DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

MILWAUKEE COUNTY LAND INFORMATION OFFICE

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

MEMORANDUM

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

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: May 13, 2011

SUBJECT: **MCAMLIS Steering Committee 86th Meeting Notice**

Date: June 14th, 2011
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD Hdqtrs, Room 401
260 W Seeboth St.
Milwaukee, WI. 53204

******** Please NOTE the location ********

Please review the attached meeting agenda and refer any questions or additional items to me directly. Items that require fiscal impact analysis should be submitted to the MCAMLIS Project Manager, no later than May 27th, to be included for consideration. Additional meeting materials will be forwarded the week of May 30th. In addition, you can obtain materials as they become available at the Milwaukee County Land Information Program website: http://www.county.milwaukee.gov/LandInformationProgr23113.htm

Attached: Proposed Meeting Agenda

* * * * *

MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM

Eighty-Sixth Steering Committee Meeting

AGENDA

Date: June 14th, 2011
Time: 9:00 a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD Hdqtrs, Room 401
260 W Seeboth St.
Milwaukee, WI. 53204

I. Roll Call

II. Special Order of Business

A. Recognition of John C. Place for his many years of service on the Committee representing We Energies

B. CDBG-EAP Citizens Participation Meeting

1. Report by MCAMLIS Staff on the status of the CDBG-EAP Grant application and LiDAR Data Acquisition Program;
2. Report by SEWRPC Staff regarding the status of Phase II of the MCAMLIS Floodland Management Project

III. Meeting Minutes

Consideration of the minutes of the 85th Steering Committee meeting held March 22nd, 2011

IV. Reports

A. **Maintain Core Foundational Elements**

1. Report by MCAMLIS staff on the evaluation of Orthophotography Products; the 2010 Regional Orthophotography Program; the Pictometry "AccuPlus" Orthophotography; and Oblique Imagery Products, and;
2. Report by MCAMLIS staff on the status of strategic initiatives regarding Topographic/Planimetric Map Maintenance.

B. **Promote the Integration of Parcel Based Land Information**

1. Report by Milwaukee County Register of Deeds staff on MCAMLIS street address and cadastral map maintenance operations;
2. Report by City of Milwaukee staff on MCAMLIS street address and cadastral map maintenance operations, and;
3. Report by MCAMLIS staff regarding on-going Enterprise Address System (EAS) efforts.

C. **Educational Outreach**

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

D. **Countywide Initiatives**

1. Report by MCAMLIS Staff regarding 2011 program activity status

E. **Financial**

1. Report by Milwaukee County DAS staff on MCAMLIS Fiscal status

V. Old Business

A. MCAMLIS Staff report regarding status of the Land Information Modernization and Integration Plan.

B. MCAMLIS Staff Report and Recommendation regarding Copyright and Data Distribution Policy

VI. New Business

A. NA

VII. Correspondence

A. Letter from Mike Friis, WLIP Program Manager, Wisconsin Department of Administration Re: WLIP Training Grant Opportunity

B. Letter from Michael Jankowski, Division 107 Fire Chiefs Re: MCAMLIS Address Data

VIII. Date, time, and place of next meeting

IX. Adjournment

THE
MILWAUKEE COUNTY AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM STEERING COMMITTEE
PRESENTS THIS CITATION
TO

JOHN C. PLACE

IN SINCERE APPRECIATION
OF HIS DEDICATED SERVICE AND LEADERSHIP
AS A MEMBER OF THE STEERING COMMITTEE
FROM DECEMBER 13, 2000 THROUGH NOVEMBER 16, 2010

Whereas, John C. Place has served as a member on the Milwaukee County Automated Mapping and Land Information System Steering Committee from December 13, 2000 through November 16, 2010; and

Whereas, he represented the Wisconsin Gas LLC, a subsidiary of Wisconsin Energy Corporation *dba.* We Energies; and

Whereas, he diligently placed his knowledge of, and expertise in, the creation and maintenance of automated land records systems, automated utility records systems, and automated mapping systems at the disposal of the Steering Committee.

Now, therefore, this citation is presented to John C. Place in sincere appreciation of his faithful and distinguished service in the public interest.

In testimony whereof, Mr. Donald R. Nehmer, as Chairman of the Steering Committee; and Ms. Nancy A. Olson, as Vice Chair of the Steering Committee, have here below affixed their signatures.

Mr. Donald R. Nehmer
Chairman

Ms. Nancy A. Olson
Vice-Chair

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: May 27, 2011

SUBJECT: COMMUNITY DEVELOPMENT BLOCK GRANT - EMERGENCY ASSISTANCE PROGRAM (CDBG-EAP) GRANT REQUEST TO OBTAIN LIDAR IMAGE DATA

BACKGROUND

Federal monies were made available under the Wisconsin Small Cities Community Development Block Grant-Emergency Assistance Program, administered by the State of Wisconsin, Department of Commerce, Bureau of Community Finance, for the purpose of disaster recovery. These funds were specifically being made available to the 31 counties in Wisconsin that were made eligible for disaster relief due to the flooding event that occurred between June 5th and July 25th, 2008.

Milwaukee County did not participate in earlier supplemental relief programs related to this flood event, although three communities within Milwaukee County did participate; the Cities of Milwaukee, Wawautosa and West Allis. The current program extends to counties included in the declared flood disaster areas for acquisition of LiDAR data to be used to assist in the generation of FEMA certified "Accuracy Assessment Report" products.

GRANT REQUIREMENTS

The MCAMLIS Steering Committee at its meeting held December 8th, 2009 approved a staff recommendation to allow the MCAMLIS Steering Committee to oversee a CDBG-EAP grant application that was submitted to the Wisconsin State Department of Commerce prior to the 12/4/2009 deadline on behalf of Milwaukee County. In so doing the MCAMLIS Staff formulated an approach that emphasized both the long standing efforts of the MCAMLIS Steering Committee, and the Committee's experiences gained over the many years that it has been involved with/and dedicated to collecting and distributing map information throughout Milwaukee County.

The CDBG-EAP grant award requirements affecting the MCAMLIS Steering Committee are herein listed:

- Milwaukee County must actively pursue citizen participation in the grant process through the development and implementation of a Citizen Participation Plan (CPP);
    - the CPP included as part of the grant application authorizes the MCAMLIS Committee to direct the MCAMLIS Project Manager to formulate the creation of the Citizen Participation Committee;

- the MCAMLIS Project Manager, guided by the MCAMLIS Steering Committee acts to nominate members to the Citizen Participation Committee;
- the Citizen Participation Committee conducts any required public hearings; and
- the Milwaukee County Board at its March 2010 meeting adopts the CPP.

ACTIVITIES THIS PERIOD – 12/10 – 6/11

1. Completed State of Wisconsin Department of Commerce reporting requirements;
2. Receipted for all payment and audit certification agreements as part of the CDBG Grant requirements; and
3. Conducted 2nd of two(2) required Public Hearings in accordance with CDBG-EAP Grant requirements

NEXT

1. No additional activities are planned. Project is complete

Attach: Public Hearing Notice to be conducted June 14th 2011 prior to the regular quarterly MCAMLIS Steering Committee Meeting
Public Hearing Agenda

****

PUBLIC HEARING NOTICE

Community Development Block Grant (CDBG)
Emergency Assistance Program (EAP)
Floodplain Mapping

Date: **June 14th, 2011**
Time: **9:00 a.m.**
Place: **Milwaukee Metropolitan Sewerage District**
MMSD Hdqtrs, Room 401
260 W Seeboth St.
Milwaukee, WI. 53204

Milwaukee County will conduct a public hearing regarding completion of a CDBG grant contract for the collection of ground surface elevation data using Light Detection and Ranging (LiDAR) technology. The public is invited to attend to learn about the Milwaukee County's Floodplain Mapping Program, to help identify additional local Floodplain Mapping needs, and to comment on the activities completed as part of the CDBG Grant.

A copy of the grant application can be viewed online at the following link:
http://www.county.milwaukee.gov/ImageLibrary/User/bshaw/cdboh_grant.pdf

Persons needing additional accessibility accommodations should contact William Shaw at (414) 278-2176

PUBLIC HEARING NOTICE

Date:	June 14th, 2011
Time:	9:00 a.m.
Place:	Milwaukee Metropolitan Sewerage District MMSD Hdqtrs, Room 401 260 W Seeboth St. Milwaukee, WI. 53204

Milwaukee County will conduct a public hearing regarding completion of a CDBG grant contract for the collection of ground surface elevation data using Light Detection and Ranging (LiDAR) technology. The public is invited to attend to learn about the CDBG grant program, to help further develop the use of acquired LiDAR data for purposes of floodland mapping, and to comment on the activities completed as part of the CDBG Grant.

The agenda for the public hearing is:

1. The CDBG-EAP Application and Contract approval process.

2. Eligible CDBG-EAP activities
   a. Floodplain Mapping Improvement

3. Presentation of the use of LiDAR data acquired for purposes of Floodplain Mapping.

4. Presentation of related activities conducted as part of Phase II of the MCAMLIS Floodland Management Project

5. Citizen input regarding combined MCAMLIS and CDBG floodland mapping activities.

Residents of the Milwaukee County are encouraged to attend, especially residents with low- to moderate-incomes.

The meeting room is handicapped accessible.

Persons needing additional accessibility accommodations should contact William Shaw at (414) 278-2176

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: June 9, 2011

SUBJECT: STATUS REPORT ON THE MILWAUKEE COUNTY FLOODLAND MAPPING PROJECT

This memorandum sets forth the progress made on the Milwaukee County Floodland Mapping project from December 1, 2011 through May 31, 2011. This status report addresses project progress in the following three major areas:

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

Progress is summarized in the attached Exhibit 1 and is graphically summarized on the map attached hereto as Exhibit 2.

DATA ACQUISITION

During the reporting period, the following data acquisition activities were carried out:

- As indicated by Exhibit 1, data acquisition activities are substantially completed for all study areas, except the Root River watershed.
- 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 counties and municipalities concerned.

HYDROLOGIC AND HYDRAULIC MODELING

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

Menomonee River Watershed

- The hydrologic and hydraulic models for the watershed was revised to explicitly represent the following MMSD projects:
  - Milwaukee County Grounds detention basin, which was operational as of June 8, 2011;
  - Underwood Creek Phase 1 channel rehabilitation project;
  - Hart Park flood mitigation project; and
  - Phase 1 of the Menomonee River fish passage project.
- The hydrologic and hydraulic models were also revised to reflect the Valley Passage bridge (part of the Hank Aaron State Trail).
- Significant work was accomplished on updating the hydraulic model of the Menomonee River within the Milwaukee Harbor estuary. That work utilized the 2010 topographic data developed to Federal Emergency Management Agency (FEMA) standards under a MCAMLIS LIDAR mapping program funded through the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Emergency Assistance Program. The updated model accounts for the new S. 25th Street and W. Canal Street bridges and the removal of one of the Canadian Pacific Railway bridges. The hydraulic model represents a complicated flow pattern, including "flow splits" from the River into adjacent land surface area in the vicinity of W. Canal Street east of the River and eventual "flow returns" to the River.
- The 2010 topographic data developed under the MCAMLIS LIDAR mapping program was also used to revise the hydraulic model of the Little Menomonee River for the reach between W. Bradley Road and W. Mill Road where the River channel and adjacent land surface area were recently altered under a U.S. Environmental Protection Agency Superfund project to remediate contaminated sediment conditions in the River.

Fish Creek Watershed

- Worked on refining the hydrologic and hydraulic models to reflect new culverts installed under W. County Line Road following the damaging flood of 2008.

FLOODLAND MAP PREPARATION

There was no work on preparation of floodland maps during this reporting period.

HYDRAULIC MODELING AND FLOODLAND MAP PREPARATION

As noted in the preceding status report, the Commission staff has developed a strategy to utilize the 2010 topographic data developed to FEMA standards under a MCAMLIS LIDAR mapping program funded through the HUD CDBG Emergency Assistance Program. The mapping products from that program are being used to refine the hydraulic model used in the work and to map the floodplain boundary along reaches of the Little Menomonee River and the Menomonee River within the Milwaukee Harbor estuary as described above and will be used to revise the model for the S. 43rd Street Ditch in the Kinnickinnic River watershed and to delineate the floodplain boundary along that stream.

The Commission staff also continued to track developments related to the FEMA Great Lakes Flood Hazard Mapping Initiative. Under that Initiative, FEMA plans to develop new analytical approaches to establish the boundaries of the Great Lakes flood hazard areas. The boundaries mapped by FEMA will be incorporated in the MCAMLIS floodplain mapping program to the extent allowed by the MCAMLIS project schedule.

PROPOSED SCHEDULE FOR COMPLETION OF PROJECT

While it was previously intended that the project would be completed by the end of 2011, it is now scheduled to be completed by December 31, 2013. Completion of the project has been delayed by the need to efficiently allocate staff resources to other short-term projects, including watercourse system plan preparation for MMSD. In part, the need for that watercourse planning derives from preparation of updated floodland maps under the MCAMLIS project.

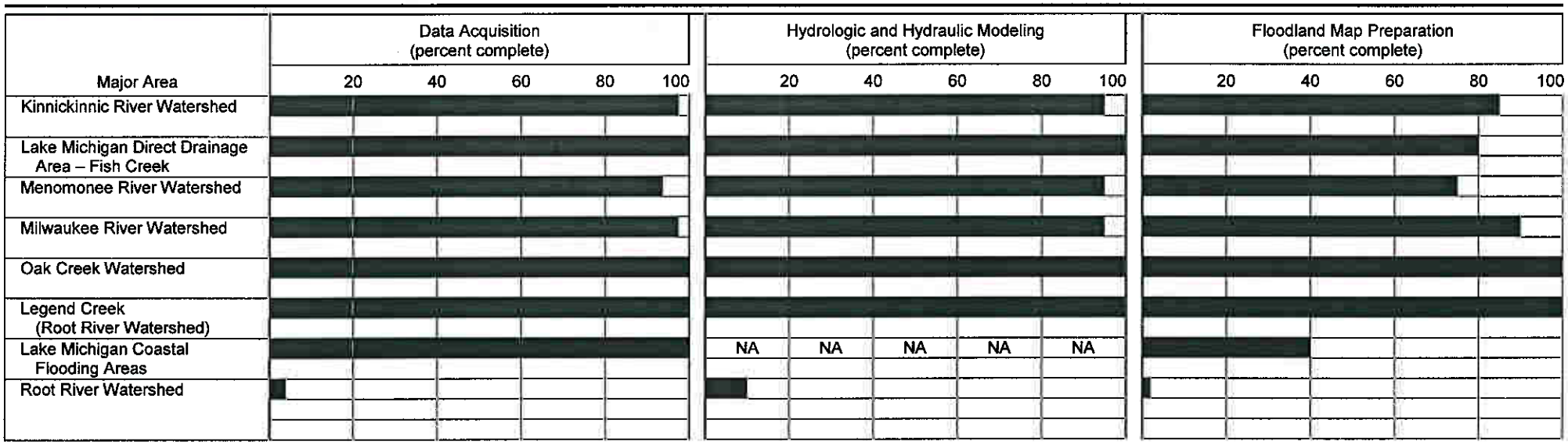
SEWRPC engineering staff resources have now been reallocated to devote more time to the MCAMLIS/ MMSD/SEWRPC floodplain mapping. Based on that reallocation of resources, it is anticipated that 1) work within the Kinnickinnic River watershed (S. 43rd St Ditch is the only remaining stream to be finished) and the Menomonee River watershed will be completed by mid-2012 and 2) work on the Root River watershed portion of the project will be reactivated in mid-2011 and completed by the end of 2013.

* * *

#157582 V1 - MCAMLIS MILW CTY FLPL STATUS RPT 2011-1
KRY/KWB/MGH/pk

Exhibit 1

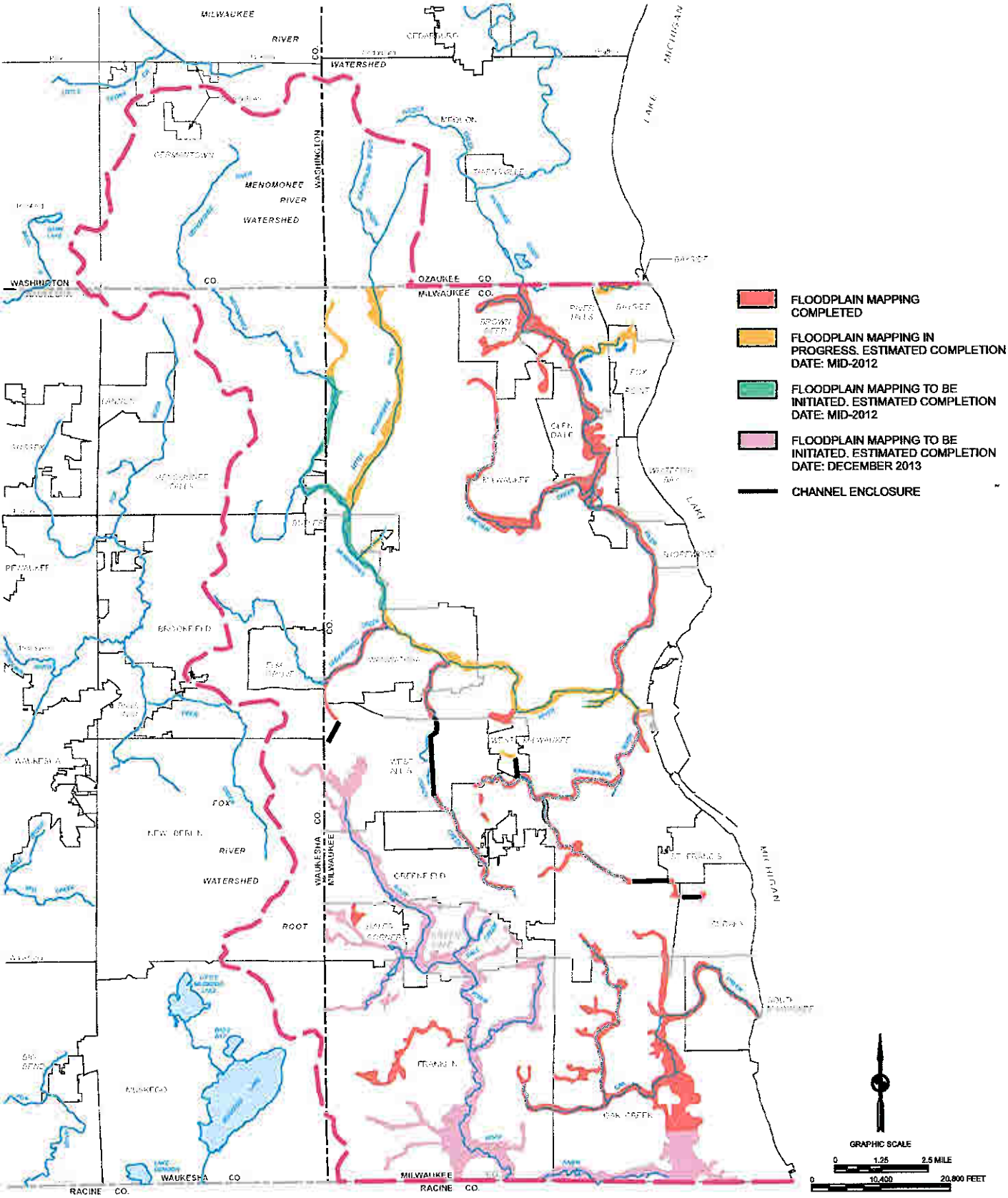
STATUS OF MCAMLIS MILWAUKEE COUNTY FLOODLAND MAPPING PROJECT: MAY 31, 2011



#157582 V1 - MCAMLIS MILW CTY FLPL STATUS RPT 2011-1
KRY/KWB/MGH/pk
06/09/11

Exhibit 2

STATUS OF FLOODPLAIN MAPPING IN MILWAUKEE COUNTY: MAY 31, 2011



Source: SEWRPC.

MINUTES OF THE 85th MEETING
Milwaukee County Automated Mapping and Land Information System
Steering Committee

Date:	March 22nd, 2011
Time:	9:00 a.m.
Place:	Milwaukee Metropolitan Sewerage District MMSD Hdqtrs, Room 401 260 W Seeboth St. Milwaukee, WI. 53204

Members Present

Kurt W. Bauer	Milwaukee County Surveyor
Donald R. Nehmer, Chairman	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
John M. Bennett	City Engineer, City of Franklin, representing the Intergovernmental Coordinating Council of Milwaukee County
Gregory G. High	Director, Architecture, Engineering and Environmental Services Division, Milwaukee County Department of Transportation and Public Works, representing Jack Takerian, Director, Milwaukee County Department of Transportation and Public Works
Timothy Marquardt	Supervisor, Mapping GIS Support, We Energies
John L. La Fave, LIO	Milwaukee County Register of Deeds
Josh Fudge	Fiscal Mgt Analyst representing Cynthia Archer, Director of Milwaukee County Department of Administrative Services
Pamela Booth	Information and Technology Management Division representing Nancy A. Olson, Chief Information Officer, City of Milwaukee

Members Absent

Nancy A. Olson, Vice Chair	Chief Information Officer, Information and Technology Management Division, City of Milwaukee

Guest and Staff Present

Tammy Bronson	City of Milwaukee, Information and Technology Management Division
Gary E. Drent	Support Services Manager, Milwaukee County, DTPW/AE&ES
William C. Shaw	MCAMLIS Project Manager, Milwaukee County DTPW/AE&ES
Kevin Bruhn	Milwaukee County DTPW/AE&ES
Hardy Meihsner	Spatial data Solutions
Kathleen Bach	Milwaukee County Register of Deeds
Marcia Cornnell	City of Milwaukee

I. ROLL CALL

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

II. SPECIAL ORDER OF BUSINESS

II(a) Election of 2011 MCAMLIS Steering Committee Officers

Bennett: the nominating committee has nominated Nehmer for Chair, Olson for Vice Chair, and MCAMLIS Staff as Secretary

Motion: Bauer moved to accept as stated

Second: High, carried unanimously

III. MEETING MINUTES

III(a) CONSIDERATION OF THE MINUTES OF THE 84TH STEERING COMMITTEE MEETING HELD DECEMBER 7TH, 2010.

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

Motion: Bauer moved to accept minutes

Second: Booth, motion carried unanimously

IV. REPORTS

IV(a) Report by Milwaukee County DAS staff on MCAMLIS Fiscal status

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

Bauer: stated for the minutes that DAS staff should be complimented on the new fiscal status reporting format

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

IV(b) Maintain Core Foundational Elements

1. **REPORT BY MCAMLIS STAFF ON THE STATUS OF THE EVALUATION OF ORTHOPHOTOGRAPHY PRODUCTS; THE 2010 REGIONAL ORTHOPHOTOGRAPHY PROGRAM; THE PICTOMETRY "ACCUPLUS" ORTHOPHOTOGRAPHY AND OBLIQUE IMAGERY PRODUCTS**

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

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

2. **REPORT BY MCAMLIS STAFF ON THE STATUS OF STRATEGIC INITIATIVES REGARDING TOPOGRAPHIC/PLANIMETRIC MAP MAINTENANCE**

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

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

IV (c) <u>Promote the Integration of Parcel Based Land Information</u>

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

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

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

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

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

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

3. **REPORT BY MCAMLIS STAFF REGARDING ON-GOING ENTERPRISE ADDRESS SYSTEM (EAS) EFFORTS**

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

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

IV (d) <u>Educational Outreach</u>

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

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

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

IV (e) <u>Countywide Initiatives</u>

1. **REPORT BY MCAMLIS STAFF ON THE STATUS OF CDBG-EAP GRANT APPLICATION AND LIDAR DATA ACQUISITION PROGRAM**

2. **REPORT BY THE MILWAUKEE COUNTY SURVEYOR ON THE STATUS OF 2010 SURVEYOR ACTIVITIES**

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

3. **REPORT BY MCAMLIS STAFF REGARDING 2010 ACCOMPLISHMENTS**

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

Bauer: stated for the minutes that MCAMLIS staff should be complimented on the status report and format

Nehmer: stated for the minutes that the report(s) were accepted by consensus and are to be placed on file

V. OLD BUSINESS

MCAMLIS Staff report regarding status of the Land Information Modernization and Integration Plan

Shaw: directed the Committee to the report materials distributed at the meeting. Noting that the peer review of the Milwaukee County LRM plan submitted to the Wisconsin State DOA by Waukesha County suggested a slight change be made in the draft Milwaukee County LRM as approved September 22nd, 2010. He then proceeded to outline the suggested amendment to the LRM plan referring to the manner in which Milwaukee County provides for public access to MCAMLIS data and materials.

Nehmer: requested clarification of the reasoning behind the need for addressing the open access to MCAMLIS data products.

Shaw: further stated that the amended text was made necessary to address longstanding perceptions that MCAMLIS unduly restricted such access.

Bennett: asked if a commercial enterprise approached MCAMLIS requesting access to the data would this be chargeable?

Shaw: indicated that there were three such licenses and that if this were requested by a company e.g. Time Warner that he would expect to negotiate a fee.

Motion: Bauer moved to approve the LRM plan as amended

Second: LaFave, motion carried unanimously

VI. NEW BUSINESS

VI(a) Consideration of Milwaukee County Land Information Officer and MCAMLIS staff recommendation regarding projects and expenditures to be undertaken as part of the $2 retained fee.

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

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

Motion: Bauer moved to approve as presented

Second: LaFave, motion carried unanimously

VII. CORRESPONDENCE

VII(a) Letter addressed to the MCAMLIS Project Manager from William Huxhold thanking the MCAMLIS staff for their participation in UWM's 2010 GIS Day

VII(b) <u>Letter addressed to Debbie Griffiths, AT&T Risk Manager, from the MCAMLIS Project Manager at the behest of Chairman Nehmer, to re-engage AT&T's involvement in MCAMLIS</u>

Nehmer: directed the Committee to the correspondence included with the meeting materials.

VIII. <u>DATE, TIME, AND PLACE OF NEXT MEETING</u>

June 14th, 2011 @ 9:00am, MMSD (next regular meeting)

IX. <u>ADJOURNMENT</u>

Motion: Bauer moved to adjourn @ 11:10 am

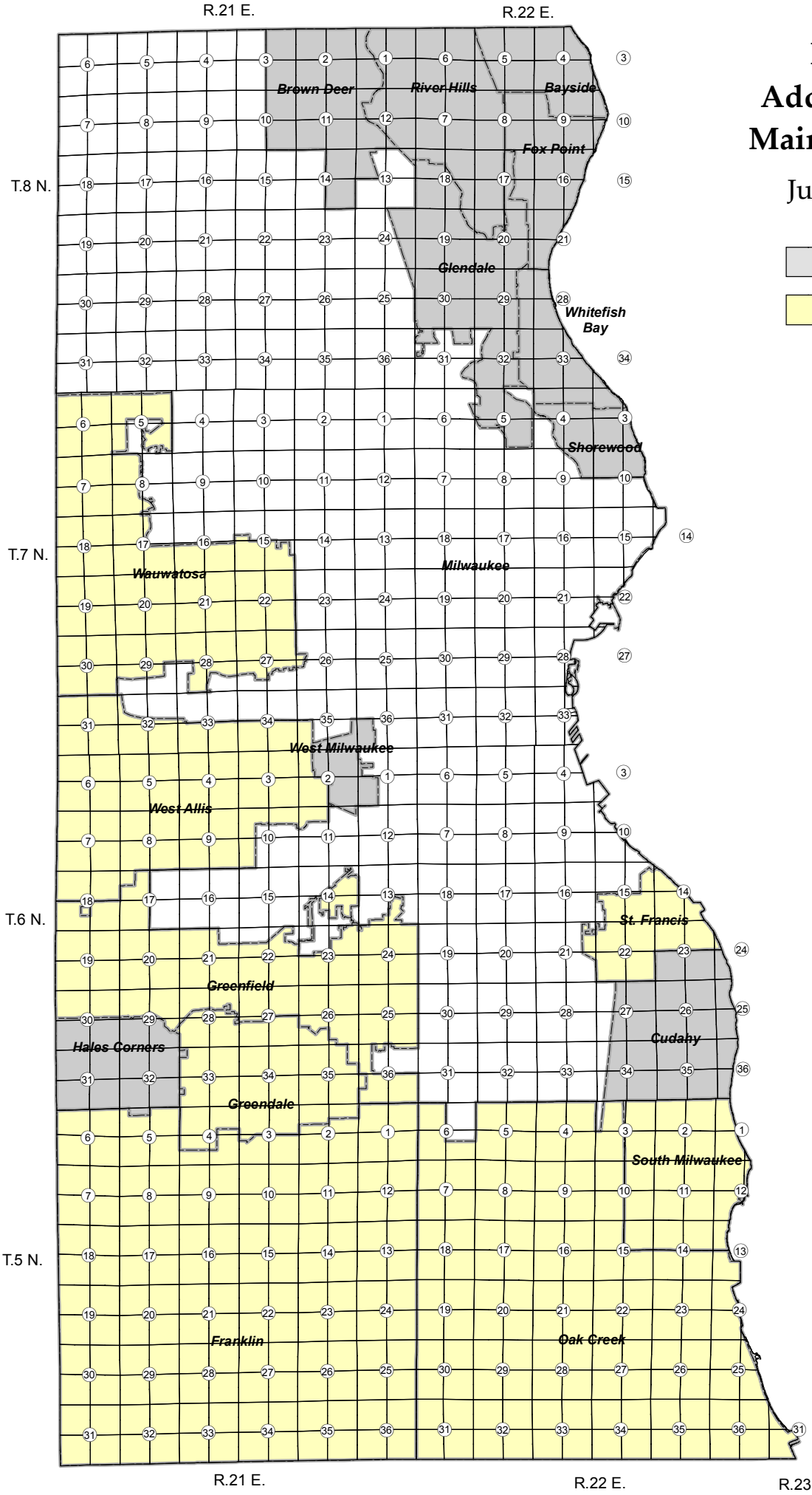
Second: Bennett motion carried unanimously

MCAMLIS Address Database Maintenance Status

June 2011 Status

January 1, 2011

June 1, 2011



N

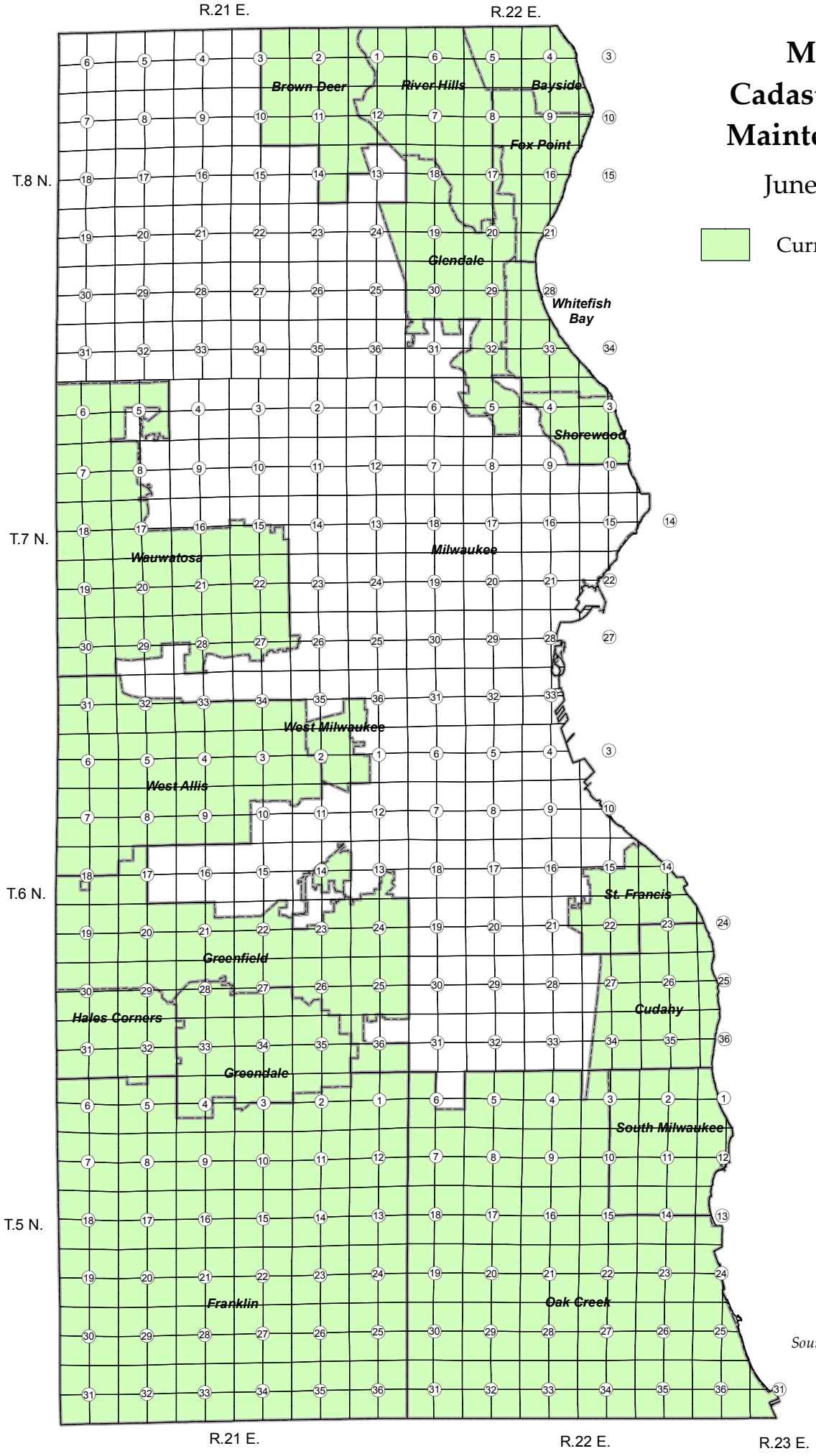
0 1 2 3
Miles

Source: MCAMLIS Project Manager

MCAMLIS
Cadastral Database Maintenance Status

June 2011 Status

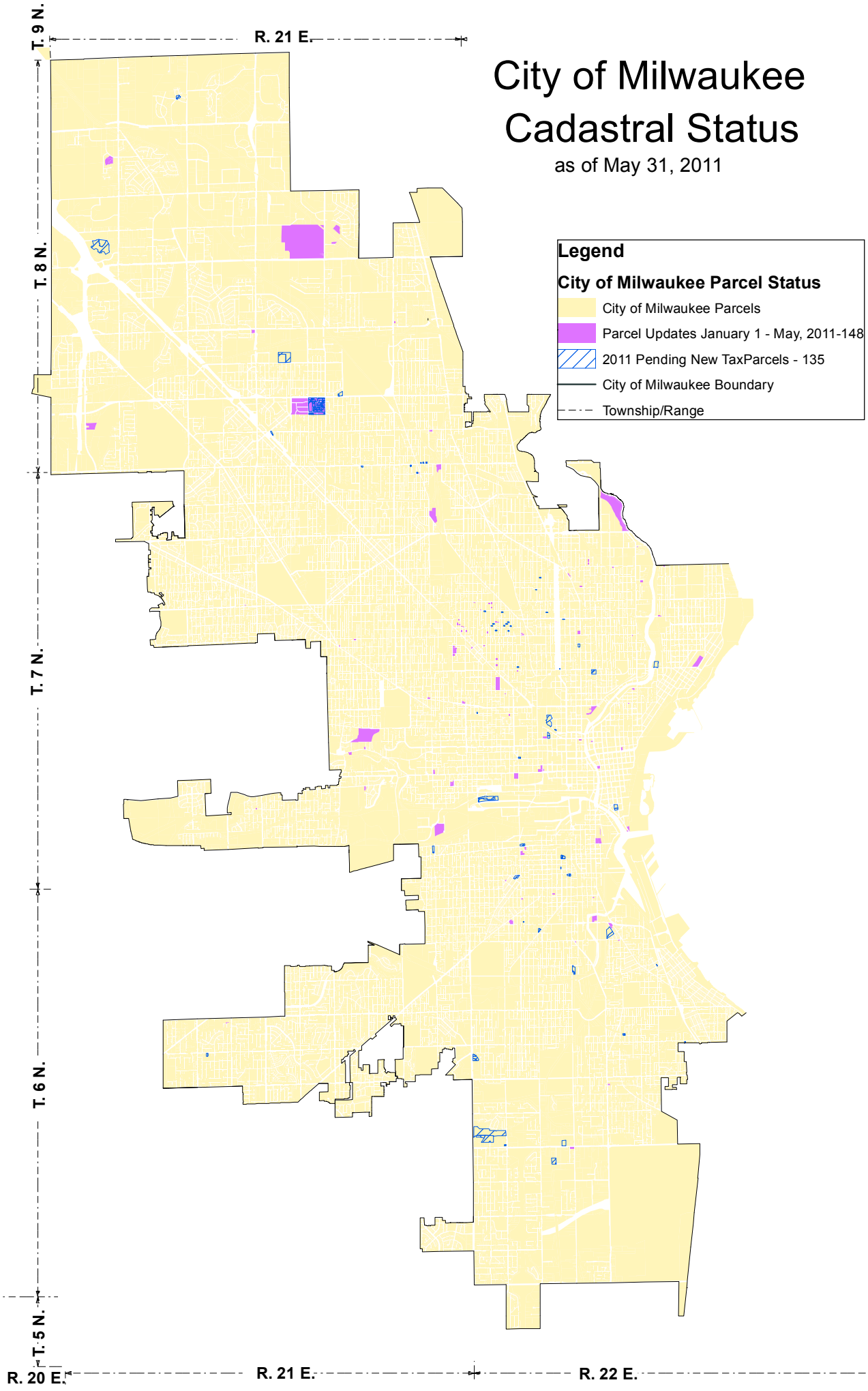
Current as of May 1, 2011



Source: MCAMLIS Project Manager

City of Milwaukee Cadastral Status

as of May 31, 2011



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: May 27, 2011

SUBJECT: 2010 Regional Orthophototography Program; Pictometry AccuPlus Comparison and Oblique Imagery Project Status

BACKGROUND

At five-year intervals in years ending in zero and five, SEWRPC typically acquires aerial photography/orthophotography sufficient to cover its seven-county planning jurisdiction and immediate environs. The 2010 program envisioned the acquisition of 1-foot pixel, color, and digital orthophotography for the entire seven county region. Milwaukee County, however, has requested a project approach that combines the acquisition of 6" Orthophotography and Oblique Imagery in the form of Pictometry International Corporation's AccuPlus product as an alternative to meet the underlying image requirements of the regional planning commission. In consideration of the requested approach it was determined that a comparative study would be required to establish the suitability of the AccuPlus technology to address the Commission's requirements.

The MCAMLIS Steering Committee approved this project at its 9/22/2009 meeting authorizing the comparative evaluation of orthophotographs produced by conventional photogrametric technology and by the "AccuPlus" technology developed by the Pictometry International Corporation of Rochester, New York. The conventional orthophotographs concerned will be prepared by the firm of Aero-Metric, Inc. of Sheboygan, Wisconsin under the 2010 Regional Orthophotography Program. Federal funds from the Surface Transportation Program will be utilized to fund the study. STP-M funds will be combined with MCAMLIS matching funds to complete the project funding requirements.

A Technical Advisory Committee (TAC) comprised of representatives of Pictometry, Aero-Metric, USGS, WISDOT, MCAMLIS, a LIO and the Commission will oversee and guide the project.

ACTIVITIES THIS PERIOD – 3/11 – 6/11

1. Convened the 2nd Orthophotography TAC meeting on 5/17/2011;
    - To determine if the orthophotography products to be compared meet NMAS 1:100 standards, and;

- To establish arrangements whereby interested parties could view the results of the study and view the orthophotography products for visual comparison

2. At the meeting, TAC membership determined that the orthophotography products met NMAS 1:100 standards and recommended minor changes the to the draft of SEWRPC MEMORANDUM REPORT NO. 200
"COMPARISON OF THE RELATIONSHIP OF ALTERNATIVE 2010 ORTHOPHOTOGRAPHS FOR MILWAUKEE COUNTY TO NATIONAL MAP ACCRURACY STANDARDS" (amended report tables attached);
3. MCAMLIS Staff establish arrangements whereby interested parties could view the results of the study and view the orthophotography products for visual comparison (instructions attached)

NEXT

1. No further TAC meetings are scheduled at this time
2. Awaiting final approval and publication of the TAC Report

Attach: TAC Report table exhibits
Ortho_Comparative_Study_2010

* * * * *

#157023 v1 - Orthophotography Comparison-Table 2
PCE/lgh
05/25/11

Table 2

COMPARISON OF TECHNIQUES AND PROCESSES USED BY THE FIRMS THAT PRODUCED ORTHOPHOTOGRAPHY FOR MILWAUKEE COUNTY: 2010

Category	Item	Conventional Orthophotography AeroMetric, Inc.	AccuPlus Orthophotography Pictometry International Corporation
Flight	Flight date range	March 30-31, 2010	April 10-13, 2010
	Type of camera	Digital Mapping Camera (DMC), Zeiss Intergraph	Pictometry Penta View
	Focal length	4.724 inches	65mm (3.438 inches)
	Pixel size	12 microns	7.4 microns
	Pixel array	13,700 x 7,500 pixels	4,872 x 3,248 pixels
	Flight altitude above average terrain	5,000 feet (nominal)	3,500 feet (nominal)
	Number of flight lines	120	147
	Sidelap(s) used	27% (nominal,) 80% in downtown area	35% (nominal)
	Forward lap(s) used	60% (nominal,) 80% in downtown area	66% (nominal)
	Number of frames for entire project (nadir view)	1,632	Approximate 25,000 frames collected
	Were all exposures used to process the orthophoto imagery?	All except excess frames at ends of lines. Also, coverage was duplicated in some areas to reduce building lean	Not all captured frames were used for the mosaic
	Area covered by each image	6,800 feet x 3,750 feet (nominal)	2,400 feet x 1,600 feet (nominal)
	Ground sample distance of input images	0.5 feet (nominal)	4.78 inch (nominal)
Georeferencing	Number of control points used	40	78
	Was Airborne Global Positioning utilized?	Yes	Yes
	Were Inertial Measuring Unit Technologies utilized?	Yes	Yes
	Method used to register images to survey control network	Match AT from Inpho software	Match AT from Inpho software
	Root Mean Square Error (RMSE) of survey control points used to register images	RMSE (x) = 0.24 feet; RMSE (y) = 0.20 feet	RMSE(x) = 0.13 feet; RMSE (y) = 0.19 feet

Image Processing[a]	Bits of resolution per band	12-bit per channel - resampled to 8-bit during initial processing	12-bit per channel - resampled to 8-bit during initial processing
	Was Pan-sharpening employed?	Yes	No
	Radiometric adjustment used	Tone balancing of brightness and contrast followed by histogram feathering of spectral values for nearby pixels on adjacent images	Pictometry utilizes a custom designed proprietary radiometric adjustment technique
Digital Elevation Model	Source of elevation data	Existing DEM from stereo photographs	Pictometry LiDAR derived DEM
	What Sensor(s) were used to collect elevation data (LiDAR or Photogrammetry)?	Aerial film and DMC cameras	Optech ALTM Gemini
	Were break lines added to improve elevations?	Yes, along elevated transportation features	Not part of specifications at time of contracting
Orthorectification	Sampling technique used	Cubic convolution	Cubic convolution
	Was image compression used?	No	No
	Seamline generation technique used	Manual seamlines	Automatic with manual edit
	Software used	Orthopro and OrthoVista	Ortho-Vista
Tile Production	Was mosaicking employed?	Yes	Yes
Accuracy Assessment	Number of internal quality assurance points used	40+	Various control points were used as check throughout the AT process. All available control was used for the final adjustment.
	Allowable pixel mismatch along seamlines	0-3	1
	Absolute accuracy	NMAS for 1:1200 feet mapping scale	To be determined by Technical Advisory Committee
	Accuracy standard used	NMAS standard where 90% of the well defined points are within 3.3 feet of their true position	To be determined by Technical Advisory Committee

[a]*The following definitions apply to terms used in this section of the table:*
Pan Sharpening: A process of transforming a set of lower (coarse) resolution color images to higher (finer) spatial resolution color images, by fusing the color images with a co-registered fine spatial resolution panchromatic (black/white) image.
Tone balancing: Adjustments made to the brightness of an image and the contrast within the image
Histogram: A plot of the number of pixels in the image (vertical axis) with a particular brightness value (horizontal axis).
Histogram matching: A method in image processing of color adjustment. In some instances a reference histogram for the project is determined and then individual image histograms are shifted (normalized) to better match the reference histogram. In other cases, the spectral differences caused by different histograms are feathered to match the adjacent image

Source: AeroMetric, Inc., Pictometry International Corporation, and SEWRPC.

Table 3

Milwaukee County Orthophotograph Product Costs: 2010

Firm	Total Cost	Cost per square mile	Deliverables
Aero-Metric, Inc.	$173,310	$716	• Six-inch pixel resolution orthophotography in GeoTIFF file format • Orthophoto elevation model suitable for ortho rectification
Pictometry International, Inc.	$118,944 [a]	$492	• Six-inch pixel resolution orthophotography in GeoTIFF file format • Oblique images in proprietary format for entire county • Pictometry software and license (Electronic Field Study software for use in viewing and measuring ortho and oblique imagery) • Software training and telephone support • Triangulated nadir frames/camera models • LiDAR data captured and available at additional cost

NOTE:

[a] The total cost for the Pictometry product includes a discount of $13,216 as a ten percent long term incentive for executing a six-year agreement. Under this agreement Milwaukee County is committed to acquiring updated products every two years provided that funds are available. Excluding this discount, the total cost is $132,160 or approximately $546 per square mile.

jgm /lgh 04-26-11; 5-23-11
#155346 v1 - 2010 Milw ortho product costs

Spectral Quality Evaluation of Alternative 2010 Orthophotographs for Milwaukee County

Milwaukee County Land Information Office
May 19, 2011

The SEWRPC 2010 Regional Orthophotography Program in cooperation with the Milwaukee County Land Information Office produced two complete sets of imagery covering Milwaukee County. The two sets were acquired for purposes of evaluating measurable accuracy and spectral (visual) qualities of two competing orthophotography products, one produced by Aero-Metric and the other by Pictometry International, marketed under the trade name AccuPlus. Interested individuals are welcome to view these two orthophotography products to conduct there own subjective, but nonetheless important, spectral quality evaluation of the resultant images.

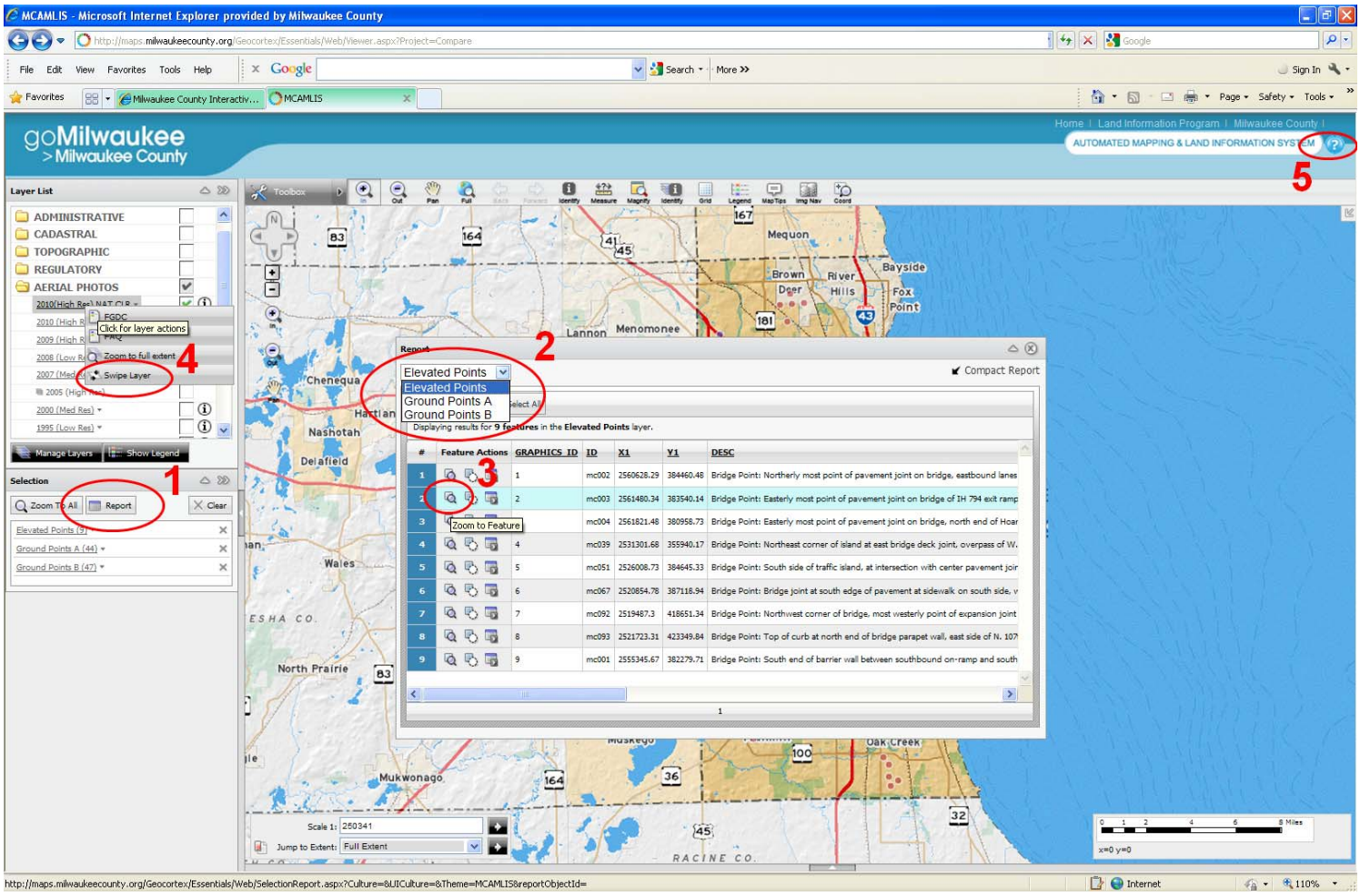
Milwaukee County has prepared an interactive web-based map for this purpose, which is accessed using commonly available Internet access software and hardware and requires no specific skill set beyond those skills that are useful to navigate and perform tasks using common mapping applications e.g., Google Maps.

The main objective of this site is to allow both experienced and casual regional LIS managers, staff members and interested decision makers an opportunity to observe both the measured differences detailed in the SEWRPC Memorandum Report No. 200 and the more subjective visual qualities that the two image technologies offer.

For this purpose the website contains each of 100 sample 'Picture Points' and their related measured difference attributes. Note: these "Picture Points" were surveyed in the field and are also used to establish the measurable accuracy of the two image sets as presented in Report No. 200. Additionally, the site has the capacity to singularly view each 'Picture Point' along with both imagery sets. In order to accomplish this we have included some of instructions for this purpose.

Access the mapping website using the following link: 2010 Orthophotography Compare

Using this link brings you to the MCLIO Interactive Mapping website and allows you to view each "Picture Point." Beyond this, you are free to explore and view these Picture Points as you wish. However, the following procedures may be useful if you are not familiar with the site. Refer to the figure on the next page for the location of the tools that will be used.



1) Report

After the map has loaded in your browser, a summary of selected “Picture Points” appears below the Layer List to the left of the map. Click on “Report” to display a table of information related to each Picture Points. The report table includes a line for each of the available Picture Points; use the scroll bars to move up, down, or across the table as necessary.

2) Selection Groups

Notice that the 100 Picture Points are divided into three groups: “Elevated” (highway bridge decks, overpasses, etc.), “Ground Points A,” and “Ground Points B” (are simply Picture Points that were surveyed at ground level). Select the desired group of Picture Points from the drop-down list.

3) Select and Zoom To a Picture Point

Click on the “Zoom To” Icon to zoom to a ‘Picture Point’ of interest, located on the left side of the table.

4) Swipe

After zooming to a Picture Point's location, it will be useful to reveal the Aero-Metric layer ("2010 High Res FALSE" in the Layer List) beneath the Pictometry layer ("2010 High Res NAT CLR" in the Layer List). Left click on the layer name and select the "Swipe Layer" layer action. This action will freeze the current map frame and allow you to pull the top image back to reveal the image below. "Handles" for this purpose are located by moving your cursor to any edge of the map frame and dragging the Pictometry image across to reveal the Aero-Metric image below it. When finished swiping, click on the "X" in the upper right corner of the map window, and move on to the next Picture Point in the table. As an alternative, click the checkbox to the left of the layer's name in the Layer List to turn its visibility on or off.

5) Help & Tutorial

For more information about the *Interactive Mapping Service's* tools and functionality, visit the *Online Help and Tutorial* by clicking on the blue question mark icon in the upper right corner above the map window.

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: May 27, 2011

SUBJECT: REPLACEMENT TOPOGRAPHIC/PLANIMETRIC MAPPING

BACKGROUND

At its meeting held on October 6th, 2010, the MCAMLIS Steering Committee approved a staff report regarding the MCAMLIS PROGRAM STRATEGIC ASSESSMENT FOR 2010-2013. The assessment recommended that the MCAMLIS Project Manager develop a project scope that met requirements for updating the 2004 - 2009 Topographic/Planimetric Map Series and maintaining this series going forward.

On occasion the Steering Committee has discussed the desirability of undertaking additional projects to acquire replacement mapping. Since the acquisition of countywide digital topographic mapping in 2004/2005 and the completion in 2009 of topographic mapping including the Marquette Interchange there has been no ongoing program or work task authorized by the MCAMLIS Committee to undertake a replacement program.

The Steering Committee considered the useful life of topographic mapping to be roughly 10 years. With the project completion in 2010 it is clear that continued maintenance should be considered to preserve the value of this investment into the future. Notwithstanding past efforts, any new project of this type should be examined through an objective lens given the initial project cost, the mitigating factors that can influence future costs, and how the topographic mapping program maintenance can be sustained within an economic framework that is suitable to the needs of Milwaukee County.

TOPOGRAPHIC ELEVATION UPDATES

LiDAR - In 2009 the MCAMLIS Steering Committee authorized staff to enter into a program to acquire LiDAR data capable of producing 1 foot' contours covering Milwaukee County. Subsequently, the derivation of updated contour elevations using the 2010 LiDAR data have provided a rich database of highly accurate elevation data that have proved capable of producing topographic map products at 1:100 scale. These products generally exceed National Map Accuracy Standards (NMAS) at this scale and now serve as a replacement for the MCAMLIS topographic products.

Orthophotography – In 2009 the MCAMLIS Steering Committee authorized staff to enter into a program to acquire Orthophotography at a resolution of 6" across Milwaukee County. Subsequent acquisition of orthophotography coincident with oblique imagery captured in the spring of 2010 adds to the already rich inventory of imagery that is available across the county. These image-based products serve to augment the potential analysis and identification of planimetric feature changes. Orthophotography and Oblique image products are to be refreshed on a bi-annual cycle i.e., 2012 & 2014/15 (to coincide with the regional 5 year cycle).

PLANIMETRIC FEATURE UPDATES

Given the experience of past projects, staff is confident that a maintenance program can be developed around multiple technologies that, in effect, become tools to manage, incrementally maintain and ultimately set in motion the means to sustain the countywide planimetric feature base map at a fraction of the cost of more traditional methods.

Photo observable planimetric features are changing on a daily basis and fortunately a significant number of these are easily detected via remote measures e.g., comparing surface model elevation can help identify a building demolition or new construction. It is also clear that a large percentage of changes can be identified though a combination of automation and more traditional measures e.g., comparing elevation models with updated orthophotography and existing mapped planimetric features.

Change detection accuracy is further improved by conducting an inventory of the locations of recorded developments - estimated at an approximate rate of 8% by area from 2005 through today, or 21 square miles(see attached map exhibit depicting known areas requiring planimetric feature updates). Additionally, major transportation realignments that have been or will be completed within the years 2010 thru 2013 e.g., I-94 north/south corridor from the southern countyline to the Mitchell Interchange through 2011 (approximate area to be mapped is 5 square miles).

PROJECT SCOPE

Further scope development of this effort is required to establish the overall deliverable products and cost of countywide topographic map production. However, based on conversations conducted with industry representatives and staff research it is believed that the identification of critical planimetric feature updates are fast becoming feasible through the application of image analysis techniques in combination with "Vector-based Plainmetric Change Detection".

Accomplishment this period - 3/11 – 6/11

- Draft compilation of Planimetric Replacement report (attached)

Next

- Continue project scope development and specifications; and
- Upon completion of final scope, solicit Professional Services Contract proposals and make recommendations to proceed with the approved update program elements.

Attach:Planimetric Change Detection Using Elevation Models & Vector-based Comparisons

* * * * *

Planimetric Change Detection Using Elevation Models & Vector-Based Comparisons

Milwaukee County Land Information Office
May 26, 2011

1) DTM vs. LiDAR DEM for Planimetric Change Detection: Observations

A change detection method was developed to compare the combined 2005 DTM (digital terrain model) elevation points and breakline points to its 2010 equivalent, a LiDAR-derived DEM (digital elevation model) raster. The 2005 DTM points were converted to a raster with a cell size matching the 2010 LiDAR DEM cell size using ESRI's interpolation tool, allowing for a direct comparison between the two datasets via ESRI's raster math tools.

In areas where change was known, particularly through knowledge of subdivisions created since 2005, this method indicated elevation differences between the two time periods that corresponded well to planimetric changes observable in aerial photography. Following this, preliminary test areas were evaluated to determine how reliably change could be detected in areas where there was *not* a pre-existing awareness of change. A key test area, which covered the north half of T7R22, was evaluated using the DTM vs. DEM method. This highly urbanized area consists mostly of small, established residential parcels and includes a high density of vacant City of Milwaukee properties.

In this test area, there was not a strong relationship between elevation change and planimetric change. In the numerous small residential parcels in this area, on-the-ground modifications that would result in measurable elevation changes are largely not present, even when a significant planimetric change occurred, such as the razing of a structure or the addition of a structure on a formerly vacant lot. The potential for landscaping or other statistically-significant changes in grade decreases as lot size decreases. Also, the land use of parcels in this area tended not to change, as is typically the case with subdivisions, where significant re-grading (and hence detectable changes in elevation between two time periods) occurs on former agricultural or manufacturing lands during the construction of streets, sidewalks, and individual lots.

Planimetric change using this method is dependent on a reasonable correlation to elevation change, which was not observed in this test area. If planimetric change

occurred, but there has been no detectable change in elevation, then planimetric change is missed via this method.

Error

Error is problematic when attempting to directly compare these two different types of data. Error introduced during the interpolation process (points to raster), which results in the generation of a considerable number of false elevation differences, is difficult to filter out. Also, the resolution of the 2005 DTM seems to contribute error, especially as lot size decreases. The number of points placed at the discretion of the photogrammetrist per unit area decrease as lot size decreases, resulting in in-parcel 2005 DTM point-to-raster interpolation error. PG-based points are not regularly placed, resulting in an inconsistent number of points per unit area. LiDAR provides a consistent number of elevation data values per unit area, and coverage is consistent, even at the surfaces of water bodies.

Future Potential of LiDAR for Detecting Change

Currently, the comparison of 2005 DTM to 2010 LiDAR DEM.datasets requires one to make the unreliable assumption that planimetric change follows elevation change. When the next cycle of LiDAR data becomes available in the near future, the comparison of LiDAR data from two difference points in time may prove to be a viable method for detecting change. Change discovered through differences in surface elevation between DSMs from t_0 and t_1, which include elevation values directly associated with planimetric features that rise above ground level, would offer the possibility of directly locating planimetric change. To test this, the sample surface model data obtained for the LiDAR pilot study conducted in 2008-09 could be compared to MCAMLIS' current LiDAR DSM, captured in 2010.

Despite the limitations observed in this study, the results of a DTM vs. DEM comparisons can be used to augment the set of changes discovered through more conventional GIS techniques (Section 2), acting as a "fine-tooth comb" method for locating change not otherwise found.

2) Vector-Based Planimetric Change Detection

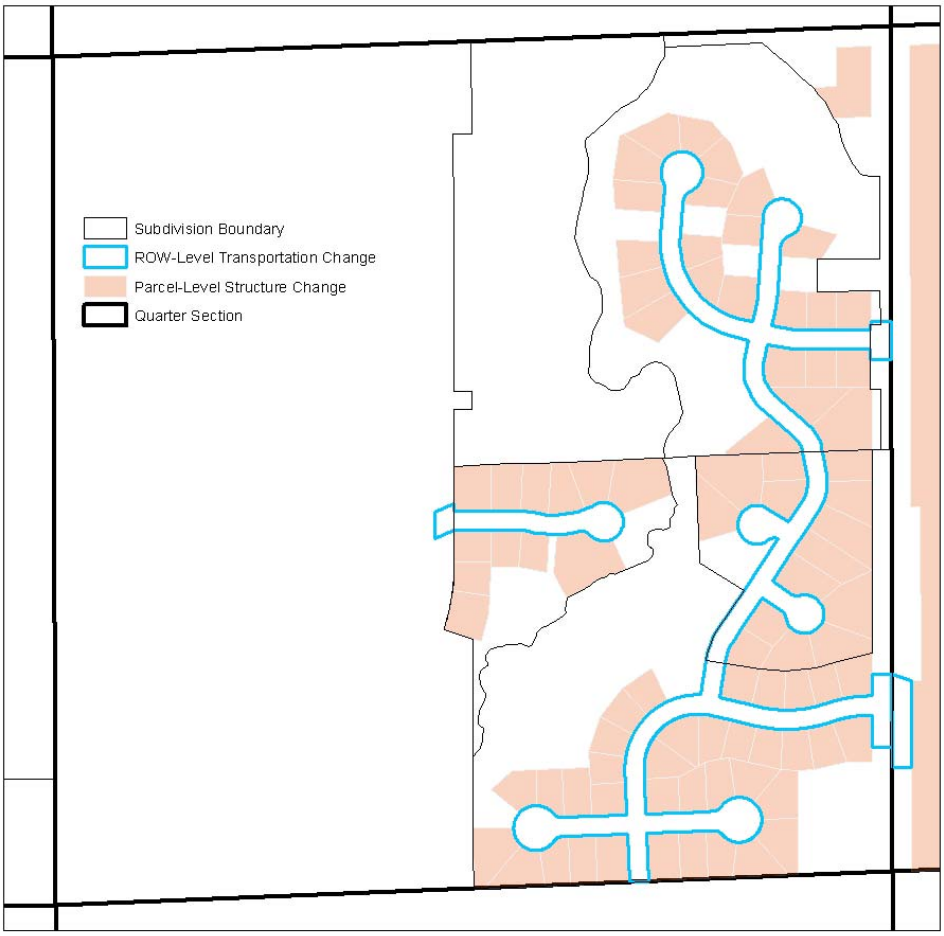
A) Methods

Though not as cutting edge as the method described in Section 1, methods for locating change using MCAMLIS-maintained vector datasets have proven to be more direct and reliable. Though elevation change associated with subdivision-level planimetric change appears to be reliably detectable via the comparison of elevation datasets from two time periods (Section 1), subdivision boundaries are maintained as part of MCAMLIS' cadastral mapping efforts; advanced techniques are not required to determine the locations and extents of subdivisions added since 2005. Currently, locating planimetric change using existing subdivision boundaries and other cadastral features as guides is the most efficient and direct method available.

In addition to known cadastral changes, planimetric change may be discovered using various GIS techniques and logic applied to MCAMLIS feature classes through the comparison of primary structure footprints in their 2005 and 2010 states. In this analysis, planimetric change at the parcel level was driven by locating changes in primary structures: improved to vacant, vacant to improved, and structure relocation, i.e. razed buildings being replaced with new structures of a different size, shape, or location.

"Change polygons" based on parcel and right-of-way boundaries were compiled and summarized to determine change rates and change counts at the quarter-section level. The sum of the proportion of the areas of individual change polygons within their respective quarter section was used to determine a rate of change for each quarter section (Figure 1). These values may be used as benchmarks toward complying with National Map Accuracy Standards, and to prioritize future planimetric re-mapping efforts - quarter sections with higher change rates will be assigned higher re-mapping priority.

Figure 1: Determination of Quarter Section Change Rate



- quarter section area = 6,868,973 ft^2
- total area of all change polygons within quarter section = 1,640,341 ft^2
- quarter section change rate: 1,640,341 / 6,868,973 = 23.9%

Change Sources & Indicators Driving Vector-Based Change Detection

- known highway construction projects

- subdivisions developed since 2004-05

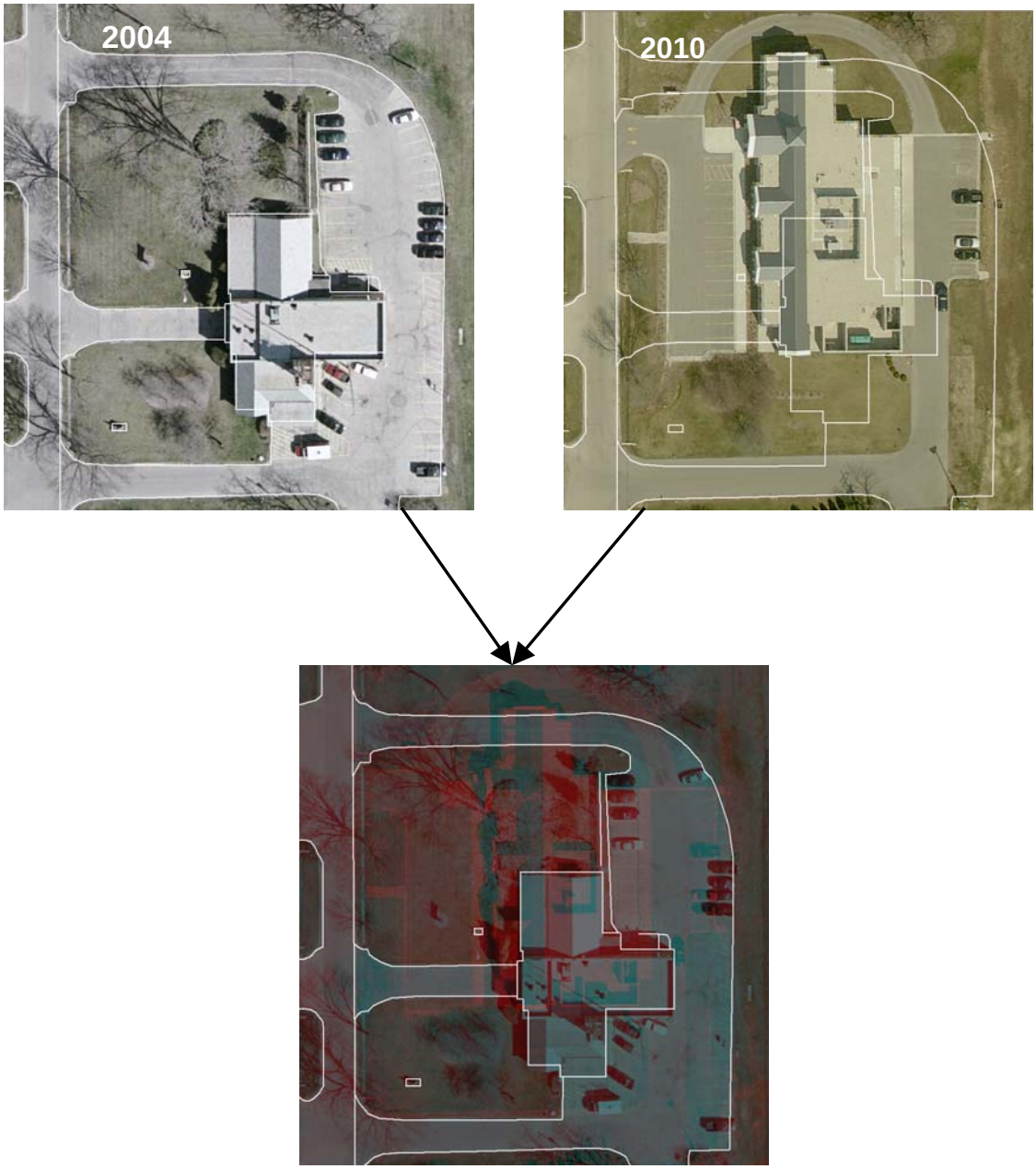
- footprints of addressable primary structures

- footprints of primary structures mapped in 2004-05

- change discovered visually using a “red over.cyan” overlay of 2010 and 2005 orthophotography (Figure 2)

Figure 2: "Red Over Cyan" Method of Visualizing Change

Fox Point Village Hall: shades of cyan represent features that existed in 2004-05 but were removed by 2010. Shades of red represent features added after 2004-05. White lines delineate transportation and planimetric features mapped in 2004-05. This example also illustrates the coincidence of transportation-related change with primary structures change.



Change Polygons Compiled and Summarized for Quarter Section Change Rate Analysis:

- parcel-level structure change:
  parcels containing footprints of primary structures that have changed shaped or location, or have been razed or built between 2005 and 2010

- ROW-level transportation change:
  portions of rights-of-way containing changes related to intersections, interchanges, sidewalks, street alignments, etc.

- parcel-level transportation-related parcel change:
  parcels containing changes related to parking lots, driveways, private streets, etc.

Opportunities for In-House Updating of Planimetric Mapping

In many cases, changes that occurred at ground level are not subject to parallax, building lean, or other common orthophotographic phenomena that affect one's ability to accurately discern the edges of photo-observable features. Required updates to the 2004-05 planimetric mapping datasets related to ground-level transportation-related change, as well as structure-related planimetric change where a structure was razed and not replaced (i.e., situations where parcels were improved in 2004-05 but by 2010 were vacant), should not require the expertise of a photogrammetry specialist. For this reason, change polygons compiled for this analysis were classified by change type so that those instances of change that may be remapped in-house can be located and summarized:

- improved-to-vacant/unimproved
- vacant/unimproved-to-improved
- improved-to-improved (primary structure changed in shape, size, or location)
- transportation-related

B) Results

Maps 1-3 summarize change by quarter section, and provide a means for deciding which quarter section to target for planimetric mapping updates, for estimating re-mapping costs, for prioritizing re-mapping efforts, or for determining which areas may be re-mapped in-house.

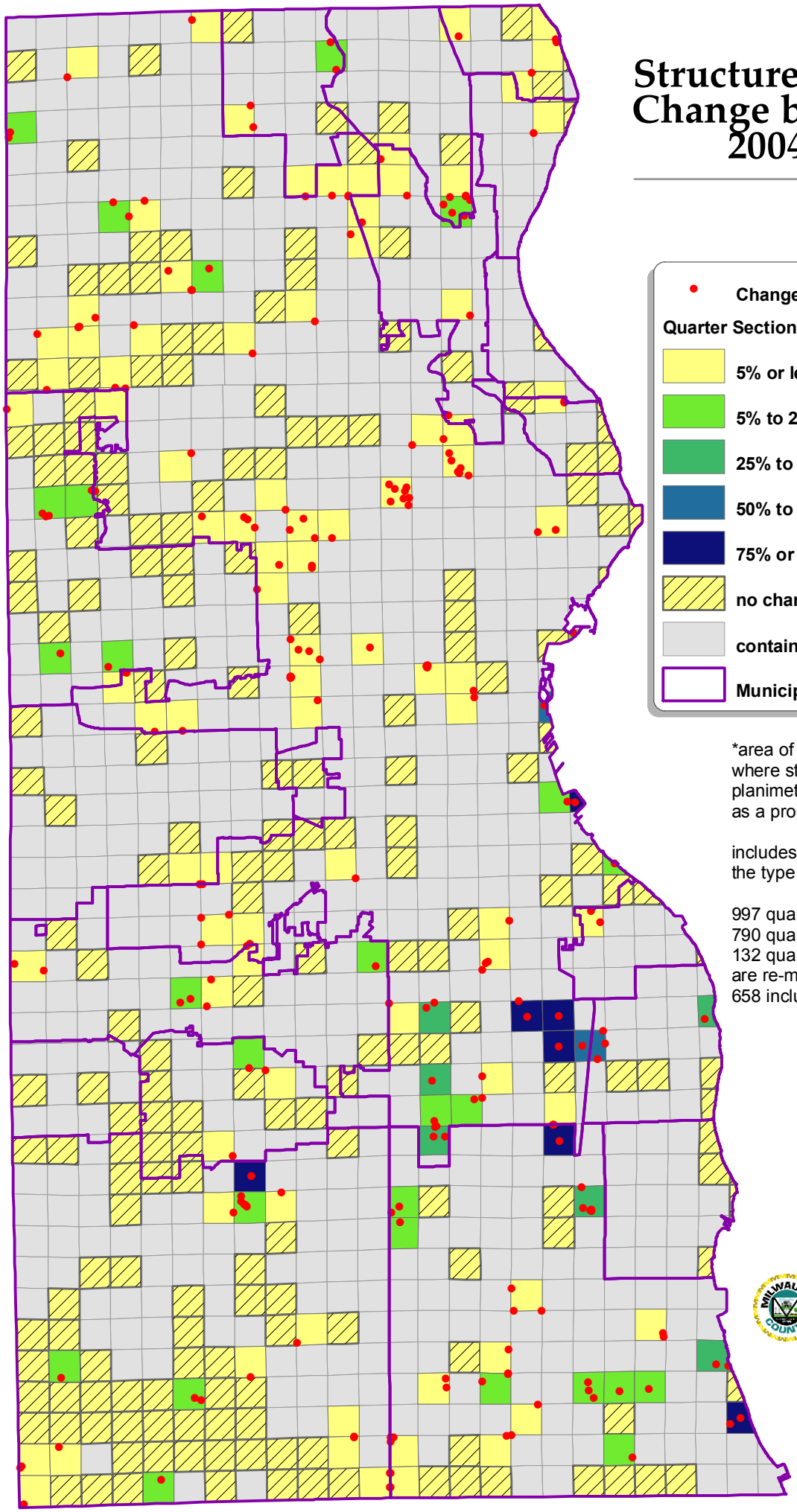
Map 1: summarizes quarter sections that contain only transportation-related and improved-to-unimproved structure-related changes (areas where re-mapping may be performed in-house), as a proportion of quarter section

Map 2: summarizes quarter sections that contain changes that require contract services for remapping (unimproved-to-improved and improved-to-improved changes), as a proportion of quarter section

Map 3: distribution of change instance by change type

Map 1: Structure & Transportation Change by Quarter Section: 2004-05 vs. 2010 *

2011 Q2



- Change at Parcel or ROW Level (225 instances)

Quarter Section Change Rate

- 5% or less (88)
- 5% to 25% (28)
- 25% to 50% (7)
- 50% to 75% (2)
- 75% or more (7)
- no change (207)
- contain change not re-mappable in-house (658)
- Municipal Subdivisions

*area of parcels or portions of ROW where structure- or transportation-related planimetric change has occurred as a proportion of total quarter section area

includes only those quarters where the type of change is re-mappable in-house

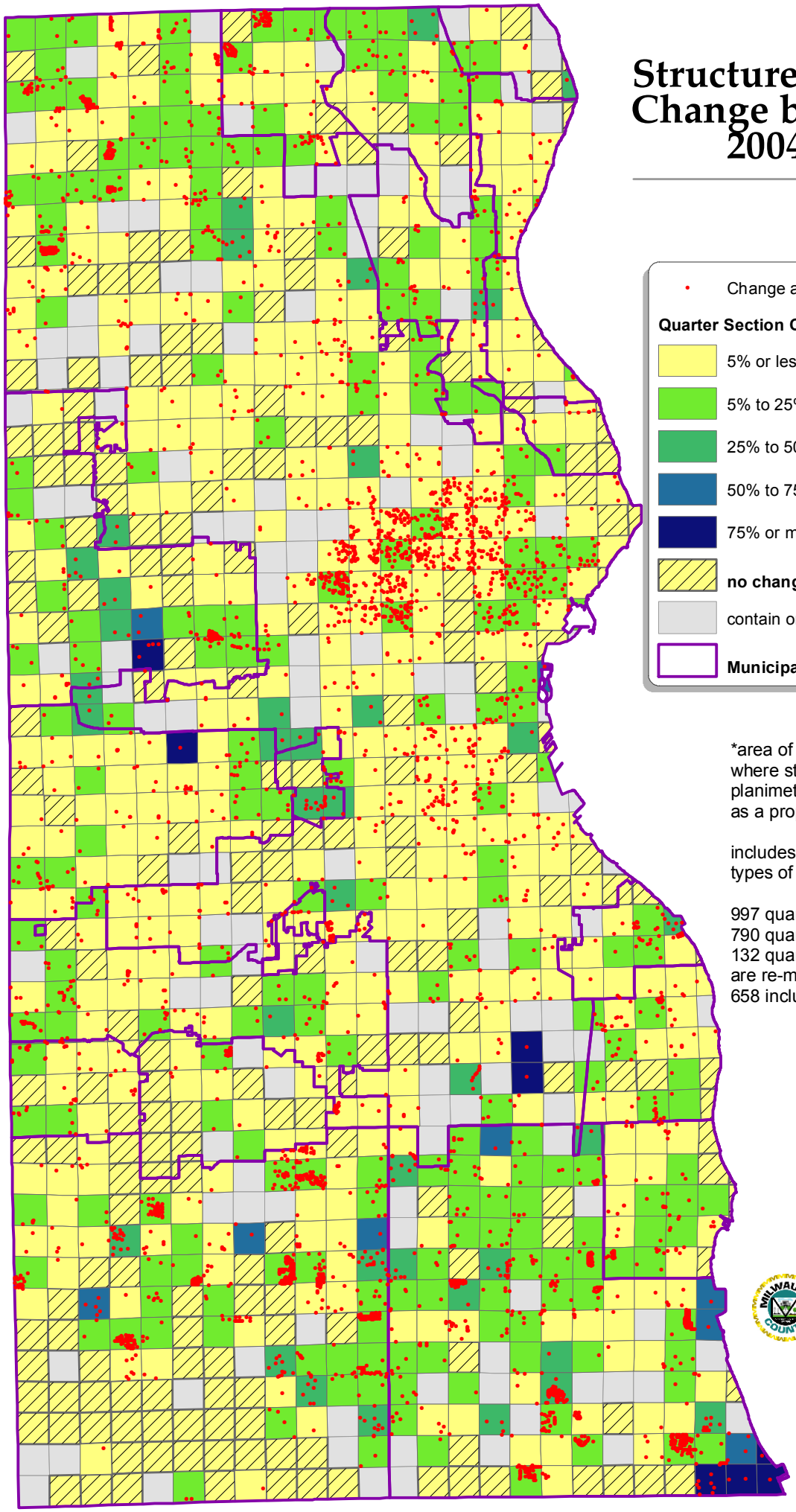
997 quarters total
790 quarters have changed
132 quarters contain only changes that are re-mappable in-house
658 include changes that are not re-mappable in-house

N

Milwaukee County Land Information Office

Map 2: Structure & Transportation Change by Quarter Section: 2004-05 vs. 2010 *

2011 Q2



Change at Parcel or ROW Level (4,183 instances)

Quarter Section Change Rate

- 5% or less (375)
- 5% to 25% (228)
- 25% to 50% (38)
- 50% to 75% (9)
- 75% or more (8)
- **no change (207)**
- contain only changes that are re-mappable in-house (132)
- **Municipal Subdivisions**

*area of parcels or portions of ROW where structure- or transportation-related planimetric change has occurred as a proportion of total quarter section area

includes only those quarters that include types of change that are not re-mappable in-house

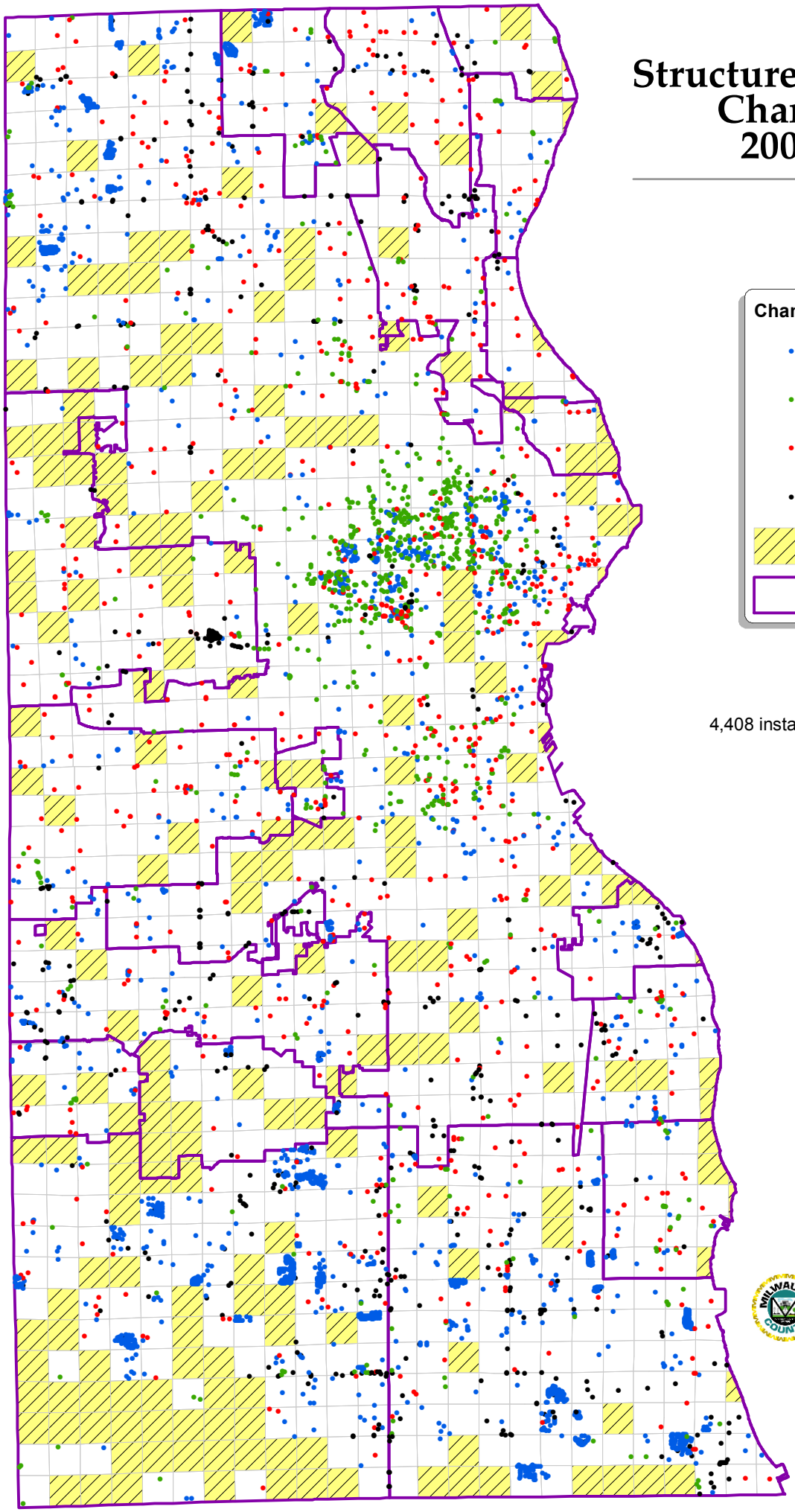
997 quarters total
790 quarters have changed
132 quarters contain only changes that are re-mappable in-house
658 include changes that are not re-mappable in-house

N

Milwaukee County Land Information Office

Map 3: Structure & Transportation Change Instances: 2004-05 vs. 2010

2011 Q2



Change Instances

- unimproved to improved (2,155)
- improved to unimproved (816)
- improved to improved (789)
- transportation (648)
- **no change (207 quarters)**
- **Municipal Subdivisions**

4,408 instances of change in 790 of 997 quarters

N

Milwaukee County Land Information Office

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: May 27, 2011

SUBJECT: Educational Outreach Activity Status

BACKGROUND

At its meeting held June 22nd, 2010, the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee requested that staff draft a set of 'Program Goals and Objectives' for purposes of establishing future program strategy and overall direction.

As part of this exercise, staff recommended that among the Program Goals and Objectives included in the 'Land Information Strategic Assessment for 2010 –2013' that efforts to conduct an Educational Outreach be considered as one of these goals.

ACTIVITIES THIS PERIOD – 3/11 – 6/11

1. Expanded on-line storage to 3 terabytes and migrated file and sqlserver database to new location in preparation to move the MCLIO web server to the county's VM cloud;
2. Incorporated updated tutorial materials and announcements available to users of the MCLIO Interactive Mapping Service website e.g., 1st qtr Foreclosure, LiDAR Image Service and Spectral Quality Evaluation of Alternative 2010 Orthophotography;
3. Presented "Milwaukee County Website, LiDAR, Orthophotography and Oblique Imagery" at the WGITA Luncheon Seminar held 4/14/2011; and
4. Received approval to hire temporary staff assigned to User Group events and activities.

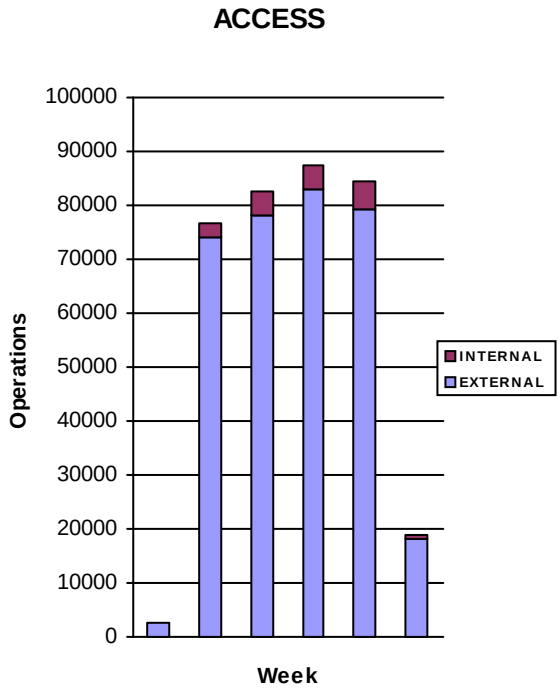
NEXT

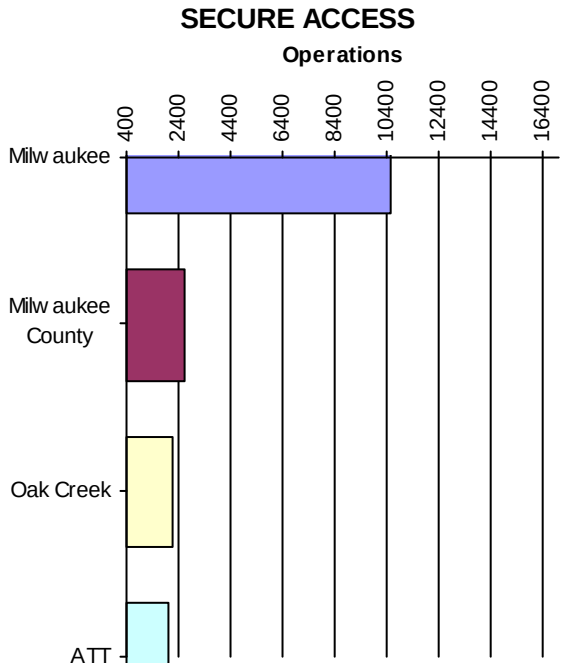
1. Continue MCLIO website training, data distribution and product enhancements; and
2. Expand outreach activities once staff is on board.

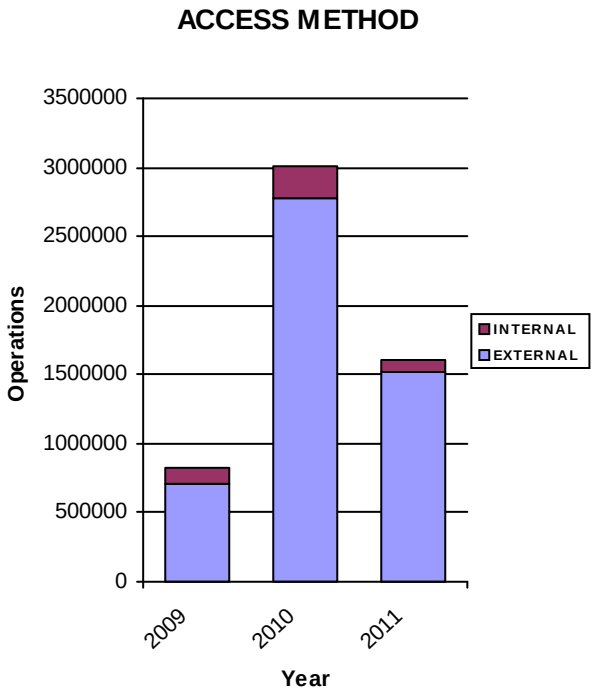
Attach: MCLIO Interactive Mapping Services Dashboard

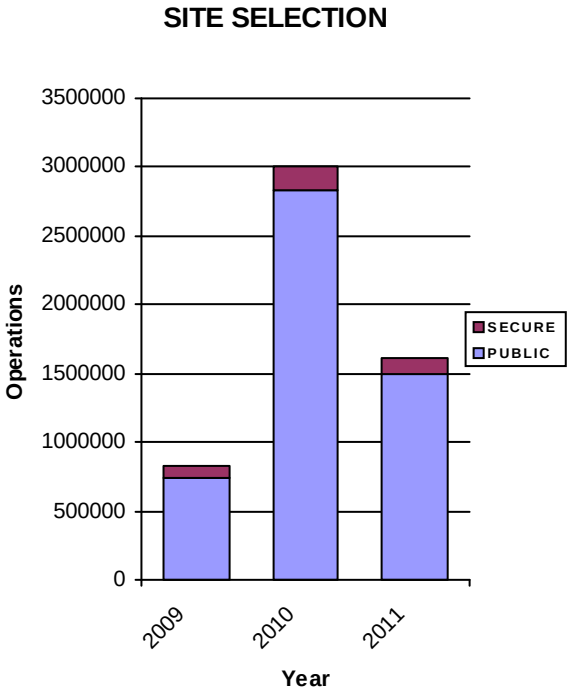
****

MCLIO Map Services Dashboard









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: May 27, 2011

SUBJECT: ENTERPRISE ADDRESS SYSTEM PROJECT STATUS

BACKGROUND

At its meeting held August 22nd, 2006, 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 – 3/11 – 6/11

1. Deployed 1st qtr consolidated Milwaukee County and City of Milwaukee Cadastral Data;
2. Continued discussions w/ ESRI to scope relevant functional capabilities within ArcGIS;
3. Finalized plans for implementing address point ”situs” relationship to buildings;
4. Provided MCAMLIS Street Address data to Division 107 Fire Chiefs to assist in their efforts to evaluate the consolidatation of Fire and Emergency response across jurisdictional borders; and
5. Participated in discussion with the City of Milwaukee regarding Street Centerline exchange leading to possible co-ownership and data replication.

NEXT

1. Ongoing effort toward incorporating multiple address source information
2. Continue address integration implementing the countywide EAS Address Model

Attach: none

****

2011 MCAMLIS Year-to-Date

$6 Fee

2011 Income Statement as of March 9, 2011

REVENUES		
2011 Operating Cash Flow		$257,123
2010 Encumbrances Carried Over		$301,855
TOTAL		**$558,978**
OPERATING EXPENSES		
2011 Actual Expenditures		$251,908
2011 Encumbrances		$350,145
TOTAL		**$602,053**
2010 Net Income (Loss)		**($43,075)**

Fund Balance as of March 9, 2011

2010 Year-End Fund Balance		**$666,172**
2011 Operating Revenues (Shown Above)	+	$558,978
2011 Expenditures for $6 Fee Projects (Incl. Encumbrances)	-	$679,078
2011 $6 Fee Other Expenditures (Incl. Enumbrances)	-	($77,025)
2011 Projected Year-End Fund Balance	**=**	**$623,097**
2011 Reserve Revenue @ 10%		$78,000
2011 Projected Fund Balance - Unrestricted		$545,097
2011 Projected Fund Balance - Restricted		$0

$2 FEE

2011 Income Statement as of March 9, 2011

REVENUES		
2011 Operating Cash Flow		$85,596
2010 Encumbrances Carried Over		$15,110
TOTAL		**$100,706**
OPERATING EXPENSES		
2011 Actual Expenditures		$27,798
2011 Encumbrances		$0
TOTAL		**$27,798**
2010 Net Income (Loss)		**$72,908**

Fund Balance

2010 Year-End Fund Balance		**$270,148**
2011 Operating Revenues (Shown Above)	+	$100,706
2011 Expenditures for $2 Fee Projects (Incl. Encumbrances)	-	$15,110
2011 $2 Fee Other Expenditures (Invcl. Enumbrances)	-	$12,688
2011 Projected Year-End Fund Balance	**=**	**$343,056**
2011 Reserve Revenue @ 10%		$28,000
2011 Projected Fund Balance - Unrestricted		$271,119
2011 Projected Fund Balance - Restricted		$43,937

Est. Documents to be Recorded: 122,000

2011 MCAMLIS YTD (May 24, 2011)

$2 & $6 Fees Combined

2011 Income Statement

REVENUES		
2011 Operating Cash Flow		$342,719
2010 Encumbrances Carried Over		$316,965
TOTAL		**$659,684**
OPERATING EXPENSES		
2011 Actual Expenditures		$279,706
2011 Encumbrances		$350,145
TOTAL		**$629,851**
2011 YTD Net Income (Loss)		**$29,833**

Fund Balance

2010 Year-End Fund Balance		**$936,320**
2011 Operating Revenues (Shown Above)	+	$659,684
2011 Expenditures for Fee Projects (Incl. Encumbrances)	-	$694,188
2011 Other Expenditures (Incl. Enumbrances)	-	($64,337)
Adjustment	+	$0
2011 Projected Year-End Fund Balance	**=**	**$966,153**
2011 Reserve Balance		$106,000
2011 Projected Fund Balance - Unrestricted		$816,216
2011 Projected Fund Balance - Restricted		$43,937

Est. Documents to be Recorded: 128,000

$2.00 Fee Authorized Projects - 2011 as of 5/24/2011									
Year Authorized	**Project Description**	**Amount Authorized**	**Amount Paid 2002-2010**	**Amount Paid 2011**	**Amount Encumbered 2011**	**2011 Total Amount Paid (Encumbrances + Actual)**	**Total Amount Paid for Project (2002-2011)**	**Remaining Unpaid Balance**	Complete
2002	Large Format Scanner	$ 13,090.00	$ 13,090.00	$ -	$ -	$ -	$ 13,090.00	$ -	Yes
2003	Improvements to Computer System	$ 240,000.00	$ 240,000.00	$ -	$ -	$ -	$ 240,000.00	$ -	Yes
2003	Electronic Recording	$ 45,000.00	$ 45,000.00	$ -	$ -	$ -	$ 45,000.00	$ -	Yes
2003	External Hard Drive/Two SNAP Servers	$ 40,000.00	$ 40,000.00	$ -	$ -	$ -	$ 40,000.00	$ -	Yes
2003/2005	Digital Images; Conversion of Microfiche	$ 400,000.00	$ 400,000.00	$ -	$ -	$ -	$ 400,000.00	$ -	Yes
2005	Scanning A Card	$ 50,000.00	$ 50,000.00	$ -	$ -	$ -	$ 50,000.00	$ -	Yes
2005	Improvements to Computer System II	$ 450,000.00	$ 450,000.00	$ -	$ -	$ -	$ 450,000.00	$ -	Yes
2007	Improvements to Computer System III	$ 150,000.00	$ 150,000.00	$ -	$ -	$ -	$ 150,000.00	$ -	Yes
2008	Improvements to Computer System IV	$ 150,000.00	$ 150,000.00			$ -	$ 150,000.00	$ -	Yes
2009	Improvements to Computer System V	$ 120,000.00	$ 120,000.00	$ -	$ -	$ -	$ 120,000.00	$ -	Yes
2009	Improvements to Computer System VI	$ 95,000.00	$ 35,952.63	$ 15,110.00	$ -	$ 15,110.00	$ 51,062.63	$ 43,937.37	No
2009	Enterprise Address System*	$ 65,000.00	$ 65,000.00	$ -	$ -	$ -	$ 65,000.00	$ -	Yes
Total		**$1,818,090.00**	**$1,759,042.63**	**$15,110.00**	**$0.00**	**$15,110.00**	**$1,774,152.63**	**$ 43,937.37**	

Data from John La Fave, Register of Deeds as of 2/28/2011

NOTES

* On September 22, 2009, the MCAMLIS Steering Committee authorized expenditure authority for the Enterprise Address System for $65,000.

2011 Combined Fiscal Report - MCAMLIS - as of 5/24/2011					
Rev / Exp C	Revenue / Expense Name	Budget Amount	Actual Amount	Encumbrance	Net Amount
2299	OTHER STATE GRANTS & REIMB	$ -	$ 20.00		$ 20.00
STATE GRANTS & REIMBURSEMENT		$ -	$ 20.00	$ -	$ 20.00
3237	RET FEES -- $6.00 PORTION	$ 780,000.00	$ 256,788.00	$ -	$ (523,212.00)
3238	RET FEES -- $2.00 PORTION	$ 280,000.00	$ 85,596.00	$ -	$ (194,404.00)
RECORD & FILING FEES		$ 1,060,000.00	$ 342,384.00	$ -	$ (717,616.00)
4999	OTHER MISC REVENUE	$ 5,000.00	$ 315.00	$ -	$ (4,685.00)
OTHER REVENUE		$ 5,000.00	$ 315.00	$ -	$ (4,685.00)
Total Revenues		**$ 1,065,000.00**	**$ 342,719.00**	**$ -**	**$ (722,281.00)**
5001	DIRECT LABOR CHARGED	$ -	$ 38,456.00	$ -	$ (38,456.00)
5002	OFFTIME CHARGED	$ -	$ 7,437.00		$ (7,437.00)
5003	FRINGE BENEFITS CHARGED	$ -	$ 42,559.00		$ (42,559.00)
5004	INDIRECT OVERHEAD CHARGED	$ -	$ -		$ -
5051	DIRECT LABOR APPLIED	$ -	$ (38,456.00)		$ 38,456.00
5052	OFFTIME APPLIED	$ -	$ (7,437.00)		$ 7,437.00
5053	FRINGE BENEFITS APPLIED	$ -	$ (42,559.00)		$ 42,559.00
5199	SALARIES - WAGES BUDGET	$ 129,271.00	$ 42,749.00		$ 86,522.00
5312	SOCIAL SECURITY TAXES	$ 9,891.00	$ 3,283.00		$ 6,608.00
5407	OPEB LIABILITY	$ 15,454.00	$ -		$ 15,454.00
5420	EMPLOYEE HEALTH CARE	$ 31,622.00	$ 9,962.00		$ 21,660.00
5421	EMPLOYEE PENSION	$ 24,575.00	$ 8,524.00		$ 16,051.00
5422	LEGACY HEALTHCARE	$ 12,327.00	$ 3,792.00		$ 8,535.00
5423	LEGACY PENSION	$ 4,120.00	$ 1,752.00		$ 2,368.00
PERSONAL SERVICES		$ 227,260.00	$ 70,062.00	$ -	$ 157,198.00
6050	CONTRACT PERS SERV - SHORT	$ 10,000.00	$ -	$ -	$ 10,000.00
6080	POSTAGE	$ 500.00	$ -	$ -	$ 500.00
6147	PROF. SERV.-DATA PROCESS	$ 35,000.00	$ -	$ -	$ 35,000.00
6148	PROF. SERV-RECURRING OPER	$ 982,199.00	$ 164,395.00	$ 349,277.00	$ 468,527.00
6149	PROF. SERV-NON RECURR OPER	$ -	$ -	$ -	
6636	INTERNET EXPENSES	$ 297.00	$ -	$ -	$ 297.00
6637	R/M COMPUTER EQUIP	$ 22,700.00	$ 26,615.00	$ 920.00	$ (4,835.00)
6803	AUTO ALLOWANCE	$ 300.00	$ 385.00	$ -	$ (85.00)
6807	DP Education	$ -	$ 990.00		$ (990.00)
6812	MEETINGS OTHER AUTH TRAVL	$ 6,000.00	$ 3,379.00	$ (125.00)	$ 2,746.00
SERVICES		$ 1,056,996.00	$ 195,764.00	$ 350,072.00	$ 511,160.00
7910	OFFICE SUPPLIES	$ 630.00	$ -	$ 73.00	$ 557.00
7917	DP SUPPLIES	$ 200.00	$ 148.00	$ -	$ 52.00
COMMODITIES		$ 830.00	$ 148.00	$ 73.00	$ 609.00
8010	DEPRECIATION - SYSTEM	$ 1,749.00	$ -	$ -	$ 1,749.00
DEBT & DEPRECIATION		$ 1,749.00	$ -	$ -	$ 1,749.00
8558	COMPUTER EQUIPMENT-REPL>$500	$ 20,000.00	$ -	$ -	$ 20,000.00
CAPITAL OUTLAYS		$ 20,000.00	$ -	$ -	$ 20,000.00
9702	TECHNICAL SUPPORT & INFRA	$ -	$ -		$ -
9706	PRO SERV DIV SERVICES	$ 42,171.00	$ -		$ 42,171.00
9719	RISK MANAGEMENT SERVICES	$ -	$ -		$ -
9742	DAS SERVICES	$ 2,500.00	$ 1,042.00		$ 1,458.00
9768	APPLICATIONS CHARGES - NETW	$ -	$ -		$ -
9769	APPLICATIONS CHARGES - MAINFR	$ -	$ -		$ -
9771	HRIS APPLICATION	$ 628.00	$ 262.00		$ 366.00
9774	WORKERS COMP & WC PAY	$ 745.00	$ 310.00		$ 435.00
9776	TELEPHONE APPLICATION	$ -	$ -		$ -
9777	INSURANCE SERVICES	$ 8,985.00	$ 3,744.00		$ 5,241.00
9778	WORKERS COMP ADMIN	$ 117.00	$ 49.00		$ 68.00
9779	CENTRAL SERVICE ALLOCATION	$ -	$ -		$ -
9781	CH COMPLEX SPACE RENTAL	$ 19,985.00	$ 8,325.00		$ 11,660.00
9788	PERSONAL COMPUTER CHARGES	$ -	$ -		$ -
CROSSCHARGES		$ 75,131.00	$ 13,732.00	$ -	$ 61,399.00
Total Expenses		**$ 1,381,966.00**	**$ 279,706.00**	**$ 350,145.00**	**$ 750,366.00**
Grand Totals		**$ (316,966.00)**	**$ 63,013.00**	**$ (350,145.00)**	**$ 28,085.00**

$6.00 Fee Authorized Projects - 2011 as of 5/24/2011							
Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	2011 Amount Encumbered	Amount Paid 2011 YTD	Total Amount Paid 2011 (Encumbrances + Actual)	Remaining Unpaid Balance
SOUTHEASTERN WI REGIONAL	MCAMLIS Floodland Mapping Phase 2	$ 436,000.00	$ 161,300.00	$ 274,700.00	$ -	$ 274,700.00	$ -
SOUTHEASTERN WI REGIONAL	County Surveyor	$ 78,719.00	$ -	$ -	$ 78,719.00	$ 78,719.00	$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance-2010	$ 87,852.00	$ 65,889.00	$ -	$ 21,963.00	$ 21,963.00	$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance-2011	$ 90,010.00	$ -	$ 67,507.50	$ 22,502.50	$ 90,010.00	$ -
MILWAUKEE COUNTY	Enterprise Address System - DTPW	$ 272,000.00	$ 228,225.75	$ -	$ 43,774.25	$ 43,774.25	$ -
LiDAR Acquisition CDBG Grant		$ 94,380.00	$ -	$ -	$ 94,380.00	$ 94,380.00	$ -
MILWAUKEE COUNTY	Internet Access to Plats of Survey-construction	$ 60,238.05	$ 47,230.00	$ -	$ 13,008.05	$ 13,008.05	$ -
MILWAUKEE COUNTY	Internet Access to Plats of Survey-maintenance	$ 5,500.00	$ -	$ 5,500.00	$ -	$ 5,500.00	$ -
MILWAUKEE COUNTY	2010 Orthrophotography Comparative Study	$ 57,024.00	$ -	$ -	$ 57,024.00	$ 57,024.00	$ -
	TOTAL	**$ 1,181,723.05**	**$ 502,644.75**	**$ 347,707.50**	**$ 331,370.80**	**$ 679,078.30**	**$ -**

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: May 27, 2011

SUBJECT: MCAMLIS Copyright and Data Distribution Policies Status

BACKGROUND

In June 2009 the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee directed staff to implement recommended changes 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 made the following recommendations:

- 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 regarding their continuing interest in the MCAMLIS Copyright;
- MCAMLIS Staff (assisted by Mr. Schwartz) would then report the impact of this action and recommend suitable alternative policy to the Steering Committee once action to dissolve the copyright had been completed.

ACTIVITIES THIS PERIOD – 6/09 - 6/11

- MCAMLIS Staff, assisted by Mr. Schwartz, Attorney, Quarles & Brady LLP, attended to the execution of a revised License Agreement between the MCAMLIS Steering Committee and the member Utilities securing Steering Committee copyright regarding hard copy and digital materials and dissolving the member Utilities interest therein;
- MCAMLIS Staff presented draft MCAMLIS Commercial and Non-Commercial Data license agreements specifying MCAMLIS as having full copyright interests as per Carl Swartz
- MCAMLIS Staff drafted MCAMLIS Requisition and Distribution Policy Guidelines (see attached).

NEXT

- MCAMLIS Steering Committee review/approve staff recommendation regarding MCAMLIS Requisition and Distribution Policy Guidelines thereby directing staff as to the disposition of MCAMLIS Copyright materials and the on-going requirement to further administer digital material distribution via license agreement

Attach: draft MCAMLIS Requisition and Distribution Policy

* * * * *

DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

MILWAUKEE COUNTY LAND INFORMATION OFFICE

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

DATA REQUISITION AND DISTRIBUTION GUIDELINES

BACKGROUND

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

MCAMLIS was formed to develop and maintain the automated mapping base essential for the creation of a modernized land information system for Milwaukee County. In so doing, MCAMLIS oversees the implementation of the Milwaukee County land records modernization plan, originally set forth in the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) Community Assistance Planning Report No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System. Accordingly, the Milwaukee County Land Information Modernization Plan is required to be revised every 5 years. Subsequent revisions of this plan were developed over time with the most recent plan pending approval by the Wisconsin State Department of Administration in April 2011. The mapping effort detailed in the County plan builds upon historic, coordinated base mapping efforts carried out by Milwaukee County, the Utilities, the cities and villages in the County, and the SEWRPC.

In December 1993 (revised June 2009), the Steering Committee executed a formal License Agreement pertaining to matters of copyright ownership and use of MCAMLIS derived data. With respect to mapping products, the License Agreement distinguishes between hard copy as derived from the digital mapped materials and the actual digital mapped materials. Under the License Agreement, the Steering Committee has taken copyright title to both hard copy maps and digital materials included under implementation of the adopted County plan.

As included in an implementation study completed in 1991 and subsequently modified over time, the MCAMLIS work program consists of the following:

- The completion of the location and remonumentation of all U. S. Public Land Survey corners in the County, including the centers of the sections.
- The completion of high-order horizontal and vertical control surveys to establish the State Plane Coordinates and elevations of the U. S. Public Land Survey corners.
- The completion of large-scale topographic base maps in digital form at a scale of one-inch equals 100 feet with one-foot contour intervals.
- The completion of companion cadastral maps to the topographic maps in digital form at a scale of one inch equals 100 feet providing detailed information on the location and configuration of all real property boundaries, including the boundaries of all streets and public ways and other public land holdings; and assigning a parcel identification number

(tax key number) to each ownership parcel to enable the linking of geographic with non-geographic data files.

- Street address data for all parcels in Milwaukee County.

All MCAMLIS mapping products are based upon the Wisconsin State Plane Coordinate System, South Zone (North American Datum of 1927) and referenced to the National Geodetic Vertical Datum of 1929.

DATA SHARING POLICY GUIDELINES AND PROCEDURES

As noted above, Milwaukee County, the local units of government in Milwaukee County, and the private utilities created the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) program in response to the need for the development of an automated mapping base. At the outset, it was recognized that an infusion of monetary resources from the private sector was necessary to create an automated mapping base for the County in a timely fashion. In response to this need, We Energies (formerly Wisconsin Gas Company and Wisconsin Electric Power Company), AT&T (formerly SBC AMERITECH, Wisconsin Bell) and The Milwaukee Metropolitan Sewerage District invested significant private capital in the MCAMLIS program.

In order to protect their investments, the private utility members of MCAMLIS were granted the MCAMLIS copyright to the mapping base in its digital form. The utility member copyright interest was dissolved in 2009 and the MCAMLIS Steering Committee now holds copyright to all MCAMLIS digital and hardcopy materials. Nevertheless, the overall goal of the MCAMLIS program has been, and continues to be, the construction of the automated mapping system that is consistent with the standards specified in the County plan, and to make the end products created as a result of the MCAMLIS program available to the widest possible range of users in a fair and efficient manner. Monies generated as a result of the sale of MCAMLIS derived data to commercial entities--other than those commercial entities requesting data for non-commercial, internal use--are to be returned to the MCAMLIS budget, and used in the continued development of the MCAMLIS automated mapping base. The MCAMLIS program is not, and was not intended to be, a 'for profit' venture. Accordingly, the Data Requisition and Distribution Guidelines presented herein are intended to embody a spirit of fair and reasonable access to the MCAMLIS digital materials.

The MCAMLIS Steering Committee has formulated the following policies attendant to the distribution and use of the copyrighted mapped data developed under the MCAMLIS program.

<u>Accommodation of Requests</u>

All requests for MCAMLIS digital materials shall be made through the MCAMLIS Project Manager.

MCAMLIS Project Manager
Milwaukee County Land Information Office
Department of Transportation and Public Works
2711 West Wells Street, Room 426
Milwaukee, Wisconsin 53208-3509
Telephone (414) 278-2176
Fax (414) 223-1982

Distribution and Use of Print Ready Electronically Formatted Materials

It is generally not the policy of the MCAMLIS Steering Committee to make available MCAMLIS products in hard copy form. All such products are now made available as print ready electronically formatted documents and can be obtained electronically through the use of readily available Internet browser technology. This includes topographic maps, cadastral maps, and records of control survey stations, control survey summary diagrams, plat of survey documents, condo/subdivision plats and certified survey maps. The cost schedule for hard copy products that are made available at the cost of reproduction and distribution is attached as Exhibit A. Digital copies of these same materials may be accessed directly through use of the Milwaukee County Land Information Office website located at maps.milwaukeecounty.org at no cost. In addition to those listed here, other types of documents may be made available over time.

Distribution and Use of Digital Materials

The Steering Committee has established a policy that distinguishes between the commercial and noncommercial use of the digital maps produced under the MCAMLIS program. Noncommercial use is defined to include the periodic internal use of selected digital mapping materials--not the entire digital mapping file--by private firms and individuals. For noncommercial purposes, it is the general policy of the MCAMLIS Steering Committee to make available duplicate copies of the copyrighted digital MCAMLIS products subject to reimbursement of the cost of reproduction, handling, and distribution. Local units of government within or outside of Milwaukee County; State and Federal agencies; private firms and individuals requesting digital data for internal, noncommercial use; and nonprofit organizations may request duplicate copies of the digital address, street centerline, topographic and cadastral map files. The MCAMLIS data are typically made available as specified within customized boundaries—area of interest (AOI). A boundary description of the AOI should accompany requests directed to the MCAMLIS Project Manager.

Current cost guidelines for obtaining such duplicate digital mapping files, intended to cover the costs of reproduction, handling, and distribution, are attached as Exhibit B. These guidelines reflect average costs associated with the reproduction, handling, and distribution of digital files as those files are presently stored. All monies received by the MCAMLIS Project Manager under this section will be retained by the MCAMLIS program as reimbursement for the actual expenses incurred.

Any party requesting duplicate digital files containing MCAMLIS copyrighted mapped data will be required to execute a license agreement in addition to paying for the costs of duplication set forth on Exhibit B. A copy of the license agreement is attached as Exhibit C. The license agreement provides the conditions under which the categories of noncommercial users described above may use the digital map data and prohibits the user from providing access to the data in digital form by a third party except in the case of 3rd parties working as agents of a Licensee or in cases where a Licensee's own internal policy requires a release of MCAMLIS data to comply with a record request. The MCAMLIS Project Manager is authorized by the MCAMLIS Steering Committee to act on the Steering Committee's behalf for action in a timely manner regarding requests for a license to obtain and use the digital MCAMLIS mapping files. The MCAMLIS Project Manager will review the request for consistencies with the policies set forth herein. The MCAMLIS Project Manager will not unreasonably refuse to provide access to the digital materials where the intended use is for a governmental, educational, non-profit, or internal private purpose. The MCAMLIS Project Manager will make findings and act to approve or disapprove the request. The MCAMLIS Project Manager will then formulate an appropriate

response with respect to each request and shall report all requests for licenses and specific determinations with respect thereto to the Steering Committee.

For commercial purposes, that is, where private firms or individuals seek to acquire all or substantially all of the digital files for internal or external use, it is the general policy of the MCAMLIS Steering Committee to make available duplicate copies of the digital copyrighted MCAMLIS mapping files in the native format within which the data is maintained. The Steering Committee will consider requests for duplicate digital copyrighted files for commercial purposes on a case-by-case basis. Requests should be directed to the MCAMLIS Project Manager at the address noted above. The Project Manager will report all such requests to the Steering Committee for their consideration and determination. The Steering Committee will make findings and act to approve or disapprove the request. If the Steering Committee disapproves the request, it shall be denied. All actions to approve a request shall include the terms of a license agreement. The MCAMLIS Project Manager will then carry out the Steering Committee's direction with respect to each request.

As a matter of general policy, it is the intent of the MCAMLIS Steering Committee to usually require any commercial entity requesting a duplicate copyrighted digital file of the MCAMLIS mapping database to acquire that database at a cost of $7,647 per feature class e.g., tax parcel. This amount is derived from $520,000 --representing a full cost equivalent of each utility member's investment whereby the complete database herein restricted by copyright, if acquired would total this sum. An additional maintenance fee totaling 20% of the original charge is assigned each requested update of the requested data used for commercial purposes. The total amount will be paid directly to the MCAMLIS Steering Committee and will be used by that Committee in furtherance of the objectives of the MCAMLIS program. All commercial entities intending to acquire a duplicate digital file of the copyrighted MCAMLIS mapping database for commercial purposes as defined above will be required to enter into a license agreement for the use of that database. That license agreement--which will be generally based upon the standard license agreement set forth in Exhibit C, but which will be adapted on a case-by-case basis as directed by the Steering Committee--will govern how, if at all, the commercial entity may provide access to the data in digital form by a third party and will provide for appropriate payment or payments.

MCAMLIS DATA AVAILABILITY

The following represents the availability of MCAMLIS print formatted electronic copy and digital data as of March 15, 2011:

- Records of control survey stations have been completed and are available for all U. S. Public Land Survey section and quarter section corners in the County.
- Control survey summary diagrams prepared for six-square-mile areas are available for the entire County.
- Digital files of large-scale topographic base maps are available from MCAMLIS for all of Milwaukee County.
- Digital files of continuously maintained cadastral maps are available from MCAMLIS for all of Milwaukee County.
- Street centerline, parcel address and building address data are available for all of Milwaukee County.

The status of available digital map products under the MCAMLIS program is continually changing. Interested parties should contact the MCAMLIS Project Manager to inquire about the availability of additional products.

* * *

Exhibit A

MCAMLIS HARDCOPY MATERIALS
DISTRIBUTION COST SCHEDULE FOR ALL USERS

Item	Geographic Unit of Coverage	Scale	Sheet Size	First Page Unit Price	Second Page(s) Unit Price
Record of Control Survey Station	One U.S. Public Land Survey Section or Quarter-Section Corner	Not Applicable	8.5″ x 11′	$ 1.00*	N/A
Control Survey Summary Diagram	Six Square-Miles	Not Applicable	17″ x 11″	$ 5.00*	N/A
Plat of Survey	Selected Parcel(s)	Not Applicable	Various	$2.00*	$1.00
Condo/Subdivision Plat	Selected Parcel(s)	Not Applicable	Various	$5.00*	$2.00
Certified Survey Map	Selected Parcel(s)	Not Applicable	Various	$2.00*	$1.00

Plus shipping costs and sales taxes where applicable.

* Available for free download at maps.milwaukeecounty.org

Source: MCAMLIS Project Manager; March 17, 2011

EXHIBIT B

MCAMLIS DIGITAL MATERIAL DISTRIBUTION
COST SCHEDULE FOR NON-COMMERCIAL USERS*

Digital Format**	Digital Base Materials Area of Interest (AOI)	
	Minimum Request including 1st .5 hour of labor*	Each Additional Hour of Labor***
ArcGIS (specify format)	$ 65.00	$ 75.00
AutoCAD DWG/DXF	$ 65.00	$ 75.00

Plus shipping costs and sales taxes where applicable.

* Most fees are waived for government agencies; MCAMLIS partner organizations; non-profit; and for academic purposes that do not incur custom labor commitments beyond a minimum request.

** The two digital formats included in the table are the most frequently requested. Delivery in other formats may not be feasible. Any party desiring to explore delivery in other formats will be expected to pay the costs entailed in determining the feasibility of such delivery.

*** Ordered simultaneously with additional labor beyond the 1st .5 hour required to complete request selection.

Source: MCAMLIS Project Manager; March 17, 2011

EXHIBIT C

MILWAUKEE COUNTY AUTOMATED MAPPING
AND LAND INFORMATION SYSTEM

LICENSE AGREEMENT PERTAINING TO THE NON-COMMERCIAL USE
OF COPYRIGHTED DIGITAL BASE MAPPING MATERIALS

WHEREAS, the Milwaukee County Automated Mapping and Land Information System Steering Committee (the "Steering Committee"), a committee whose members currently are the Southeastern Wisconsin Regional Planning Commission, Milwaukee County, Wisconsin Bell Telephone now dba/"AT&T", Wisconsin Electric Power Company and Wisconsin Gas now dba/"We Energies", The City of Milwaukee, the Milwaukee Metropolitan Sewerage District, and the Intergovernmental Cooperation Council of Milwaukee County, is the copyright owner of certain digital base mapping materials developed under the Milwaukee County Automated Mapping and Land Information System (hereinafter referred to as "MCAMLIS"); and

WHEREAS, the MCAMLIS program is presently being administered by the Milwaukee County Land Information Office within the Milwaukee County Department of Transportation and Public Works through an employee designated as the MCAMLIS "Project Manager"; and

WHEREAS, _____ a unit or agency of government, a not-for-profit organization, an educational institution, or a private firm or individual seeking MCAMLIS digital data for internal, non-commercial use, (hereinafter referred to as the "Requestor"), has filed a request with the MCAMLIS Project Manager to obtain duplicate files of the digital MCAMLIS base mapping materials (hereinafter referred to as the "digital base maps"); and

WHEREAS, the Steering Committee is willing to permit the Requestor to obtain the digital base maps subject to the following conditions and understandings:

1. Within ten days after the later of the execution of this License Agreement or the Project Manager's receipt of the Paragraph 6 payment, the Steering Committee will provide Requestor with one digital copy of the requested MCAMLIS data in a mutually agreed format. Subject to the limitations set forth below, the Steering Committee agrees not to object to the Requestor using, reproducing, modifying, and/or displaying the digital base maps; preparing or distributing in non-digital form reports incorporating the base maps derived from the digital files; and distributing the base maps and reports in non-digital form to all parties concerned.
2. The Steering Committee agrees not to object to the Requestor making duplicate copies of the digital base map files for its own internal use. Such files, however, are intended only for the use of the employees and agents of the Requestor; and the Requestor and its employees and agents are expressly prohibited from providing copies of the digital base map files to any other party.
3. The Requestor agrees to use the digital base maps only for noncommercial purposes; that is, for governmental and educational purposes and for private purposes when a private firm or individual periodically uses selected digital materials -- not the entire MCAMLIS digital files -- for internal use.

4. The Requestor agrees to hold the digital base map files in confidence and prevent any third party from having access to those files or to any materials in digital form derived there from except as otherwise authorized by the Steering Committee by special agreement with the Requestor.
5. The distribution or use of the digital base maps in violation of the foregoing provisions shall be deemed a copyright violation and shall automatically terminate all rights of the Requestor relative to the digital base maps or any materials derived there from.
6. The Requestor agrees to reimburse the Steering Committee (via payment to the Project Manager), if requested, in the amount set forth in the attached cost schedule in connection with obtaining a copy or copies of the digital base maps.
7. The Requestor understands that the digital base maps and materials are being provided AS IS, WITHOUT ANY WARRANTY BY THE STEERING COMMITTEE OR ITS MEMBERS OR THE PROJECT MANAGER OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND WITHOUT ANY WARRANTY OF ACCURACY. The Requestor hereby agrees to indemnify, defend, and hold harmless the Steering Committee, its members, and the Project Manager, and their subcontractors, from any claims arising out of the Requestor's use of the digital base maps or any information or materials derived there from.
8. The Requestor understands that none of the Steering Committee, or its members, or the Project Manager, or their subcontractors, has any obligation to supplement or update any of the digital base maps provided. Should, however, the Steering Committee or its members provide any updated digital base maps to the Requestor; such updated maps shall automatically be covered hereunder.
9. In the event that MCAMLIS derived hardcopy maps depicting the MCAMLIS copyright have been modified by Requestor, the Requestor shall describe such modification and depict the modification as clearly distinguishable from the original MCAMLIS base maps. The Requestor agrees not to misrepresent modified maps as being the original MCAMLIS base maps, nor to state or imply that modifications made by Requestor were reviewed or approved by MCAMLIS.

AGREED TO:

Requestor: _____

By: _____ Date: _____

Title: _____

Steering Committee

By: _____ Date: _____

Title: Project Manager

MKE\8919307.1

"libeyersdorff@mail.co.marathon.wi.us" <libeyersdorff@mail.co.marathon.wi.us>, "toestreich@marinettecounty.com" <toestreich@marinettecounty.com>, "mstalker@co.marquette.wi.us" <mstalker@co.marquette.wi.us>, "bill.shaw@milwcnty.com" <bill.shaw@milwcnty.com>, "ahoff@co.monroe.wi.us" <ahoff@co.monroe.wi.us>, "behlinlt@co.outagamie.wi.us" <behlinlt@co.outagamie.wi.us>, "Surveyor@co.polk.wi.us" <Surveyor@co.polk.wi.us>, "borlick@co.rock.wi.us" <borlick@co.rock.wi.us>, "scobb@co.sauk.wi.us" <scobb@co.sauk.wi.us>, "davidf@co.Saint-Croix.wi.us" <davidf@co.Saint-Croix.wi.us>, "nnelson@co.washburn.wi.us" <nnelson@co.washburn.wi.us>, "ctello@co.waupaca.wi.us" <ctello@co.waupaca.wi.us>, "gpopelka@co.wood.wi.us" <gpopelka@co.wood.wi.us>, "Herreid, Peter E - DOA" <Peter.Herreid@Wisconsin.gov>

DATE: May 16, 2011

TO: Wisconsin Land Information Officers

FROM: Mike Friis, Program Manager
Wisconsin Land Information Program

RE: Wisconsin Land Information Program 2011
Training & Education and Base Budget Grant Applications

I am pleased to announce that the department is able to fund 2011 Wisconsin Land Information Program grants and the grant applications are now available.

As you are undoubtedly aware, deed recording fees continue to lag and the state budget situation remains very difficult and there are many cuts across all levels of government. The Wisconsin Land Information Program will have $521,600 available in total funding for 2011 base budget grants and training and education grants. Of this total, $500,000 is allocated for base budget grants (each county's eligibility amount was prorated at 43%).

According to program statutes and administrative rule, every Wisconsin county land information office is eligible for a training & education grant of $300. In addition, counties that retained less than $50,000 in deed recording fees during state fiscal year 2010 (July 1, 2009 – June 30, 2010) are eligible for base budget grants. A list of all counties with their retained fees and their grant eligibility is found on Table A of the base budget grant application. This year a total of 46 counties are now eligible for grants, up from 44 in 2010.

The base budget and training & education grant applications (due August 15, 2011) can be accessed online at: www.doa.state.wi.us/WLIP (To navigate to the application forms go to the "Grant Program" link).

Wisconsin Land Information Program
Grants-In-Aid to Local Governmental Units

Year 2011-Cycle Training and Education Grant Application
Pursuant to Chapter Adm. 47, Wisconsin Administrative Code

Grant Applications Accepted:
May 16, 2011 – August 15, 2011

Mail Your Application, Including Required Signature To:

Michael Friis, WLIP Program Manager
Wisconsin Department of Administration
101 E. Wilson Street, 9th Floor
Madison, WI 53703

If you have questions about anything contained in this application packet, please email or call Michael Friis at (608) 267-7982

General Information

Please complete this application form in order to receive a Wisconsin Land Information Program (WLIP) 2011 training and education grant. This year, as in the past, the WLIP will award training and education grants.

This packet contains an application form for the training and education grant.

Training and Education Grants
All county land information offices are eligible for training and education grants. Wisconsin Statute Section 16.967(7)(b) authorizes up to a $300 annual grant "for the training and education of county employees for the design, development and implementation of a land information system." These funds can be used for staff to participate in workshops and courses provided by institutions of higher education, professional land information organizations or land information system vendors.

Grant Application Submittal and Deadline:
All applications must be submitted in hardcopy form. Applications must have a U.S. Postal Service postmark of **August 15, 2011** or earlier. Completed applications, including the required signature, should be mailed to:

Michael Friis, WLIP Program Manager
Wisconsin Department of Administration
101 E. Wilson Street, 9th Floor
Madison, WI 53703

Signature and Project Timeline:
The Land Information Officer's signature is required on this application.

Upon project approval, funds for all grants will be disbursed in their entirety.

Year 2011 grant projects must be completed by June 30, 2012.

WLIP Year 2011 Grant Application

Training and Education

For DOA Use - Date of Receipt

1. **Applicant County:**

2. **Land Information Officer:**

Name: John La Fave Title: Milwaukee County Register of Deeds
Office: Courthouse Room 103
Mailing Address: 901 N 9th St. Room 103
City: Milwaukee State: WI Zip: 53233-1453
Telephone Number: (414) 278-3083 E-Mail Address: Jlafave@milwcnty.com

3. Funding Amount

Available: $300.00 **Requested: $300**

4. Provide a brief description of intended expenditures for the training and education grant:
This Grant will be used to partially offset the cost of attending and registering for WLIA Conference and Workshop events.

5. **Date of your latest land information plan update:**

Day/Month/Year 3/22/2011

6. **Statement and Signature of Land Information Officer:**

As the Land Information Officer for Milwaukee County, I am authorized to submit this application, as an eligible applicant, on the authority of the county board. I understand that application authority shall be obtained by specific action of the county board, and that the WLIP may request evidence of such authority. Project work shall meet all standards and conditions as set forth by the relevant Wisconsin State Statutes, Wisconsin Administrative Code, and policy adopted by the Wisconsin Department of Administration. To the best of my knowledge, the information contained in this application is accurate and complete. I understand that grant projects must be completed by June 30, 2012.

Signature:

_____ ***Date:***____/____/____
Day/Month/Year

MABAS Division 107
Fire Chiefs

Mr. Shaw,

I am submitting this request in reference to your phone conversation with Brian Bieganski of the South Milwaukee Professional Firefighters Union. As discussed, the Union Consolidation Committee is in need of assistance acquiring Arcview files for a GIS study currently being conducted in suburban Milwaukee County. After consulting with Brian, the individual who will be analyzing the data is requesting the following information:

-Street Centerline Map of Milwaukee County

-Jurisdictional Boundary Map of Milwaukee County

The information required is a map of the entire county, with the ability to see street names and jurisdictional boundaries. If we are able to see the jurisdictions in contrasting colors, that would be ideal. To include such details as: waterways, railroad tracks, parkland, and fire station locations would also be helpful. If this can be accomplished on one map, that would be acceptable. The file format requested is Arcview Shapefile. Brian Bieganski, whom you previously spoke with, will be recipient of the data request. Please contact Brian with further questions: Brian Bieganski (414) 241-9632 brian_bieganski@yahoo.com Thank you in advance for your assistance.

Regards,

Michael Jankowski

Michael Jankowski
Division 107 Fire Chiefs

Representing Fire Chief's from:
– Cudahy – Hales Corners – Franklin – Greendale – Greenfield –
– Milwaukee County Airport – North Shore – Oak Creek– South Milwaukee –
– St. Francis – Wauwatosa – West Allis – Wisconsin Air National Guard –