These products will undergo a quality control / quality assurance (QC/QA) procedure in order to thoroughly evaluate accuracy and cost for a larger scale LiDAR analysis. Accuracy and final resolution of certain products is TBD through this pilot project.

3. Compensation to NCDC Imaging

Milwaukee County shall pay NCDC Imaging for the items identified herein a sum total of \$3,900.00. This payment represents a 50% share of the total project costs of \$7,800. Payment by Milwaukee County includes all project management and delivery costs to be equally apportioned between Milwaukee County and the University of Wisconsin - Milwaukee. This same amount will be charged to University of Wisconsin - Milwaukee and approval of this project is contingent upon both parties separately agreeing to the terms identified in each contributor's individual and comparable Scope of Work document.

SCOPE OF WORK

4. Ownership

Data delivered through this pilot project will be not be licensed. It can be shared with the partners above or other entities and made publicly available if desired.

5. Method of Compensation and related Correspondence

The proposed 30-day net payment terms are:

- \$3,900.00 invoiced upon delivery of products listed herein

Correspondence and payment should be directed to:

Firm Name: Native Communities Development Corporation
Firm Contact Name: Charlotte Love
Firm Contact Title: Accountant
Address: 1235 Lake Plaza Drive, Suite 221, Colorado Springs, CO 80906
Phone No.: (719) 579-9276 Fax No. (719) 632-5614
E-Mail: clove@ncdcimaging.com

6. Time of Delivery

With execution of a contract expected in mid-January 2009, the proposed time of delivery is approximately 30-45 days for all datasets listed above. Incremental deliveries are available upon request as work is completed. The first products available will be the raw LiDAR point-cloud, trees and DSM.

Acceptance and Purchase Authority:

The undersigned, duly authorized representative accepts this Scope of Work and authorizes NCDC to provide the products and services defined herein. By signing below, the authorized representative accepts this document in its entirety including the General Conditions without modification.

Date _____

Name _____

Title _____

Signature _____

Purchase Order # or Reference _____



February 18, 2009

Environmental
Services Analysis

William Shaw
MCAMLIS Project Manager
Milwaukee County Land Information Office
Milwaukee County Department of Transportation and Public Works
City Campus - Room 426
2711 W Wells St.
Milwaukee, WI. 53208
414.278.2176 phone
email: bill.shaw@milwcnty.com

Green Infrastructure
Planning

Water Conservation

Dear Bill,

Air Quality
Monitoring

We are pleased to inform you that an interim delivery has been prepared for the Milwaukee LiDAR Pilot Project. A list of deliverables contained on the enclosed DVD is provided below. The files included here should be considered complete and final. *Note that we have included two products for your review that were not part of the Scope of Work at no additional charge.*

Risk Assessment

Files in this delivery are projected to NAD27 State Plane Coordinate System, WI South and include:

Urban Forest
Management

- Tree Points – point GIS shapefile of trees including the following attributes; height, height source, stem diameter, x/y coordinate and tree crown area.

Stormwater
Modeling & Design

- Tree Canopy – polygon GIS shapefile of tree canopy which including the following attribute: area in square feet.
- LiDAR-derived GIS-ready digital surface model (DSM)

Watershed
Management

- Raw unfiltered point-cloud LiDAR data in .las format for 2 of the 3 areas of interest (see note below for .las data for the SW AOI)

Additional Products

Utility Vegetation
Management

- Grass – polygon GIS shapefile of all low-lying vegetation (excludes tree canopy)
- 1-meter resolution, 4-band ortho-imagery derived from hyperspectral



aerial data for the three areas of interest

Additional information on these GIS data products can be found in each file's FGDC-compliant metadata. We are currently working on clean-up of the bare earth return digital elevation model (DEM) and producing associated contours, a software issue related to clipping .las data to the SW pilot project boundary, producing an accurate buildings layer, and creation of LiDAR intensity images. We will be sending data to you incrementally or in its finished state. Note that the products delivered here are in NAD27, State Plane Coordinate System and if necessary can also be delivered in NAD83.

Thank you again from the team at NCDC Imaging & Mapping. If you have any questions please do not hesitate to contact us at anytime. We look forward to a successful completion of this pilot project and hope you find these deliverables satisfactory.

Sincerely,

Ian S. Hanou
Vice President, Business Development
(719) 579-9276
ihanou@ncdcimaging.com

LiDAR - Planimetric Comparison: Building Footprints

LiDAR intensity image (30% transparent)
over 2005 orthophotography

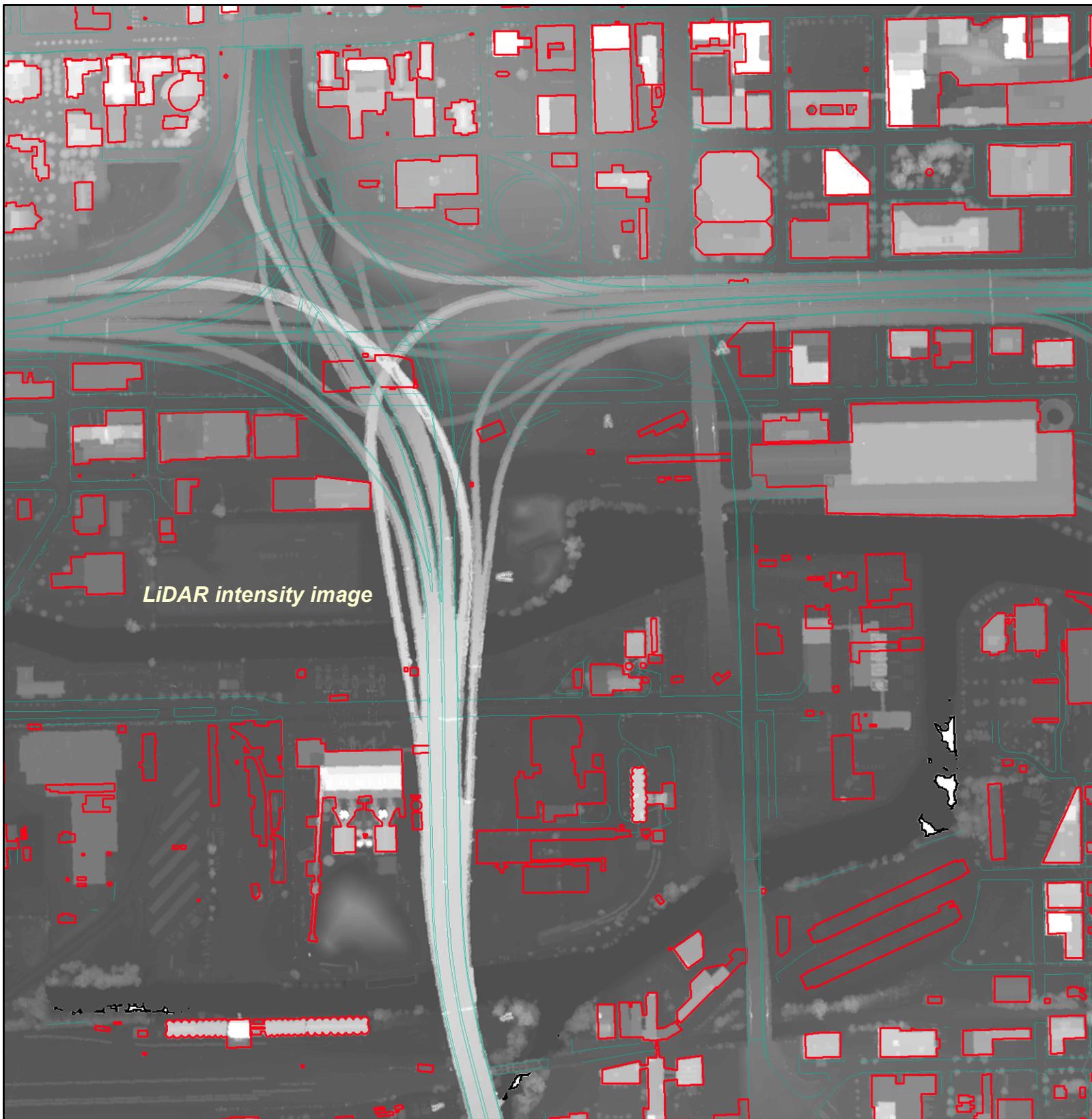


 MCAMLIS topo2005 Buildings

 Feet
0 100 200 400

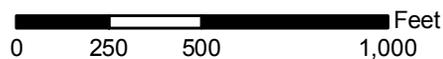


LiDAR for Identifying Features Excluded from 2005 Topo/Planimetric Data: Marquette Interchange Area

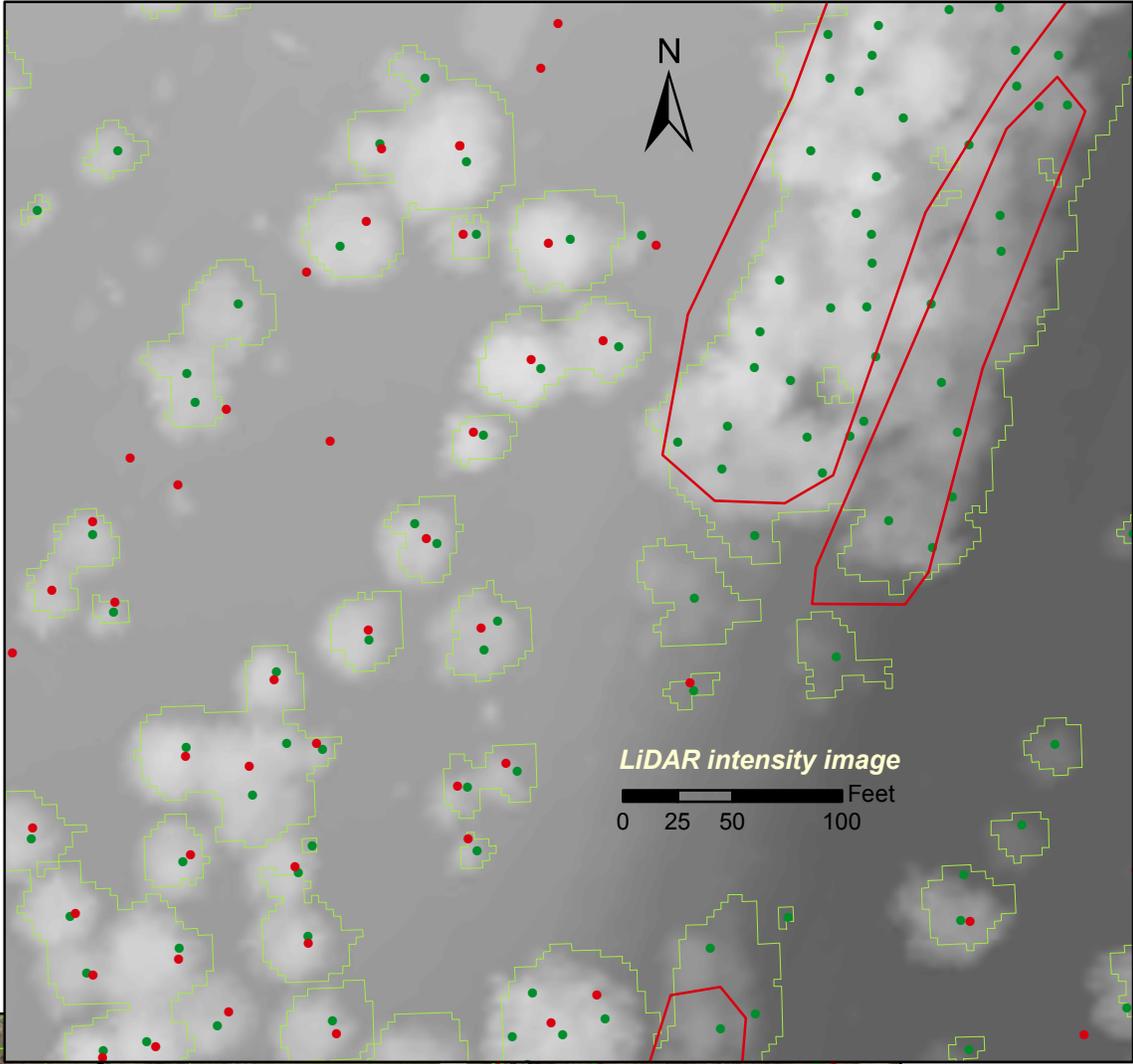


LiDAR intensity image

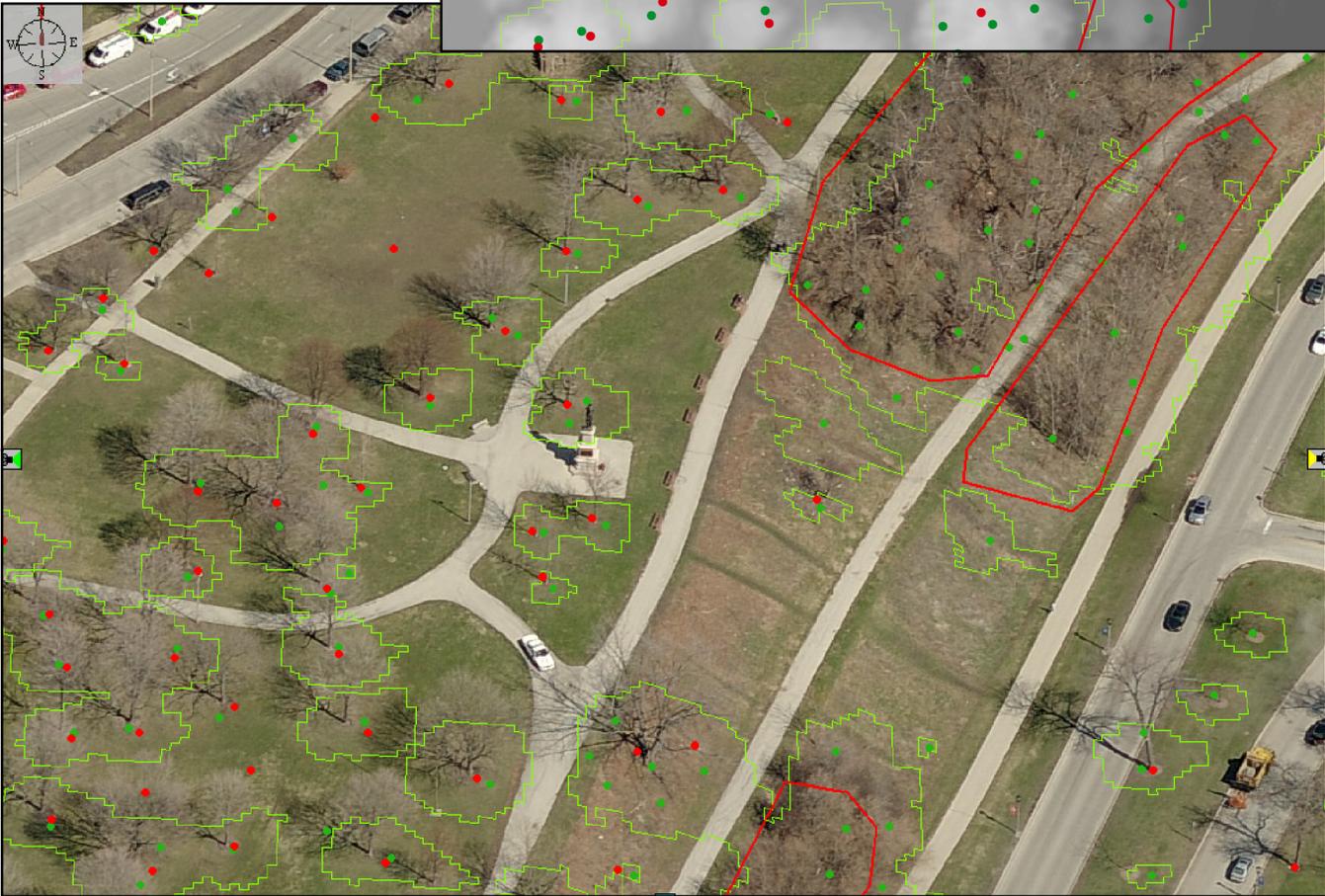
-  pre-2005 MCAMLIS Planimetric (Structures)
-  pre-2005 MCAMLIS Planimetric (Transportation)



LiDAR - Topographic Comparison: Trees



- MCAMLIS topo2005 tree point
- MCAMLIS topo2005 tree line
- LiDAR tree point
- LiDAR tree canopy



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



MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: SEWRPC Staff

DATE: March 16, 2008

SUBJECT: STATUS REPORT NO. 13 ON REGIONAL WATER SUPPLY PLAN

This memorandum sets forth the progress made on the regional water supply planning program from November 15, 2008, the date of the last report to the Steering Committee, through March 16, 2009. The preparation of the regional water supply plan represents the third, and final, element of the SEWRPC regional water supply planning program. The first two elements, comprising the development of basic groundwater inventories and the development of a groundwater simulation model for the Southeastern Wisconsin Region, were completed over the past several years. These first two elements involved interagency partnership programs with the U.S. Geological Survey, the Wisconsin Geological and Natural History Survey, the University of Wisconsin-Milwaukee, the Wisconsin Department of Natural Resources, and many of the water supply utilities serving the Region. The third, and final, step in the planning program, the preparation of the water supply plan, was initiated in 2005. In addition, the 2035 regional land use plan has been completed. That land use plan was separately funded and serves as the basis for the development of the regional water supply plan.

Progress on the water supply plan during the reporting period has been focused on the continuation and documentation of special groundwater analyses, the selection of a preliminary recommended plan to be considered further through public outreach activities, and carrying out the public outreach activities.

Progress on the water supply plan is summarized in the attached Exhibit 1 and in the following paragraphs.

STUDY ORGANIZATION

As previously reported, a cooperative staffing arrangement is being used, involving the Southeastern Wisconsin Regional Planning Commission (SEWRPC) staff, consulting engineering and legal firms, and the groundwater technical staffs of the Wisconsin Geological and Natural History Survey (WGNHS), the U.S. Geological Survey (USGS), and the University of Wisconsin-Milwaukee. The contractual arrangements were previously completed through agreements with groundwater technical staffs of the State and Federal agencies concerned, with a consulting engineering firm for carrying out portions of the work, and with a legal firm for a review of water supply laws. During this reporting period, the administrative direction and internal project management of the planning program was continued.

ADVISORY COMMITTEE

On September 23, 2008, the Committee approved chapter IX of the planning report which sets forth the comparative evaluation of the alternative plan and describes a composite plan which has been developed as the preliminary recommended plan.

PLAN REPORT PREPARATION

Nine of the 12 chapters of the planning report have now been finalized. Work has been initiated on the 10th chapter which will set forth the comments received at the public informational meetings and hearings held on the preliminary recommended plan; the response to those comments; and a final recommended plan. SEWRPC Technical Report No. 43, *State-of-the-Art of Water Supply Practices*, SEWRPC Technical Report No. 44, *Water Supply Law*, and SEWRPC Technical Report No. 47, *Groundwater Recharge in Southeastern Wisconsin Estimated By a GIS-Based Water-Balance Model* have been completed and published.

GROUNDWATER MODELING ACTIVITIES

Work was continued on a technical report which is intended to provide information on groundwater sustainability in areas served by individual private wells.

PUBLIC OUTREACH ACTIVITIES

During the reporting period, the following public outreach activities were carried out:

- Eight presentations to local elected officials from throughout the seven-county Region;
- Five presentations to interested professional and environmental groups and organizations from within the Region;
- Publication and distribution to about 2,000 persons of the third newsletter on the plan and summarizing the preliminary recommended water supply plan. The newsletter included notice of the public informational meetings. The newsletter mailing included the chief elected officials and clerks of the 147 cities, villages, and towns within the Region, as well as all board members; and
- Publication of paid newspaper ads announcing the public informational meetings in the CSI Community Shoppers (Walworth County), Daily News (West Bend), El Conquistador (Milwaukee area), Freeman (Waukesha), Fronteras de la Noticia (Kenosha area), Insider News (Racine area), Journal Times (Racine), Kenosha News, Milwaukee Journal Sentinel, Milwaukee Times, and News Graphic (Ozaukee County) Oconomowoc Enterprise; and Weekend Freeman Lake Country (Waukesha County).
- Nine public information meetings on the preliminary recommended plan within the Region:
 - January 12, 2009, HeartLove Place at in the City of Milwaukee in Milwaukee County;
 - January 13, 2009, at the United Community Center in the City of Milwaukee in Milwaukee County;

- January 14, 2009, at the Wauwatosa Public Library in the City of Wauwatosa in Milwaukee County;
- January 20, 2009, at the Rotary Building in Frame Park in the City of Waukesha in Waukesha County;
- January 21, 2009, at the Washington County Fair Park Pavilion in the Town of Polk in Washington County;
- January 22, 2009, at the Government Center in the City of Elkhorn in Walworth County;
- January 26, 2009, at the Ozaukee County Administration Center in the City of Port Washington in Ozaukee County;
- January 27, 2009, at the Kenosha County Office Building in the Town of Bristol in Kenosha County; and
- February 2, 2009, at the Ives Groves Office Complex in the Village of Sturtevant in Racine County.
- In addition, on March 7, 2009, two sessions of the Water-Wise conference held in Waukesha were utilized to present the preliminary plan and receive comments.

The purpose of these informational meetings was to: 1) provide a briefing on the preliminary recommended water supply plan; 2) answer and questions that interested citizens and local public officials may have had on the plan; and 3) solicit constructive comments and criticisms on the preliminary recommended plan. Each meeting consisted of an open house from 5:00 to 6:00 p.m. at which the public had the opportunity to meet with the SEWRPC staff to receive information, ask questions, and provide comment. Each open house was followed by a SEWRPC staff presentation summarizing the planning process and describing the recommended plan from 6:00 to 6:30 p.m. SEWRPC staff were available throughout the meeting to receive written comments, including via personal dictation to a court reporter. The meetings were scheduled to end by 7:00 p.m.

OTHER ACTIVITIES

The Commission water supply planning website has been maintained. The Advisory Committee meeting minutes and report chapters are being placed on that site. The site also includes related presentations, reports, and other pertinent information.

* * *

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



MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: SEWRPC Staff

DATE: March 13, 2009

SUBJECT: THIRD COMBINED STATUS REPORT ON PHASES I AND II OF THE MILWAUKEE COUNTY FLOODLAND MAPPING PROJECT

This memorandum sets forth the progress made on Phases I and II of the Milwaukee County Floodland Mapping project from November 11, 2008, through March 13, 2009. Phase I includes all streams that are to be studied in the County, with the exception of those in the Root River watershed. Phase II includes the Lake Michigan shoreline and streams that are to be studied in the County in the Root River watershed except for Legend Creek, which was studied under Phase I. In Status Report No. 17, dated December 1, 2007, it was proposed to consolidate the schedules for Phases I and II of the overall project. This is the third consolidated status report. It addresses project progress in the following three major areas:

- Data Acquisition
- Hydrologic and Hydraulic Modeling
- Floodland Map Preparation

Overall, the Phase I portion of the project is about 90 percent complete, and the Phase II portion is about 10 percent complete. Progress is summarized in the attached Exhibit 1 and is graphically summarized on the map attached hereto as Exhibit 2.

DATA ACQUISITION

During the period of November 11, 2008, through March 13, 2009, the following data acquisition activities were carried out:

- As indicated by Exhibit 1, data acquisition activities are substantially completed on Phase I.
- Engineering drawings for a bank stabilization project for S. 43rd Street Ditch were obtained from the engineer for the Village of West Milwaukee.
- The Commission staff made a field reconnaissance along Honey Creek.
- Photographs of June 2008 flooding conditions along Honey Creek were obtained from the MMSD.
- For Phase II, when additional data needs are identified as work proceeds, the acquisition of the data will be coordinated with the Milwaukee Metropolitan Sewerage District (MMSD), the

Wisconsin Department of Natural Resources (WDNR), the Wisconsin Department of Transportation (WisDOT), and the pertinent communities.

HYDROLOGIC AND HYDRAULIC MODELING

During the reporting period, progress on hydrologic and hydraulic modeling included the following:

Kinnickinnic River Watershed

- During the March 12, 2008, through September 17, 2008, reporting period, the SEWRPC staff completed review and revision of the U.S. Environmental Protection Agency (USEPA) HSPF continuous simulation hydrologic model developed for the Kinnickinnic River watershed under Phases 1 and 2 of the MMSD watercourse system management plan and revised under the SEWRPC Regional Water Quality Management Plan Update/MMSD 2020 Facilities Planning Program. The review and revision were for the purpose of verifying the model calibration and validation according to WDNR and Federal Emergency Management Agency criteria, so that flood flows developed with the model can be used in the MCAMLIS/MMSD/SEWRPC floodplain mapping program.
- Completed the hydraulic model for Lyons Park Creek.
- Began work on refining the hydrologic and hydraulic models for S. 43rd Street Ditch.

Menomonee River Watershed

- Began work on the hydraulic model for Honey Creek.
- Worked on refining the hydraulic model for the Little Menomonee River.

FLOODLAND MAP PREPARATION

Kinnickinnic River Watershed

- Delineated the 100-year floodplain and floodway boundaries along Lyons Park Creek.

PROPOSED SCHEDULE FOR COMPLETION OF PROJECT

The Commission staff recently published the regional water quality management plan update for the greater Milwaukee watersheds. The hydrologic models developed for the Menomonee, Kinnickinnic, and Root River watersheds under that planning effort form the basis for the models used in this floodplain mapping project. As described in Status Report No. 14 on Phase I of the Milwaukee County Floodland Mapping Project, dated June 30, 2006, preparation of the regional water quality plan update required significant reallocation of SEWRPC Environmental Planning Division engineering staff from other projects to the water quality plan. With the completion of that plan, those staff members now are able to devote significantly more time to the MCAMLIS/MMSD/SEWRPC floodland mapping project.

The maximum possible level of SEWRPC staff resources is now committed to this project, with three engineers devoting substantial time to this project on a continuing basis. The Phase I portion of the project is scheduled to be completed by December 31, 2009. Phase II is to be completed in 2010.

* * *

Exhibit 1

STATUS OF MCAMLIS MILWAUKEE COUNTY FLOODLAND MAPPING PROJECT: MARCH 13, 2009

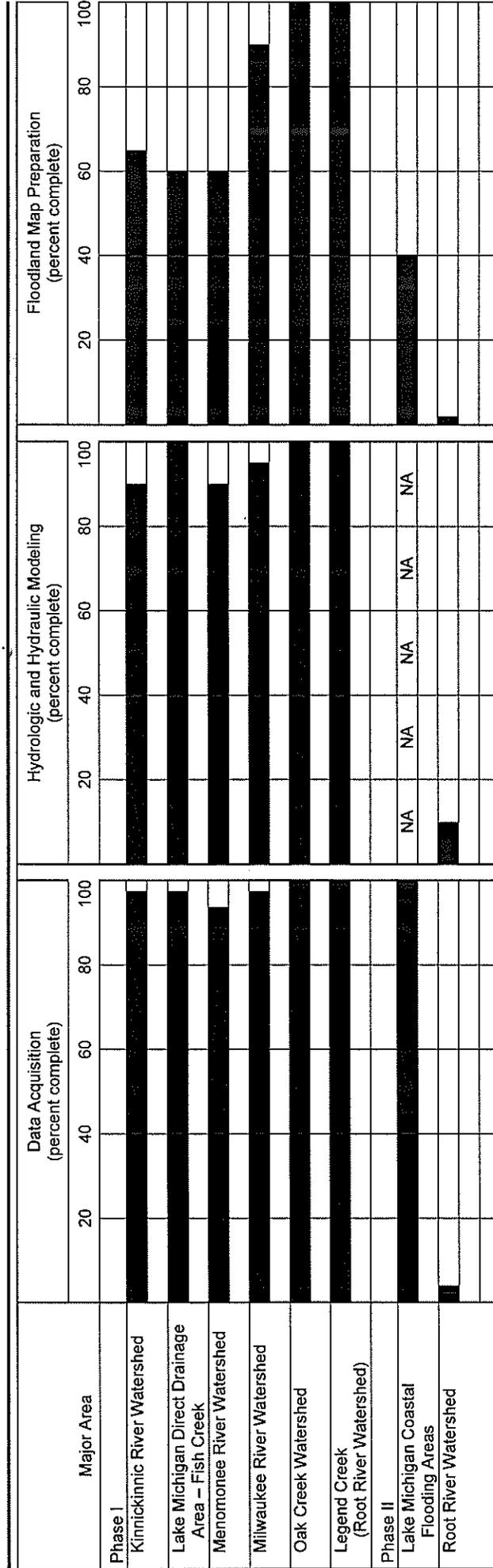
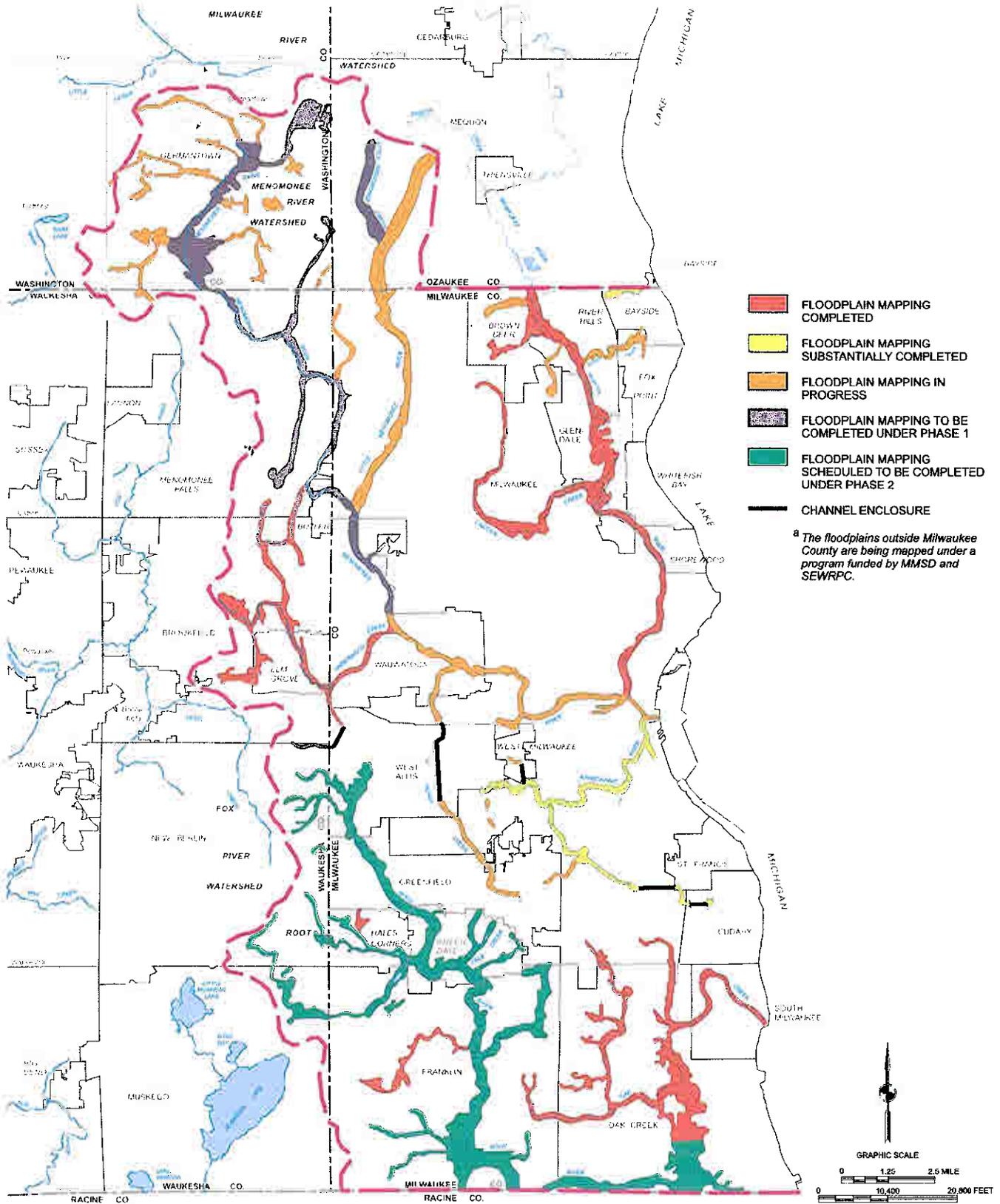


Exhibit 2

STATUS OF FLOODPLAIN MAPPING IN MILWAUKEE COUNTY AND IN MENOMONEE AND ROOT RIVER WATERSHEDS OUTSIDE MILWAUKEE COUNTY:^a MARCH 13, 2009



Source: SEWRPC.

Authorized \$1.00 Fee Projects

\$1.00 Fee Authorized Projects as of 12/31/08

Year Authorized	Project Description	Amount Authorized	Amount Paid 2002-2007	Amount Paid 2008 YTD	Amount Encumbered 2008	2008 Total Amount Paid (Encumbrances + Actual)	Total Amount Paid for Project (2002-2008)	Remaining Unpaid Balance
2002	Large Format Scanner	\$13,090.00	\$13,090.00	\$0.00	\$0.00	\$0.00	\$13,090.00	\$0.00
2003	Improvements to Computer System	\$240,000.00	\$240,000.00	\$0.00	\$0.00	\$0.00	\$240,000.00	\$0.00
2003	Electronic Recording	\$45,000.00	\$30,550.81	\$0.00	\$0.00	\$0.00	\$30,550.81	\$0.00
2003	External Hard Drive/Two SNAP Servers	\$40,000.00	\$40,000.00	\$0.00	\$0.00	\$0.00	\$40,000.00	\$0.00
2003/2005	Digital Images; Conversion of Microfiche*	\$400,000.00	\$400,000.00	\$0.00	\$0.00	\$0.00	\$400,000.00	\$0.00
2005	Scanning A Card	\$50,000.00	\$26,514.55	\$23,485.45	\$0.00	\$23,485.45	\$50,000.00	\$0.00
2005	Improvements to Computer System II**	\$450,000.00	\$450,000.00	\$0.00	\$0.00	\$0.00	\$450,000.00	\$0.00
2007	Improvements to Computer System III	\$150,000.00	\$23,945.58	\$126,054.42	\$0.00	\$126,054.42	\$150,000.00	\$0.00
2008	Improvements to Computer System IV	\$150,000.00	\$0.00	\$73,358.25	\$0.00	\$73,358.25	\$73,358.25	\$76,641.75
Total		\$1,538,090.00	\$1,224,100.94	\$222,898.12	\$0.00	\$222,898.12	\$1,446,999.06	\$76,641.75

Data from John La Fave, Register of Deeds as of 03/17/09

Notes

* The conversion of microfiche project had an original authorization of \$200,000. The current project authorization is \$400,000 due to the Steering Committee approving three requests (at meetings held on 11/1/05, 8/22/06 and 3/6/07) that increased and then decreased expenditure authority for this project.

** The 2005 authorization for the improvements to the computer system was \$150,000. At the August 2006 and again at the March 2007 meeting, the Steering Committee approved a total \$300,000 increase in expenditure authority for this project.

\$4 Fee Summary

2008 Outstanding Commitments as of 12/31/2008

Organization 1923-Automated Land Information System
\$4.00 Fee

Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	2008 Amount Encumbered	Amount Paid 2008 YTD	Total Amount Paid 2008 (Encumbrances + Actual)	Remaining Unpaid Balance
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 1	\$ 206,000.00	\$ 197,353.00	\$ 8,647.00	\$ -	\$ 8,647.00	\$ -
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 2	\$ 436,000.00	\$ -	\$ 412,000.00	\$ 24,000.00	\$ 436,000.00	\$ -
SOUTHEASTERN WI REGIONAL	County Surveyor (per year*)	\$ 77,175.00	\$ -	\$ -	\$ 77,175.00	\$ 77,175.00	\$ -
SOUTHEASTERN WI REGIONAL	Topographic Mapping Project**	\$ 3,264,304.00	\$ 3,212,785.00	\$ 51,519.00	\$ -	\$ 51,519.00	\$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance (per year*)	\$ 76,977.00	\$ -	\$ 19,244.00	\$ 57,733.00	\$ 76,977.00	\$ -
MILWAUKEE COUNTY	Enterprise Address System	\$ 207,000.00	\$ 77,054.00	\$ 11,786.58	\$ 118,159.42	\$ 129,946.00	\$ -
MILWAUKEE COUNTY	North Shore Fire Department	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -
Quarles & Brady	Copyright Review**	\$ 10,000.00	\$ -	\$ -	\$ 4,542.50	\$ 4,542.50	\$ 5,457.50
Pictometry	Oblique Imagery Technology	\$ 98,390.00	\$ -	\$ 45,818.45	\$ 52,571.55	\$ 98,390.00	\$ -
Latitude	Server Design	\$ 35,000.00	\$ -	\$ 26,447.10	\$ 8,552.90	\$ 35,000.00	\$ -
LiDar Project		\$ 10,000.00	\$ -	\$ -	\$ -	\$ -	\$ 10,000.00
	TOTAL	\$ 4,430,846.00	\$ 3,487,192.00	\$ 585,462.13	\$ 342,734.37	\$ 928,196.50	\$ 15,457.50

Data from Milwaukee County Advantage System and Gary Drent, A&E as of March 17, 2009

Notes

*Per Year authorizations are reauthorized each year therefore they do not include prior year expenditures or authorizations.

** On September 30, 2008 the MCAMLIS Steering Committee authorized two additional expenditure authorities for existing projects: \$7,500 for the Copyright Review project and \$11,594 for the Topographical Mapping Project.

Summary MCAMLIS
3/27/2009

MCAMLIS Financial Report	AS OF 12/31/08	TOTALS
12/31/07 Balance (Balance Sheet)*	\$ 1,395,572.97	\$ 1,395,572.97
2008 Revenue Activity**		
2008 YTD Activity \$1.00	\$141,383.00	
2008 YTD Activity \$4.00	\$564,332.00	
Other Revenue \$	26,146.00	
Total Revenue 2008		\$731,861.00
2008 Expenditure Activity including Encumbrances		
Personnel Services	\$0.00	
Services	\$1,128,518.77	
Commodities	\$1,102.00	
Capital Outlay	\$13,358.00	
Crosscharges	\$333,313.58	
Total Expenditure 2008		(\$1,476,292.35)
BALANCE AS OF 12-31-08		\$ 651,141.62
Remaining Projected Revenues for 2008**	\$0.00	
Remaining Projected Expenditures for 2008***	\$0.00	
2008 End of Year Balance		\$0.00
Remaining Balance as of 12/31/08		\$ 651,141.62

Remaining Unrestricted Balances Based on 12-31-07 Close

12/31/07 Balance (Balance Sheet)*	\$ 1,395,572.97
Remaining Unrestricted Balance \$1.00 Fee	\$ 296,978.82
Remaining Unrestricted Balance \$4.00 Fee	\$ 1,098,594.15

Outstanding Authorized Commitments (Non-Encumbered) 2008-Onward

\$4.00 Fee

2008 YTD Project Expenditures for \$4 Fee (Encumbrances + Actual)	\$ (928,196.50)
Additional Authorized Expenditures	\$ -
2008 YTD Non-Project Related Expenditures (\$4 Fee)	\$ (335,273.54)
2008 \$4 Fee Remaining Projected Expenditures***	\$ -
Remaining Unrestricted Balance \$4.00 Fee	\$ 1,098,594.15
2008 YTD Revenue for \$4 Fee	\$ 590,478.00
2008 \$4 Fee Remaining Projected Revenues**	\$ -
Remaining Unrestricted Balance \$4.00 Fee	\$ 425,602.11
Remaining Restricted Balance \$4.00 Fee	\$ 425,602.11

\$1.00 Fee

2008 YTD Project Expenditures for \$1 Fee (Encumbrances + Actual)	\$ (222,898.12)
Additional Authorized Expenditures	\$ -
2008 YTD Non-Project Related Expenditures (\$1 Fee)	\$ (12,500.04)
2008 \$1 Fee Remaining Projected Expenditures***	\$ -
Remaining Unrestricted Balance \$1.00 Fee	\$ 296,978.82
2008 YTD Revenue for \$1 Fee	\$ 141,383.00
2008 \$1 Fee Remaining Projected Revenues**	\$ -
Remaining Unrestricted Balance \$1.00 Fee	\$ 202,963.66
Remaining Restricted Balance \$1.00 Fee	\$ 202,963.66

The \$1 Fee Revenue can be used for purposes of providing internet access to land records maintained by the Register of Deeds . Any amount not expended in this manner cannot be used for other MCAMLIS tasks.

* Balance includes both \$1.00 and \$4.00 fee revenue; Based on data provided by John La Fave and the 2007 ending operating balance, the balance sheet account was divided between the two funds.

*** Projected expenditures for 2008 are anticipated to be the budgeted amount for all accounts except 6148 and 6637 - which is covered in the additional authorized expenditure line. This is divided between the \$1 and \$4 fee based on the budgeted amounts.

Note: The amount of the reserve fund balance, as determined by the committee, is set at ten percent of current budgeted revenues. This equals \$99,000 in 2008, of which \$79,200 is for the \$4 fee and \$19,800 is for the \$1 fee.

3/27/2009

2008 Fiscal Report as of 03/17/09 - MCAMLIS					
Rev / Exp	Revenue / Expense Name	Budget Amount	Actual Amount	Encumbrance	Net Amount
3237	RETAINED FEES -- \$4.00 PORTION	\$ 792,000.00	\$ 564,332.00	\$ -	\$ (227,668.00)
3238	RETAINED FEES -- \$1.00 PORTION	\$ 198,000.00	\$ 141,383.00	\$ -	\$ (56,617.00)
RECORD & FILING FEES		\$ 990,000.00	\$ 705,715.00	\$ -	\$ (284,285.00)
4999	OTHER MISC REVENUE	\$ 5,000.00	\$ 26,146.00	\$ -	\$ 21,146.00
OTHER REVENUE		\$ 5,000.00	\$ 26,146.00	\$ -	\$ 21,146.00
Total Revenues		\$ 995,000.00	\$ 731,861.00	\$ -	\$ (263,139.00)
5001	DIRECT LABOR CHARGED	\$ -	\$ -	\$ -	\$ -
PERSONAL SERVICES		\$ -	\$ -	\$ -	\$ -
6080	POSTAGE	\$ 500.00	\$ 330.07	\$ -	\$ 169.93
6147	PROF. SERV.-DATA PROCESS	\$ 45,000.00	\$ -	\$ -	\$ 45,000.00
6148	PROF. SERV-RECURRING OPER	\$ 1,406,066.00	\$ 575,864.61	\$ 545,303.00	\$ 284,898.39
6637	R/M COMPUTER EQUIP	\$ 63,481.00	\$ 2,154.14	\$ -	\$ 61,326.86
6812	MEETINGS OTHER AUTH TRAVL	\$ 6,000.00	\$ 4,739.37	\$ -	\$ 1,260.63
6999	SUNDRY SERVICES	\$ -	\$ 127.58	\$ -	\$ (127.58)
SERVICES		\$ 1,521,047.00	\$ 583,215.77	\$ 545,303.00	\$ 392,528.23
7915	COMPUTER SOFTWARE	\$ 5,000.00	\$ -	\$ 1,102.00	\$ 3,898.00
COMMODITIES		\$ 5,000.00	\$ -	\$ 1,102.00	\$ 3,898.00
8558	COMPUTER EQUIPMENT-REPL>\$500	\$ 24,000.00	\$ 13,358.00	\$ -	\$ 10,642.00
CAPITAL OUTLAYS		\$ 24,000.00	\$ 13,358.00	\$ -	\$ 10,642.00
9706	PRO SERV DIV SERVICES	\$ 318,685.00	\$ 308,313.50	\$ -	\$ 10,371.50
9742	DAS SERVICES	\$ 25,000.00	\$ 25,000.08	\$ -	\$ (0.08)
CROSSCHARGES		\$ 343,685.00	\$ 333,313.58	\$ -	\$ 10,371.42
Total Expenses		\$ 1,893,732.00	\$ 929,887.35	\$ 546,405.00	\$ 417,439.65
Grand Totals		\$ (898,732.00)	\$ (198,026.35)	\$ (546,405.00)	\$ 154,300.65

\$4 Fee Summary

2009 Outstanding Commitments as of 3/16/2009

Organization 1923-Automated Land Information System
\$4.00 Fee

Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	2009 Amount Encumbered	Amount Paid 2009 YTD	Total Amount Paid 2009 (Encumbrances + Actual)	Remaining Unpaid Balance
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 1	\$ 206,000.00	\$ 197,353.00	\$ 8,647.00	\$ -	\$ 8,647.00	\$ -
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 2	\$ 436,000.00	\$ 24,000.00	\$ 412,000.00	\$ -	\$ 412,000.00	\$ -
SOUTHEASTERN WI REGIONAL	County Surveyor (per year*)	\$ 77,175.00	\$ -	\$ -	\$ 77,175.00	\$ 77,175.00	\$ -
SOUTHEASTERN WI REGIONAL	Topographic Mapping Project**	\$ 3,264,304.00	\$ 3,212,785.00	\$ 51,519.00	\$ -	\$ 51,519.00	\$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance (per year*)	\$ 83,652.00	\$ -	\$ 83,652.00	\$ -	\$ 83,652.00	\$ -
MILWAUKEE COUNTY	Enterprise Address System	\$ 207,000.00	\$ 148,667.30	\$ 27,985.53	\$ 30,347.17	\$ 58,332.70	\$ -
MILWAUKEE COUNTY	North Shore Fire Department	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -
Quarles & Brady	Copyright Review**	\$ 10,000.00	\$ -	\$ -	\$ 4,542.50	\$ 4,542.50	\$ 5,457.50
Pictometry	Oblique Imagery Technology	\$ 98,590.00	\$ 52,458.00	\$ 13,862.77	\$ 32,269.23	\$ 46,132.00	\$ -
Latitude	Server Design	\$ 35,000.00	\$ 35,000.00			\$ -	\$ -
LiDar Project		\$ 10,000.00	\$ -	\$ 3,900.00	\$ -	\$ 3,900.00	\$ 6,100.00
	TOTAL	\$ 4,437,721.00	\$ 3,670,263.30	\$ 611,566.30	\$ 144,333.90	\$ 755,900.20	\$ 11,557.50

Data from Milwaukee County Advantage System and Gary Drent, A&E as of March 16, 2009

Notes

*Per Year authorizations are reauthorized each year therefore they do not include prior year expenditures or authorizations.

** On September 30, 2008 the MCAMLIS Steering Committee authorized two additional expenditure authorities for existing projects: \$7,500 for the Copyright Review project and \$11,594 for the Topographical Mapping Project.

Summary MCAMLIS
3/27/2009

MCAMLIS Financial Report	AS OF 3/17/09	TOTALS
12/31/08 Balance (Balance Sheet)*	\$ 949,873.97	\$ 949,873.97
2009 Revenue Activity (YTD)**		
2009 YTD Activity \$1.00	\$27,205.00	
2009 YTD Activity \$4.00	\$106,780.00	
Other Revenue \$	355.00	
Total Revenue YTD 2009		\$134,340.00
2009 Expenditure Activity (YTD) including Encumbrances		
Personnel Services	\$0.00	
Services	\$808,326.68	
Commodities	\$1,101.50	
Capital Outlay	\$19,480.00	
Crosscharges	\$6,250.02	
Total Expenditure YTD 2009		(\$835,158.20)
BALANCE AS OF 3-18-09		\$ 249,055.77
Remaining Projected Revenues for 2009**	\$690,660.00	
Remaining Projected Expenditures for 2009***	(\$590,246.80)	
2009 Projected Balance		\$100,413.20
Remaining Balance as of 3/18/09 (Based on Budget/Projections)		\$ 349,468.97

Remaining Unrestricted Balances Based on 12-31-08 Close

12/31/08 Balance (Balance Sheet)*	\$ 949,873.97
Remaining Unrestricted Balance \$1.00 Fee	\$ 240,361.97
Remaining Unrestricted Balance \$4.00 Fee	\$ 709,511.68

Outstanding Authorized Commitments (Non-Encumbered) 2009-Onward

\$4.00 Fee

2009 YTD Project Expenditures for \$4 Fee (Encumbrances + Actual)	\$ (755,900.20)
Additional Authorized Expenditures	\$ (11,557.50)
2009 \$4 Fee Remaining Projected Expenditures***	\$ (317,650.00)
Remaining Unrestricted Balance \$4.00 Fee	\$ 709,511.68
2009 YTD Revenue for \$4 Fee	\$ 106,780.00
2009 \$4 Fee Remaining Projected Revenues**	\$ 553,220.00
Reserve Revenue, not to be expended	\$ (70,000.00)
Remaining Unrestricted Balance \$4.00 Fee	\$ 214,403.98
Remaining Restricted Balance \$4.00 Fee	\$ 225,961.48

\$1.00 Fee

2009 YTD Project Expenditures for \$1 Fee (Encumbrances + Actual)	\$ (72,385.20)
Additional Authorized Expenditures	\$ (4,256.55)
2009 \$1 Fee Remaining Projected Expenditures***	\$ (12,500.00)
Remaining Unrestricted Balance \$1.00 Fee	\$ 240,361.97
2009 YTD Revenue for \$1 Fee	\$ 27,205.00
2009 \$1 Fee Remaining Projected Revenues**	\$ 137,795.00
Reserve Revenue, not to be expended	\$ (17,500.00)
Remaining Unrestricted Balance \$1.00 Fee	\$ 298,720.22
Remaining Restricted Balance \$1.00 Fee	\$ 302,976.77

Note: The \$1 Fee Revenue can be used for no other purpose than Register of Deeds projects. Any amount not expended in this manner cannot be used for other MCAMLIS tasks.

* Balance includes both \$1.00 and \$4.00 fee revenue; Based on data provided by John La Fave and the 2007 ending operating balance, the balance sheet account was divided between the two funds.

** Total revenues for 2009 are anticipated to be \$165,000 for the \$1 fee and \$660,000 for the \$4 fee plus \$4,000 in misc. revenue. This is \$50,000 less than total budgeted revenues. This is based on John La Fave's estimate that there will be approximately 165,000 documents recorded in 2009.

*** Projected expenditures for 2008 are anticipated to be the budgeted amount for all accounts except for the 6000 accounts - which are covered in the additional authorized expenditure line. This is divided between the \$1 and \$4 fee based on the budgeted amounts.

Note: The amount of the reserve fund balance, as determined by the committee, is set at ten percent of current budgeted revenues. This equals \$87,500 in 2008, of which \$70,000 is for the \$4 fee and \$17,500 is for the \$1 fee.

3/27/2009

2009 Fiscal Report as of 3/17/09 - MCAMLIS					
Rev / Exp	Revenue / Expense Name	Budget Amount	Actual Amount	Encumbrance	Net Amount
3237	RETAINED FEES -- \$4.00 PORTION	\$ 700,000.00	\$ 106,780.00	\$ -	\$ (593,220.00)
3238	RETAINED FEES -- \$1.00 PORTION	\$ 175,000.00	\$ 27,205.00	\$ -	\$ (147,795.00)
RECORD & FILING FEES		\$ 875,000.00	\$ 133,985.00	\$ -	\$ (741,015.00)
4999	OTHER MISC REVENUE	\$ 4,000.00	\$ 355.00	\$ -	\$ (3,645.00)
OTHER REVENUE		\$ 4,000.00	\$ 355.00	\$ -	\$ (3,645.00)
Total Revenues		\$ 879,000.00	\$ 134,340.00	\$ -	\$ (744,660.00)
5001	DIRECT LABOR CHARGED	\$ -	\$ -	\$ -	\$ -
PERSONAL SERVICES		\$ -	\$ -	\$ -	\$ -
6080	POSTAGE	\$ 500.00	\$ 45.35	\$ -	\$ 454.65
6147	PROF. SERV.-DATA PROCESS	\$ 35,000.00	\$ -	\$ -	\$ 35,000.00
6148	PROF. SERV-RECURRING OPER	\$ 1,041,605.00	\$ 107,077.70	\$ 684,760.63	\$ 249,766.67
6637	R/M COMPUTER EQUIP	\$ 12,150.00	\$ 12,500.00	\$ -	\$ (350.00)
6812	MEETINGS OTHER AUTH TRAVL	\$ 6,000.00	\$ -	\$ -	\$ 6,000.00
6999	SUNDRY SERVICES	\$ -	\$ -	\$ 3,943.00	\$ (3,943.00)
SERVICES		\$ 1,095,255.00	\$ 119,623.05	\$ 688,703.63	\$ 286,928.32
7915	COMPUTER SOFTWARE	\$ 6,102.00	\$ -	\$ 1,101.50	\$ 5,000.50
COMMODITIES		\$ 6,102.00	\$ -	\$ 1,101.50	\$ 5,000.50
8558	COMPUTER EQUIPMENT-REPL>\$500	\$ 19,480.00	\$ -	\$ 19,480.00	\$ -
CAPITAL OUTLAYS		\$ 19,480.00	\$ -	\$ 19,480.00	\$ -
9706	PRO SERV DIV SERVICES	\$ 279,568.00		\$ -	\$ 279,568.00
9742	DAS SERVICES	\$ 25,000.00	\$ 6,250.02	\$ -	\$ 18,749.98
CROSSCHARGES		\$ 304,568.00	\$ 6,250.02	\$ -	\$ 298,317.98
Total Expenses		\$ 1,425,405.00	\$ 125,873.07	\$ 709,285.13	\$ 590,246.80
Grand Totals		\$ (546,405.00)	\$ 8,466.93	\$ (709,285.13)	\$ (154,413.20)



**DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
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: March 13, 2009
SUBJECT: Enterprise Address System Project – Funding Request

BACKGROUND

The Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee approved a project to provide for the development of a Countywide "Enterprise Address System" (EAS).

It was determined that a need for an EAS was a result of the many County and Regional services that rely on high quality address information to effectively provide critical services.

To meet this need, the EAS project is designed to provide a comprehensive approach to the management of all Milwaukee County Address information.

The EAS Project focus is on the establishment of data, technology and organizational components required to serve all Milwaukee County units of government as well as the many individual public service agencies that use address information in their day-to-day operations.

SUMMARY OF PROJECT OBJECTIVES AND STATUS OF COMPLETION

1. Migrate existing MCAMLIS digital street centerline database into EAS – **Complete**
2. Convert existing City of Milwaukee street centerline and address range data layers into EAS and implement processes and tools to automate the posting of City of Milwaukee street updates into the EAS - **Complete**
3. Convert existing site addresses maintained as part of the County parcel mapping system into EAS and update site addresses to reflect current conditions – **Partially Complete**
4. Create site addresses for the City of Milwaukee and incorporate into EAS – **Partially Complete**
5. Create web-based user application that allows County and municipal partner staff and the public to browse, query, and report on countywide street and address information in a spatial format - **Complete**
6. Create standard web services to assist in address verification/validation – **Partially Complete**

ESTIMATED COST

Original project estimate to complete the EAS project:	\$272,000
Amount requested and approved by the MCAMLIS Steering Committee	<u>\$207,000</u>
Remaining funds requested to be authorized as part of this request	\$ 65,000

RECOMMENDATION

Based upon staff assessment of the remaining work required to complete the EAS project; the following recommendation is made to the Steering Committee:

- It is recommended that the Steering Committee authorize an additional \$65,000 necessary to fully fund the remaining elements of the EAS project. This amount was included in the original EAS project estimate but was not requested by staff at the time of the request. This addition brings the total authorization for this project to \$272,000 and is required to satisfactorily complete the remaining elements of the EAS project.

Attach: Address Integration Memo to the MCAMLIS Steering Committee dated 6/29/2006

MILWAUKEE COUNTY FISCAL NOTE FORM

DATE: 3/23/09

Original Fiscal Note

Substitute Fiscal Note

SUBJECT: Request for additional authorization of funds for the Enterprise Address System Project

FISCAL EFFECT:

No Direct County Fiscal Impact

Existing Staff Time Required

Increase Operating Expenditures

(If checked, check one of two boxes below)

Absorbed Within Agency's Budget

Not Absorbed Within Agency's Budget

Decrease Operating Expenditures

Increase Operating Revenues

Decrease Operating Revenues

Indicate below the dollar change from budget for any submission that is projected to result in increased/decreased expenditures or revenues in the current year.

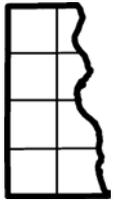
	Expenditure or Revenue Category	Current Year (2009)	Subsequent Year (2010)
Operating Budget	Expenditure	\$65,000	\$0
	Revenue	0	0
	Net Cost	\$65,000	\$0
Capital Improvement Budget	Expenditure		
	Revenue		
	Net Cost		

DESCRIPTION OF FISCAL EFFECT

In the space below, you must provide the following information. Attach additional pages if necessary.

- A. Briefly describe the nature of the action that is being requested or proposed, and the new or changed conditions that would occur if the request or proposal were adopted.
 - B. State the direct costs, savings or anticipated revenues associated with the requested or proposed action in the current budget year and how those were calculated. If annualized or subsequent year fiscal impacts are substantially different from current year impacts, then those shall be stated as well. In addition, cite any one-time costs associated with the action, the source of any new or additional revenues (e.g. State, Federal, user fee or private donation), the use of contingent funds, and/or the use of budgeted appropriations due to surpluses or change in purpose required to fund the requested action.
 - C. Discuss the budgetary impacts associated with the proposed action in the current year. A statement that sufficient funds are budgeted should be justified with information regarding the amount of budgeted appropriations in the relevant account and whether that amount is sufficient to offset the cost of the requested action. If relevant, discussion of budgetary impacts in subsequent years also shall be discussed. Subsequent year fiscal impacts shall be noted for the entire period in which the requested or proposed action would be implemented when it is reasonable to do so (i.e. a five-year lease agreement shall specify the costs/savings for each of the five years in question). Otherwise, impacts associated with the existing and subsequent budget years should be cited.
 - D. Describe any assumptions or interpretations that were utilized to provide the information on this form.
-
- A. The MCAMLIS Steering Committee has been presented with a proposal from the MCAMLIS Project Manager to increase the expenditure authorization by \$65,000 for the Enterprise Address System (EAS) Project. The total allocation for this project would then be \$272,000, including the \$207,000 already approved.
 - B. This addition would authorize \$65,000 of expenditure authority to fully fund the remaining elements of the EAS project, including converting existing site addresses maintained as part of the County parcel mapping system, creating site addresses for the City of Milwaukee and creating web-based user application.
 - C. Approval of these actions would result in the expenditure of \$65,000 from the \$4 fee account. These project costs are not included in the 2009 MCAMLIS Budget but the March 2009 fiscal report is projecting an unrestricted surplus of \$284,404 for the \$4 fee therefore sufficient funds will be available in 2009. A total of \$201,000 in additional funding is being requested at the March MCAMLIS Steering Committee. If all requests were approved, the remaining unrestricted surplus in the \$4 fee account would be \$83,404. Taking into account the \$70,000 \$4 fee reserve level set by the Steering Committee, the remaining funds would be \$13,404, assuming the projects are completed in 2009.
 - D. It is assumed that the project will be completed in 2009 and that 2009 revenue is achieved at the level projected by the Register of Deeds in the March 2009 report. No other assumptions are included.

Prepared By: Alexandra Kotze, Milwaukee County, DAS- Fiscal Affairs



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Department of
Transportation and Public Works
2711 West Wells Street, Room 427
Milwaukee, Wisconsin 53208-3509
Telephone (414) 278-2176

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: June 29, 2006

SUBJECT: Geo Database Migration Project: Address and Street Centerline Integration leading to a Countywide Master Street and Address Guide (MSAG)

BACKGROUND

In its meeting held on October 8, 2002, the MCAMLIS Steering Committee approved a report prepared by Spatial Data Systems Inc., assessing the accuracy and currency of the City of Milwaukee address database and the steps that would need to be taken to render that database compatible with the MCAMLIS street address database. An estimated cost of \$149,000 was provided by Spatial data Systems, Inc., for this undertaking.

Subsequently, MCAMLIS Staff in a report to the Committee dated May 19, 2003, provided an assessment of the **WORK EFFORT REQUIRED FOR THE COMPLETION OF A MCAMLIS STREET ADDRESS DATABASE**. This assessment outlined an approach and refined the estimated resources required to be \$142,000.

At its meeting held on November 18, 2003, the MCAMLIS Steering Committee tabled consideration of this project, along with two related matters, until such time as the, then pending, County Geodatabase needs assessment was complete. The MCAMLIS Steering Committee has not taken this matter up directly since it was tabled.

During the intervening period, a seamless Geodatabase format has been implemented and two of the three sister projects i.e.; creation of a seamless cadastral map environment and implementation of a transactional cadastral map maintenance capability, have been put in-place for the suburban Milwaukee County communities. At its February 7, 2006, meeting the MCAMLIS Steering Committee approved a joint City of Milwaukee and MCAMLIS solution to provide for resources required to maintain the current MCAMLIS cadastral data maintenance in concert with the City of Milwaukee.

This action now provides an opportunity to finally fully integrate the MCAMLIS Address and Street Centerline with that of the City of Milwaukee and to provide for a countywide address database which was envisioned by the Committee, in 1996, when the Committee authorized SEWRPC to proceed in establishing the current MCAMLIS address database.

It also affords us an opportunity to re-consider the earlier proposals in light of improvements in technology and to a great extent, recent demands placed on the importance of this data for critical management of county assets and its role in providing for public safety, among others. In this regard, it is appropriate to re-calibrate our overall objectives and to declare our vision and the action steps required to attain them.

VISION

It is clear that many County and municipal operations and services use addresses as a form of identification and location. Given this, it makes sense that street name and address data be standardized and managed across County government and in concert with external business partners to more efficiently and effectively deliver government

services. When address location is expressed and maintained in different ways without a common framework, decision making is impeded as integration of background information becomes limited or impossible. Addresses more than any other location referencing feature, can be a powerful integrating factor that permits local governments to relate complementary information. As such, it requires enterprise thinking to serve cross-departmental and jurisdictional (regional) needs.

As such, the solution also seems evident – an enterprise approach to this key information element is needed. An enterprise approach takes into account how creation, management, and use of address data effects the whole organization, not just individual agencies. It establishes a coordinated framework, an ‘Enterprise Address System (EAS)’, which includes key process, data, technology, and organization components. Only when all of these components are acknowledged can the system truly respond to agency-wide and partner needs.

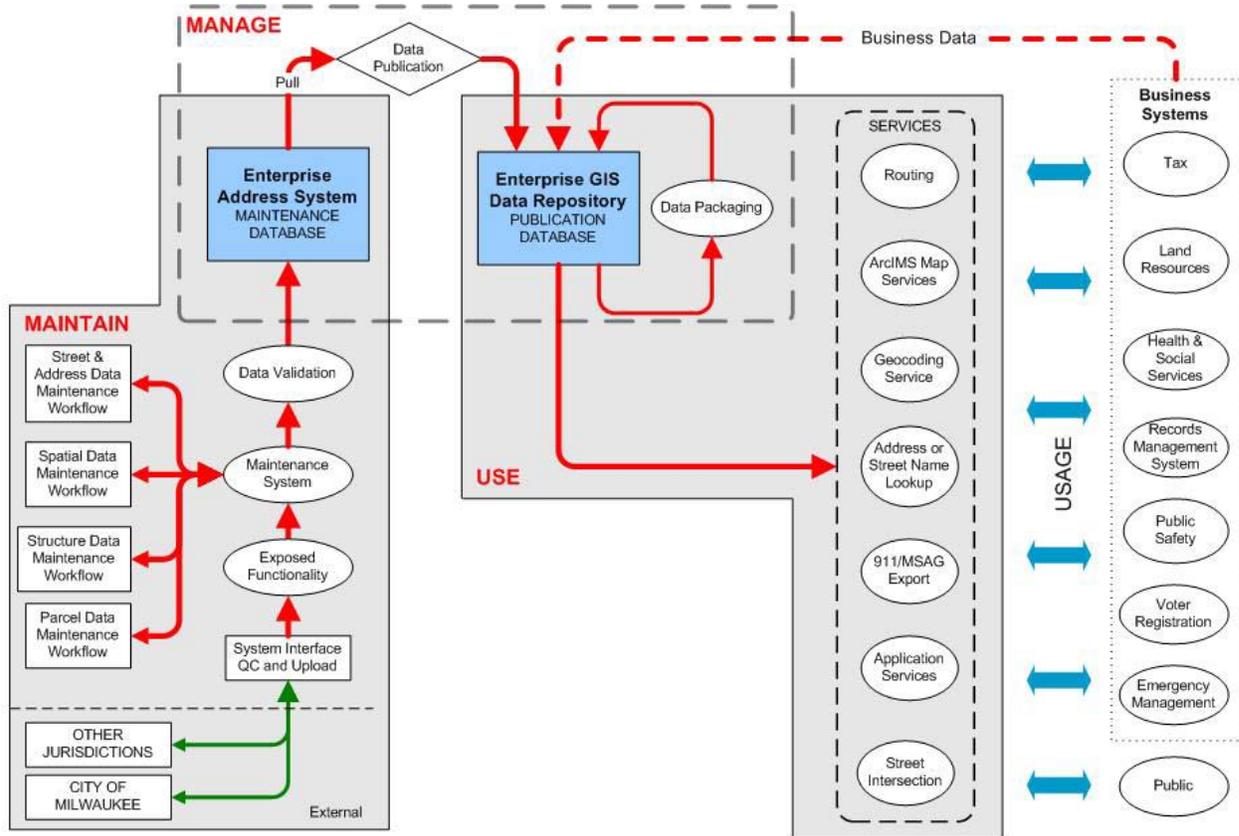
A number of key goals or characteristics are identified for a County enterprise address system. These goals strive to remedy current operational and management constraints while also enhancing access to and usability of street name and address data countywide. They are listed below with additional description provided later in this section:

1. **Enterprise Support.** The new system should be designed, deployed, and operated to support all stakeholder interests including internal County department staff and information systems as well as those of external public agency and private partners.
2. **Automated.** The system should be automated in the sense that it offers stakeholders computerized access to digital street name and address data and automates the process of address data maintenance.
3. **Current.** Address data made available through a new system should be current enough to support the time sensitive needs of internal and external users and their respective business information systems.
4. **Complete and Standardized.** Street name and address data should be complete and standardized representing all jurisdictional areas of the County including external service areas.
5. **Location-based.** All street name and address records in the new system that represent a physical location inside or immediately outside Milwaukee County (e.g., extra service area) should be spatially-enabled.
6. **Accessible.** Finally, the enterprise address system should be accessible to all internal and external users and their information systems. This means it needs to provide various mechanisms for staff and public access and interfaces that facilitate data communication.

The figure below depicts a conceptual architecture for an enterprise County address system that meets the abovementioned goals. It provides for a single, definitive source of GIS-based addresses across the County and facilitates better maintenance, publication, and use of address and related data through standard user applications and system services. It serves as the master source of normalized and standardized address formats to which all agency staff can refer when entering addresses into their respective databases.

This covers different types of addresses including those created as part of the land development process (parcel addresses), for facility asset tracking and management, and for mailing purposes, etc. It also can support sub-unit address types related to multi-unit residential, commercial, and industrial use facilities. Finally, the envisioned system includes mechanisms for departments and municipal partners to submit new or updated address information, so that the “enterprise” address database is as current as possible. Conversely, this also includes the ability to view, extract, and convert address data for use by other systems such as 911.

Figure: Conceptual Architecture for a MCAMLIS Countywide Enterprise Address System (EAS)



The benefits to the County and its partners in pursuing an enterprise approach to address data maintenance, management, and use are significant. Noteworthy benefits include:

- ✓ Reduced cost through less duplication of address data maintenance and management, more efficient staff processes, and better quality information
- ✓ Better and more reliable decisions based on better quality and current address data and data that is formatted to meet specific decision-making needs
- ✓ Improved coordination and execution of citizen services across partner jurisdictions through use of a common address system framework
- ✓ Minimized liability in dispatching emergency services through use of accurate address locations

REQUIRED ACTION STEPS

Earlier GIS planning work completed by MCAMLIS and the County to support its migration to an ArcGIS technology environment, identified a number of discrete projects to advance creation of a County enterprise address system. These projects, along with a number of other needed initiatives are listed below:

1. Migrate existing MCAMLIS digital street centerline database into ArcGIS Geodatabase format. Update the migrated Geodatabase to include missing and vacated street segments, proper street name assignments, and actual/theoretical address ranges as well as additional attribution needed for 911 MSAG update support.

2. Convert existing City of Milwaukee street centerline and address range data layers into an ArcGIS format and integrate with the countywide street centerline Geodatabase. Implement processes and tools to automate the posting of City of Milwaukee street updates into the countywide street centerline Geodatabase.
3. Convert existing site addresses maintained as part of the County parcel mapping system into the migrated digital street centerline Geodatabase to establish an overall, Enterprise Address Geodatabase. Update converted site addresses to reflect current conditions and to ensure consistency with street names and address ranges.
4. Create site addresses for the City of Milwaukee and incorporate into the countywide, Enterprise Address Geodatabase. Implement processes and tools to automate the posting of City of Milwaukee site address updates into the countywide, Enterprise Address Geodatabase.
5. Create web-based user application that allows County and municipal partner staff and the public to browse, query, and report on countywide street and address information in a spatial format.
6. Create standard web services or equivalent data access application that allows County and municipal partner information systems (e.g., 911/CAD, Permitting, etc.) to directly lookup and validate official street name and address information.

ESTIMATED COST

The total cost for the project, as described herein, is estimated to be \$272,000. This cost is comprised of the following components:

1. Migrate and update the current MCAMLIS street centerline data to ArcGIS GeoDatabase format.	\$16,500
2. Migrate and update the City of Milwaukee street centerline data to ArcGIS GeoDatabase format:	\$16,500
3. Convert existing MCAMLIS site (Structure) addresses to the Enterprise Address Geodatabase :	\$35,000
4. Create site addresses for the City of Milwaukee addresses to the Enterprise Address GeoDatabase:	\$74,000
5. Create web-based user application that allows County and municipal partner staff to browse, query, report and update on countywide street and address information in a spatial format.	\$65,000
6. Create standard web services or equivalent data access application that allows County and municipal partner information systems (e.g., 911/CAD, Permitting, etc.) to directly lookup and validate street name and address information	\$65,000
<hr/>	
	\$272,000

FISCAL CONSIDERATIONS

Adequate funds are available to commit to this project.
There is an unreferenced 2005 year-end MCAMLIS balance of over \$400,000
MCAMLIS 2006 revenues are approaching budgeted expectations

RECOMMENDATION

Based upon staff assessment the following recommendations are made to the Steering Committee:

- It is recommended that the Steering Committee authorize the initiation of the project described herein with the exception of **required Action Step 6**. This step will be included as part of a proposed project establishing a Countywide MCAMLIS Land Information Access Website. The steps 1-5 can be carried out independent of the web-enabling software and hardware components and easily align their deliverables within the original scope and intent of prior project estimates that have been reviewed by the MCAMLIS Steering Committee.
- It is recommended that the Steering Committee authorize the expenditure of \$207,000 from MCAMLIS funds to carry out the project.

- It is recommended that the project staff be directed to secure the execution of Professional Services Contract(s) in accordance with Milwaukee County Procurement Policies and Procedures as may be required to complete this work.

* * * * *



**DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
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: March 4, 2009

SUBJECT: PROPOSAL TO PROVIDE INTERNET ACCESS TO THE MILWAUKEE COUNTY PLATS OF SURVEY

BACKGROUND

The Southeastern Regional Planning Commission, under requirement of the Wisconsin State Statute, serves as Surveyor for Milwaukee County. As such, the Commission is responsible for receiving and filing copies of land survey plats prepared by land surveyors for real property parcels in Milwaukee County. The Commission has maintained the files concerned since 1984 and those filings are currently in hard copy format.

MCAMLIS and Commission Staff jointly propose that the existing hard copy files be converted to and maintained in digital format to facilitate user access through the Internet utilizing the Milwaukee County Land Information Office (MCLIO) Interactive Mapping website. Under this proposal the responsibility for maintaining the files would shift to the Milwaukee County Automated Mapping and Land Information System and be managed under the direction of the MCAMLIS Project manager.

FISCAL CONSIDERATIONS

The proposal included herein estimates that the cost for providing Internet access to Plat of Survey documents prepared in Milwaukee County ranges from \$106,800 to \$136,000.

An additional cost for ongoing annual maintenance is estimated to be \$5,500. This additional annual maintenance cost will be factored into the annual MCAMLIS Agreement if this project is approved.

RECOMMENDATION

The following tables describe the three phased proposal for conversion, indexing and ongoing maintenance. Staff recommends approval of \$136,000.

Phase 1: Plat Conversion and Internet Application			
Responsibility	Task	Estimated Time to Complete	Estimated Cost
Selected Contractor	<ul style="list-style-type: none"> Scan approximately 70,000 plats Convert to PDF format files Assign unique file names 	14 - 28 weeks	\$45,000 - \$58,000
MCAMLIS	<ul style="list-style-type: none"> Develop web application for access and retrieval of plat files by reference map search and database search Host application on Milwaukee County Land Information Office website 	3 weeks	\$8,400
Totals		17 - 31 weeks	\$53,400 - \$66,400
Phase 2: Digital File Indexing and Website Enhancement			
Responsibility	Task	Estimated Time to Complete	Estimated Cost
Selected Contractor or MCAMLIS staff	<ul style="list-style-type: none"> Perform address matching to assign parcel ID numbers to approximately 40,000 plat files Research and manually assign parcel ID numbers and addresses for remaining 30,000 plat files 	16 - 32 weeks	\$48,000 - \$64,000
MCAMLIS Staff	<ul style="list-style-type: none"> Enhance application on Milwaukee County Land Information Office website to provide for access and retrieval of plat files by parcel ID number 	2 weeks	\$5,600
Totals		18 - 34 weeks	\$53,600 - \$69,600
Phase 3: Annual Maintenance of Plats of Survey			
Responsibility	Task	Estimated Time to Complete	Estimated Cost
Selected Contractor or MCAMLIS staff	<ul style="list-style-type: none"> Scan and index approximately 2,000 new plats each year 	3 weeks	\$5,000
MCAMLIS Staff	<ul style="list-style-type: none"> Incorporate plats into application on Milwaukee County land information office website 	1 weeks	\$500
Totals		4 weeks	\$5,500

MILWAUKEE COUNTY FISCAL NOTE FORM

DATE: 3/23/09

Original Fiscal Note

Substitute Fiscal Note

SUBJECT: Request for funds to provide Internet Access to the Milwaukee County Plats Survey

FISCAL EFFECT:

No Direct County Fiscal Impact

Existing Staff Time Required

Increase Operating Expenditures

(If checked, check one of two boxes below)

Absorbed Within Agency's Budget

Not Absorbed Within Agency's Budget

Decrease Operating Expenditures

Increase Operating Revenues

Decrease Operating Revenues

Indicate below the dollar change from budget for any submission that is projected to result in increased/decreased expenditures or revenues in the current year.

	Expenditure or Revenue Category	Current Year (2009)	Subsequent Year (2010)
Operating Budget	Expenditure	\$136,000	\$0
	Revenue	0	0
	Net Cost	\$136,000	\$0
Capital Improvement Budget	Expenditure		
	Revenue		
	Net Cost		

DESCRIPTION OF FISCAL EFFECT

In the space below, you must provide the following information. Attach additional pages if necessary.

- A. Briefly describe the nature of the action that is being requested or proposed, and the new or changed conditions that would occur if the request or proposal were adopted.
 - B. State the direct costs, savings or anticipated revenues associated with the requested or proposed action in the current budget year and how those were calculated. If annualized or subsequent year fiscal impacts are substantially different from current year impacts, then those shall be stated as well. In addition, cite any one-time costs associated with the action, the source of any new or additional revenues (e.g. State, Federal, user fee or private donation), the use of contingent funds, and/or the use of budgeted appropriations due to surpluses or change in purpose required to fund the requested action.
 - C. Discuss the budgetary impacts associated with the proposed action in the current year. A statement that sufficient funds are budgeted should be justified with information regarding the amount of budgeted appropriations in the relevant account and whether that amount is sufficient to offset the cost of the requested action. If relevant, discussion of budgetary impacts in subsequent years also shall be discussed. Subsequent year fiscal impacts shall be noted for the entire period in which the requested or proposed action would be implemented when it is reasonable to do so (i.e. a five-year lease agreement shall specify the costs/savings for each of the five years in question). Otherwise, impacts associated with the existing and subsequent budget years should be cited.
 - D. Describe any assumptions or interpretations that were utilized to provide the information on this form.
-
- A. The MCAMLIS Steering Committee has been presented with a proposal from the MCAMLIS Project Manager to establish a new authorization of \$136,000 from the \$4 retained fee to provide internet access to the Milwaukee County land survey plats. Land survey plots have been kept in hard copy since 1984. This project would provide funding to digitizing these files and post them on the Milwaukee County Land Information Office website. This will make the information more accessible to the public.
 - B. This project would authorize \$136,000 of expenditure authority for a selected contractor and MCAMLIS staff. The cost estimate ranges from \$106,800 to \$136,000. MCAMLIS staff is recommending the higher end of the cost estimate. It is anticipated, based on the proposed timeline, that \$136,000 in 2009. There is an on-going maintenance component of \$5,500 annually which is not considered here but should be part of future MCAMLIS budget proposals if this project is approved.
 - C. Approval of these actions would result in the expenditure of \$136,000 from the \$4 fee account. These project costs are not included in the 2009 MCAMLIS Budget but the March 2009 fiscal report is projecting an unrestricted surplus of \$284,404 for the \$4 fee therefore sufficient funds will be available in 2009. A total of \$201,000 in additional funding is being requested at the March MCAMLIS Steering Committee. If all requests were approved, the remaining unrestricted surplus in the \$4 fee account would be \$83,404. Taking into account the \$70,000 \$4 fee reserve level set by the Steering Committee, the remaining funds would be \$13,404, assuming the projects are completed in 2009.
 - D. It is assumed that the project will be completed in 2009 and that 2009 revenue is achieved at the level projected by the Register of Deeds in the March 2009 report. No other assumptions are included.

Prepared By: Alexandra Kotze, Milwaukee County, DAS- Fiscal Affairs

REGISTER OF DEEDS

*Milwaukee County*

JOHN LA FAVE • Register of Deeds

March 6, 2009

To: MCAMLIS Steering Committee
From: John La Fave, Register of Deeds (ROD) *J. L.*
Re: Request for new authorization for **Improvements to Computerized System**

I request that MCAMLIS approve a new authorization of **\$120,000** from the \$1.00 retained fee for **Improvements to Computerized System** in the Register of Deeds department.

The Register of Deeds would like to continue its ongoing program to convert additional document images from microfilm to digital format. It is extremely beneficial for the public and our department to access these images via computer both within our office and on the Internet rather than having to handle microfilm.

This new **2009 Authorization for Improvements to Computerized System** will enable the Register of Deeds to digitize additional document images and to also index party names. This amount will likely cover several more years worth of document images (likely 1985, 1984 and 1983). These years total approximately 524,000 images (about 292,000 documents).

Register of Deeds will continue to utilize the services of Superior Support Resources (SSR), a registered Milwaukee County DBE vendor using their existing price agreement in place with Milwaukee County.

Digitizing additional years of document images provides better service to the public and increases efficiency in the ROD operation.

Thank you.

MILWAUKEE COUNTY FISCAL NOTE FORM

DATE: 3/23/09

Original Fiscal Note

Substitute Fiscal Note

SUBJECT: Request for new authorization of funds for the Improvements to Computerized Systems

FISCAL EFFECT:

No Direct County Fiscal Impact

Existing Staff Time Required

Increase Operating Expenditures

(If checked, check one of two boxes below)

Absorbed Within Agency's Budget

Not Absorbed Within Agency's Budget

Decrease Operating Expenditures

Increase Operating Revenues

Decrease Operating Revenues

Indicate below the dollar change from budget for any submission that is projected to result in increased/decreased expenditures or revenues in the current year.

	Expenditure or Revenue Category	Current Year (2009)	Subsequent Year (2010)
Operating Budget	Expenditure	120,000	0
	Revenue	0	0
	Net Cost	120,000	0
Capital Improvement Budget	Expenditure		
	Revenue		
	Net Cost		

DESCRIPTION OF FISCAL EFFECT

In the space below, you must provide the following information. Attach additional pages if necessary.

- A. Briefly describe the nature of the action that is being requested or proposed, and the new or changed conditions that would occur if the request or proposal were adopted.
 - B. State the direct costs, savings or anticipated revenues associated with the requested or proposed action in the current budget year and how those were calculated. If annualized or subsequent year fiscal impacts are substantially different from current year impacts, then those shall be stated as well. In addition, cite any one-time costs associated with the action, the source of any new or additional revenues (e.g. State, Federal, user fee or private donation), the use of contingent funds, and/or the use of budgeted appropriations due to surpluses or change in purpose required to fund the requested action.
 - C. Discuss the budgetary impacts associated with the proposed action in the current year. A statement that sufficient funds are budgeted should be justified with information regarding the amount of budgeted appropriations in the relevant account and whether that amount is sufficient to offset the cost of the requested action. If relevant, discussion of budgetary impacts in subsequent years also shall be discussed. Subsequent year fiscal impacts shall be noted for the entire period in which the requested or proposed action would be implemented when it is reasonable to do so (i.e. a five-year lease agreement shall specify the costs/savings for each of the five years in question). Otherwise, impacts associated with the existing and subsequent budget years should be cited.
 - D. Describe any assumptions or interpretations that were utilized to provide the information on this form.
-
- A. The MCAMLIS Steering Committee has been presented with a proposal from the Register of Deeds to establish a new authorization of \$120,000 from the \$1 retained fee for Improvements to the Computerized System. This project will continue the initiative to digitize documents contained on microfilm. The additional appropriation will enable the Register of Deeds to digitize several more years of documents, thus extending back to 1983, and also index party names.
 - B. This project would authorize \$120,000 of expenditure authority with Superior Support Resources (SSR). SSR has been working with the ROD throughout this project and they are a certified County DBE.
 - C. Approval of these actions would result in the expenditure of \$120,000 from the \$1 fee account. These project costs are not included in the 2009 MCAMLIS Budget but the March 2009 fiscal report is projecting an unrestricted surplus of \$316,220 for the \$1 fee therefore sufficient funds will be available in 2009 to cover either option listed above.
 - D. It is assumed that the project will be completed in 2009. This provides the most conservative fiscal estimate for the Committee to consider since the entire cost would be incurred in 2009. No other assumptions are included.

Prepared By: Alexandra Kotze, Milwaukee County, DAS- Fiscal Affairs

Mark Your Calendar for the Milwaukee County Land Information Office's

GIS OPEN HOUSE

WHEN: Wednesday, April 22, 2009 (Earth Day)
9 am to 3 pm

WHERE: Milwaukee Co. City Campus, Room 590
2711 W. Wells St.
Milwaukee, WI 53208
Parking is available across from City Campus on 28th St. – present this announcement to attendant
Refreshments will be served

.....

PRESENTERS SHOWCASING LAND INFORMATION TECHNOLOGIES:

- **2010 Orthophotography Project** John McDougall, SEWRPC GIS Manager
- **MCAMLIS Floodplain Mapping**Mike Hahn, SEWRPC Chief Environmental Engineer & Dave Fowler, MMSD Sr. Project Manager
- **Introduction To LiDAR in SE Wisconsin**Jeff Stroub, VP of Domestic Programs, Aero-Metric
- **MCAMLIS Today** Bill Shaw, MCAMLIS Project Manager
- **Sanitary Sewer Management using CityWorks**Mark Sifuentes, Milwaukee County Engineering Technician
- **GIS at Milwaukee County** Kevin Bruhn, Milwaukee County GIS Specialist
- **MCAMLIS Enterprise Address System** Lee Frederick, Milwaukee County GIS Technician

.....

TRAINING SESSIONS & DEMONSTRATIONS PROVIDING A HANDS-ON INTRODUCTION TO THE LATEST OFFERINGS FROM MILWAUKEE COUNTY:

- Introduction to Oblique Imagery using Pictometry Electronic Field Study (EFS)
 - Introduction to Milwaukee County's *Interactive Mapping Service* web application & Pictometry Online* (a wireless-enabled laptop computer is recommended for this workshop)
 - EAS Address Updating Workshop using Milwaukee County's *Interactive Mapping Service**
- *a wireless-enabled laptop computer is recommended (but is not required) for these workshops

.....

DISPLAYS HIGHLIGHTING COUNTYWIDE GIS EFFORTS:

- | | | |
|--------------------|--------------------------------|-------------------------------------|
| Milwaukee County: | MCAMLIS: | Other: |
| - Stormwater | - Topographic/Planimetric Data | -North Shore Fire Department's |
| - Sanitary Sewer | - Orthophotography | <i>Street Address Atlas</i> |
| - Parks Department | - Oblique Imagery | - Wisconsin Dept. of Transportation |

.....

PLEASE PRE-REGISTER BY VISITING:

<http://www.county.milwaukee.gov/LandInformationProgr23113/GISOpenHouseSignUp.htm>

William Shaw, MCAMLIS Project Manager
Milwaukee County Land Information Office
Milwaukee Co. Dept. of Transportation and Public Works
City Campus, Room 426
2711 W Wells St.
Milwaukee, WI. 53208
414.278.2176 phone
414.223.1982 fax
email: bill.shaw@milwcnty.com