



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: March 10, 2011

SUBJECT: MCAMLIS 85th Steering Committee Meeting Materials

Enclosed please find a set of materials that the steering committee will take up at its scheduled March 22nd meeting.

- I. Meeting Agenda
- II. Nominating Committee 2011 Candidate Recommendation
- III. Meeting Minutes of the 84th Steering Committee meeting held December 7th, 2010
- IV. Reports
 - A. **Maintain Core Foundational Elements**
 1. Report materials related to the status of the Evaluation of Orthophotography Products; the 2010 Regional Orthophotography Program; the Pictometry "AccuPlus" Orthophotography; and Oblique Imagery Products.
 2. Report materials related to the status of strategic initiatives regarding Topographic/Planimetric Map Maintenance..
 - B. **Promote the Integration of Parcel Based Land Information**
 1. Report materials related to the status of MCAMLIS street address and cadastral map maintenance operations.
 2. Report materials regarding on-going Enterprise Address System (EAS) efforts
 - C. **Educational Outreach**
 1. Report materials related to the status of work performed on behalf of MCAMLIS in support of local community mapping efforts
 - D. **Countywide Initiatives**
 1. Report materials related to the status of CDBG-EAP Grant application and LiDAR Data Acquisition Program

- 2. Report materials related to the status of the status of 2010 surveyor activities
(to be distributed at the meeting)
- E. Report materials related to the MCAMLIS Program Fiscal status
- V. Old Business
 - A. Report materials regarding status of the Land Information Modernization and Integration Plan **(to be distributed at the meeting)**
- VI. New Business
 - A. Materials related to the Milwaukee County Land Information Officer and MCAMLIS Staff recommendation regarding projects and expenditures to be undertaken as part of the \$2 retained fee.
- VII. Correspondence
 - A. Letter addressed Milwaukee County in support of participation at UWM GIS Day 2010;
 - B. Letter addressed to Debbie Griffiths, Risk Manager, AT&T Wisconsin regarding active participation in the MCAMLIS Program

* * * * *

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

Eighty-Fifth Steering Committee Meeting

AGENDA

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

I. Roll Call

II. Special Order of Business

Election of 2011 MCAMLIS Steering Committee Officers

III. Meeting Minutes

Consideration of the minutes of the 84th Steering Committee meeting held December 7th, 2010

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 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, and;

3. Report by MCAMLIS Staff regarding 2010 Accomplishments.

E. 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.

VI. New Business

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.

VII. Correspondence

VIII. Date, time, and place of next meeting

IX. Adjournment



MEMORANDUM: FROM ENGINEERING

DATE: December 13, 2010

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

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

SUBJECT: NOMINATING COMMITTEE REPORT

Pursuant to the direction of Mr. Donald Nehmer, Chairman of MCAMLIS and his selection of a nominating committee consisting of Greg High and myself as the Nominations Committee, please be advised that via telephone/internet the committee has selected the following nomination for officers for the 2011 MCAMLIS Steering Committee:

Chairman: Mr. Donald Nehmer
Vice Chairman: Ms. Nancy Olson

Both candidates have agreed to serve as officers for the calendar year of 2011. It is recommended that the chair appoint Milwaukee County staff as secretary.

Respectfully submitted,

John Bennett
Greg High

JMB/sg

MINUTES OF THE 84th MEETING
Milwaukee County Automated Mapping and Land Information System
Steering Committee

Date: Tuesday, December 7th, 2010
Time: 9:00a.m.
Place: Milwaukee Metropolitan Sewerage District
MMSD Hdqtrs, Room 401
260 W. Seeboth Street
Milwaukee, WI 53204

Members Present

Kurt W. Bauer	Milwaukee County Surveyor
Donald R. Nehmer, Chairman	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
Nancy A. Olson, Vice Chair	Chief Information Officer, Information and Technology Management Division, City of Milwaukee
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

Members Absent

Guest and Staff Present

Tammy Bronson	City of Milwaukee, Information and Technology Management Division
Pamela Booth	City of Milwaukee, Information and Technology Management Division
Gary E. Drent	Fiscal and Budget Manager, Milwaukee County, DTPW/AE&ES
William C. Shaw	MCAMLIS Project Manager, Milwaukee County DTPW/AE&ES

Kevin Bruhn
 Hardy Meihsner
 Kathleen Bach
 Marcia Cornnell

Milwaukee County DTPW/AE&ES
 GeoDecisions
 Milwaukee County Register of Deeds
 City of Milwaukee

I. ROLL CALL

Chairman Nehmer called the Eighty-Fourth 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. MEETING MINUTES

II (a) CONSIDERATION OF THE MINUTES OF THE 83RD STEERING COMMITTEE MEETING HELD SEPTEMBER 21, 2010 & CONT'D ON OCTOBER 6TH, 2010

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

Bauer: The minutes should clearly indicate that the last meeting, held on 10/6/10, was a continuation of the 9/21/10 meeting.

Motion: Olson moved to accept minutes
Second: Bauer, motion carried unanimous

III. REPORTS

III (a) Report by Milwaukee County DAS staff on MCAMLIS Fiscal Status

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

Shaw: inquired regarding clarification of the \$4/\$6 remaining unrestricted balance.

Fudge: replied that he was unable to fully explain this item given that he was not the author of the current report in use by the Committee and offered after several questions regarding the format of the MCAMLIS financial report that he could create another format for the MCMALIS financial report that would be easier to understand prior to the next meeting.

Bauer: submitted that it is important to the Committee to know how much money is available to commit to new projects. Otherwise, he has no problem with the current format.

Bennett: requested that a column be added that incorporates estimated revenues into an end-of-year balance so the Committee would know what could be carried over into the next year.

Shaw: requested that Mr. Fudge provide an end-of-year balance.

Fudge: stated that a final balance could be determined by mid-January and included in the next report.

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

III (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

III(c) Promote the Integration of Parcel Based Land Information

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

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

Bauer: stated that he would prefer that status maps to be included as part of a quarterly report. Adding that the report should indicate where the address and cadastral data is current. Further stating that it was unclear why the County needs to report on this when it is the City that is being paid by MCAMLIS.

Olson: replied that MCAMLIS pays the County to do the same work the City is paid to do. Adding that if the City is asked to report, the same should be asked of the County.

Nehmer: concluded that he would like to see this report from both groups annually, including status maps to know regularly where there may be gaps.

Shaw: submitted that the status maps did not change quarter by quarter and suggested that the reporting would only including maps that indicate exceptions. Adding that nonetheless, providing maps quarterly or annually is not a problem.

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

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

Olson: 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 ON THE STATUS OF THE ENTERPRISE ADDRESS SYSTEM PROJECT

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

Nehmer: inquired as to when the project would be completed?

Shaw: replied at the end of this year.

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

III (d) Educational Outreach

1. REPORT BY MCAMLIS STAFF ON THE STATUS OF WORK PERFORMED 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

III (e) Countywide Initiatives

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

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

Bauer: asked for further clarification of what was actually proposed as a means of updating the topographic and planimetric map features.

Shaw: indicated that he would work with Mr. Bauer when the time came to formalize an acceptable recommendation for Committee approval.

Bennett: offered to set up a presentation with topographic data users and that the MMSD Technical Advisory Team meeting might be a good venue for this.

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

2. REPORT BY SEWRPC STAFF ON THE STATUS OF MCAMLIS FLOODLAND MAPPING PROJECT.

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

Bauer: adding that the Chairman may want to ask Commission staff to give a report at a meeting next year. Further suggesting that Mike Hahn be requested to report on this item.

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

IV. OLD BUSINESS

IV (a) MCAMLIS Staff report regarding status of the Land Information Modernization and Integration Plan

Motion: Bennett moved to approve as presented

Second: Olson, motion carried unanimously

IV (b)

V. NEW BUSINESS

V (a) Consideration of a 2011 agreement for Milwaukee County Surveyor Services between MCAMLIS and SEWRPC

Motion: Bennett moved to approve as presented

Second: Olson, motion carried unanimously

V (a) Consideration of a 2011 agreement for Map Maintenance Services between MCAMLIS and the City of Milwaukee

Olson: directed the Committee to the agreement included with the meeting materials.

Motion: Bennett moved to approve as presented
Second: Bauer, motion carried unanimously

V (b) Appointment of a Steering Committee Nomination Committee to recommend a slate of officers to be seated at the Committee's next regular meeting

Nehmer: requested that Mr. High and Mr. Bennett accept appointment to the committee.

Bennett & High: agreed to meet and submit nominations to be taken up at the next Committee meeting.

V. CORRESPONDENCE

VI (a) Letter(s) addressed to the Milwaukee County Board Chairman, Lee Holloway in support of the Milwaukee County Register of Deeds 2011 Budget (Nehmer, Olson, La Fave)

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

VI (a) Letter addressed to the MCAMLIS Project Manager from John Place, Manager Gas Engineering and Mapping, We Energies appointing Timothy Marquardt, Supervisor Mapping GIS Support, to represent We Energies on the MCAMLIS Steering Committee

Motion: Bennett moved to provide a plaque to commemorate Mr. Place's service to the MCAMLIS Steering Committee and to present the plaque to Mr. Place at the next meeting.

Second: Olson, motion carried unanimously

Secretary's Note: Mr. Place is not available for the March 22nd meeting but could make himself available to attend the Committee's June meeting if it were possible to schedule that meeting for June 14th.

VII. DATE, TIME, AND PLACE OF NEXT MEETING

March 22nd, 2011 @ 9:00am, MMSD (next regular meeting)

VIII. ADJOURNMENT

Motion: Olson moved to adjourn
Second: High, motion carried unanimously



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MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: March 7, 2011
SUBJECT: 2010 Regional Orthophotography 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 photogrammetric 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 – 12/10 – 3/10

1. Convened the 1st Orthophotography TAC meeting on 2/15/2011
2. TAC membership approved proposed study objectives
 - 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.

NEXT

1. The next meeting of the TAC is scheduled for 5/17/2011

Attach:None

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MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: March 4, 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 the 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 many of these are easily detected via remote measures e.g., comparing elevation can help identify a complete 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.

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 development of scope 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 it is believed that critical planimetric feature updates are fast becoming feasible through the application of image analysis techniques in combination with MCAMLIS staff and the services of a certified photogrammetric services contractor.

Accomplishment this period 9/10 – 3/11

- Compilation of Planimetric Update exhibit(s) (attached)
- Met with Jeff Stroub – Aerometric to discuss project feasibility and costs
- Met with Kevin Kuhlmann – Sanborn to discuss project feasibility and costs

Next

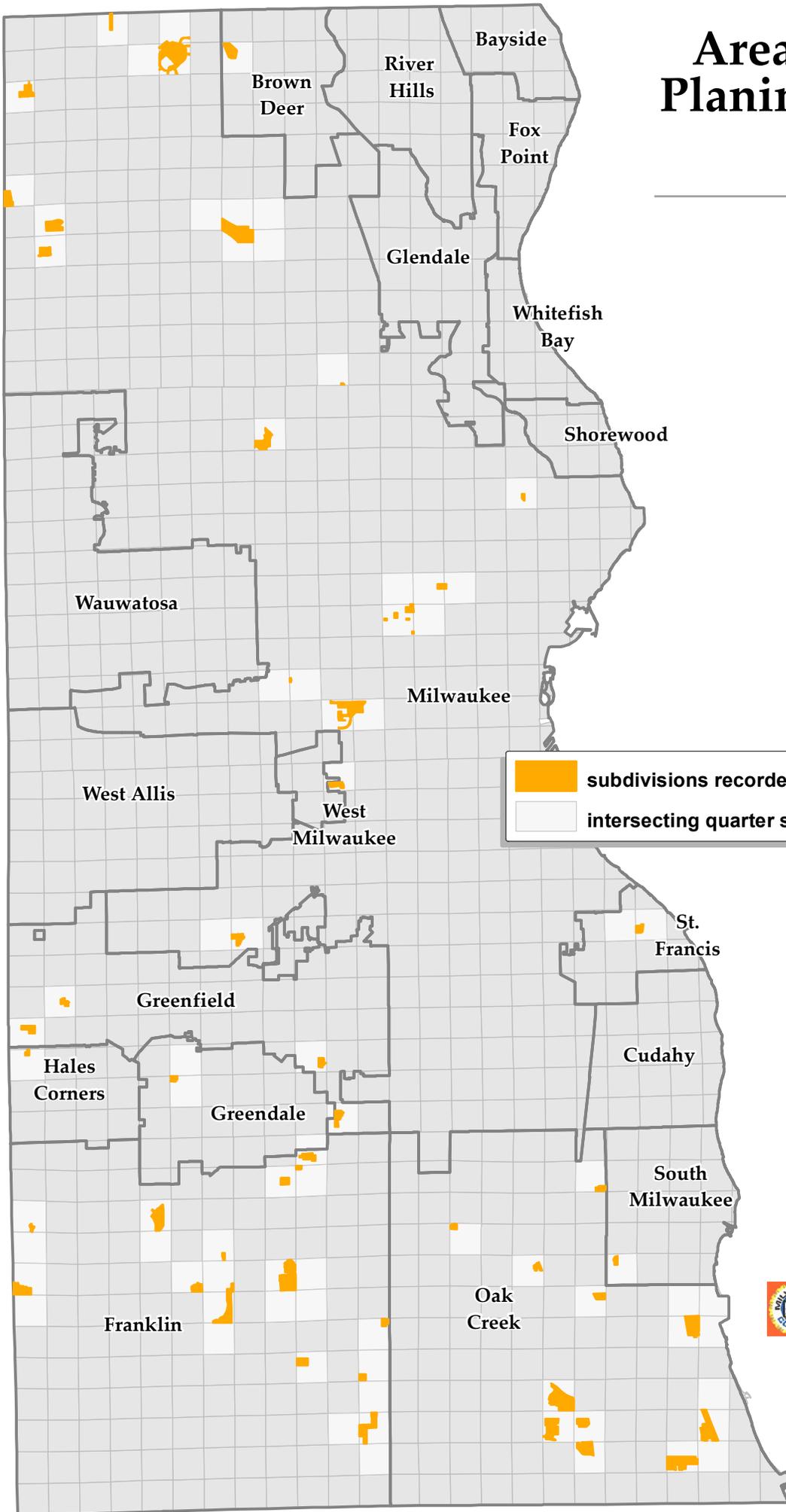
- Continue project scope development and specifications

Attach:Planimetric_update_areas.pdf, LiDAR_change_detection_exhibit

* * * * *

Areas Targeted for Planimetric Mapping Updates

February 28, 2011

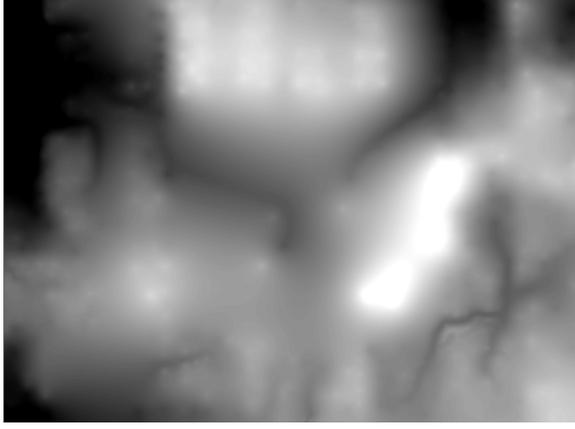


	subdivisions recorded since 2004-05 planimetric mapping
	intersecting quarter sections (20.1 sq. mi., 8.3% of total area)



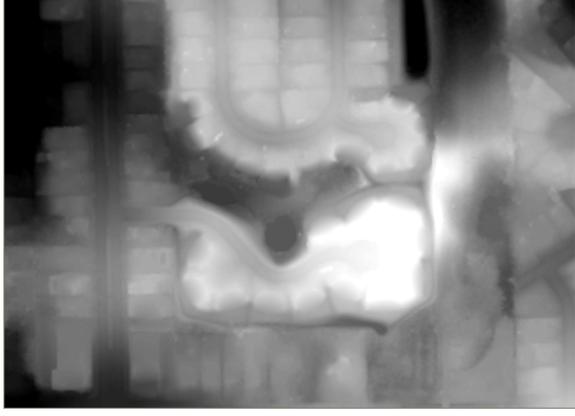
Milwaukee County
Land Information Office

Detecting Change using Elevation Models



2005 Photogrammetric
Elevation Model

-



2010 LiDAR
Elevation Model

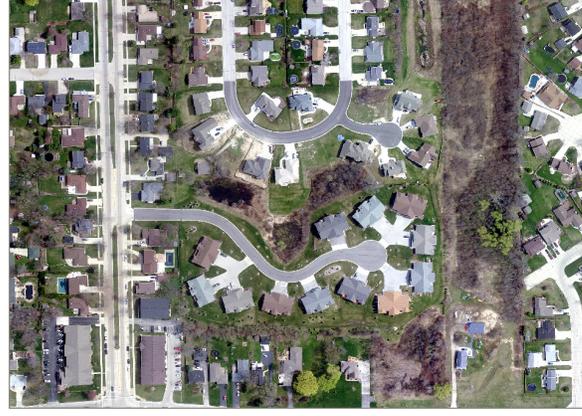
=



Elevation Difference Raster



2005 Ortho



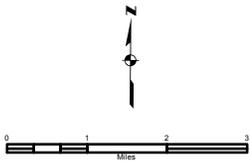
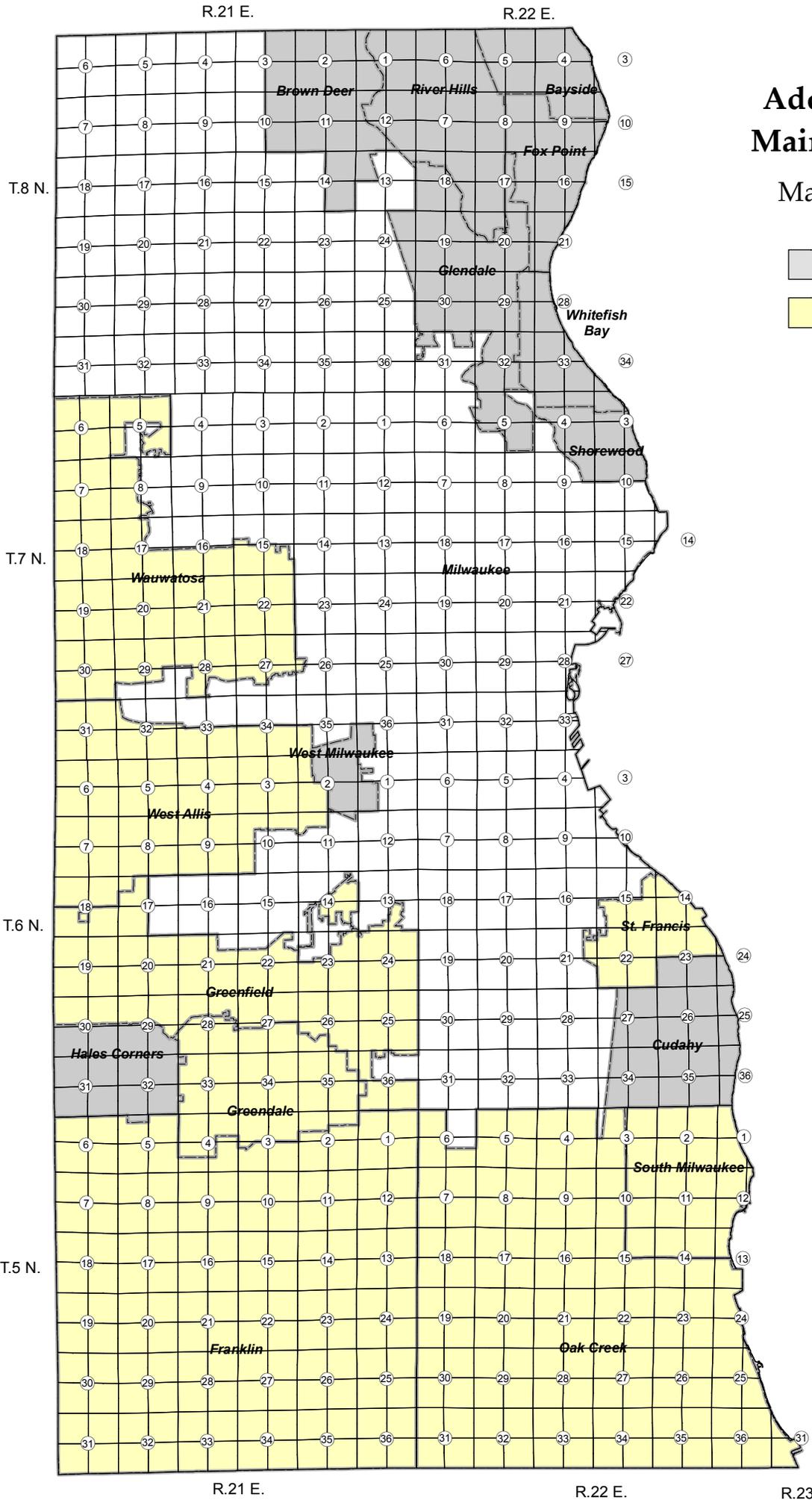
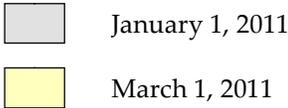
2010 Ortho



Elevation Difference Raster
& 2010 Ortho Overlay

MCAMLIS Address Database Maintenance Status

March 2011 Status

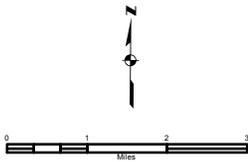
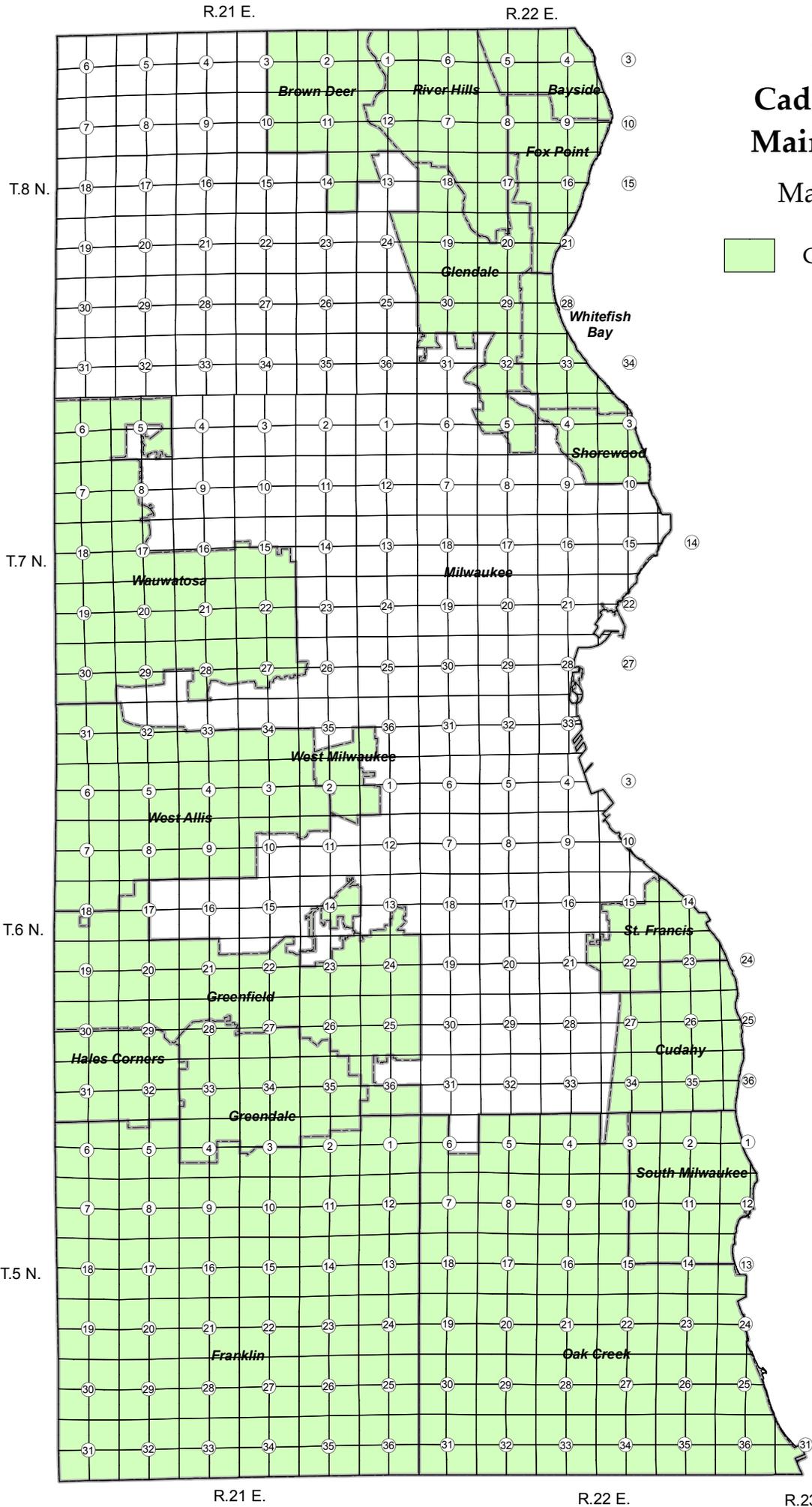


Source: MCAMLIS Project Manager

MCAMLIS Cadastral Database Maintenance Status

March 2011 Status

 Current as of February 1, 2011



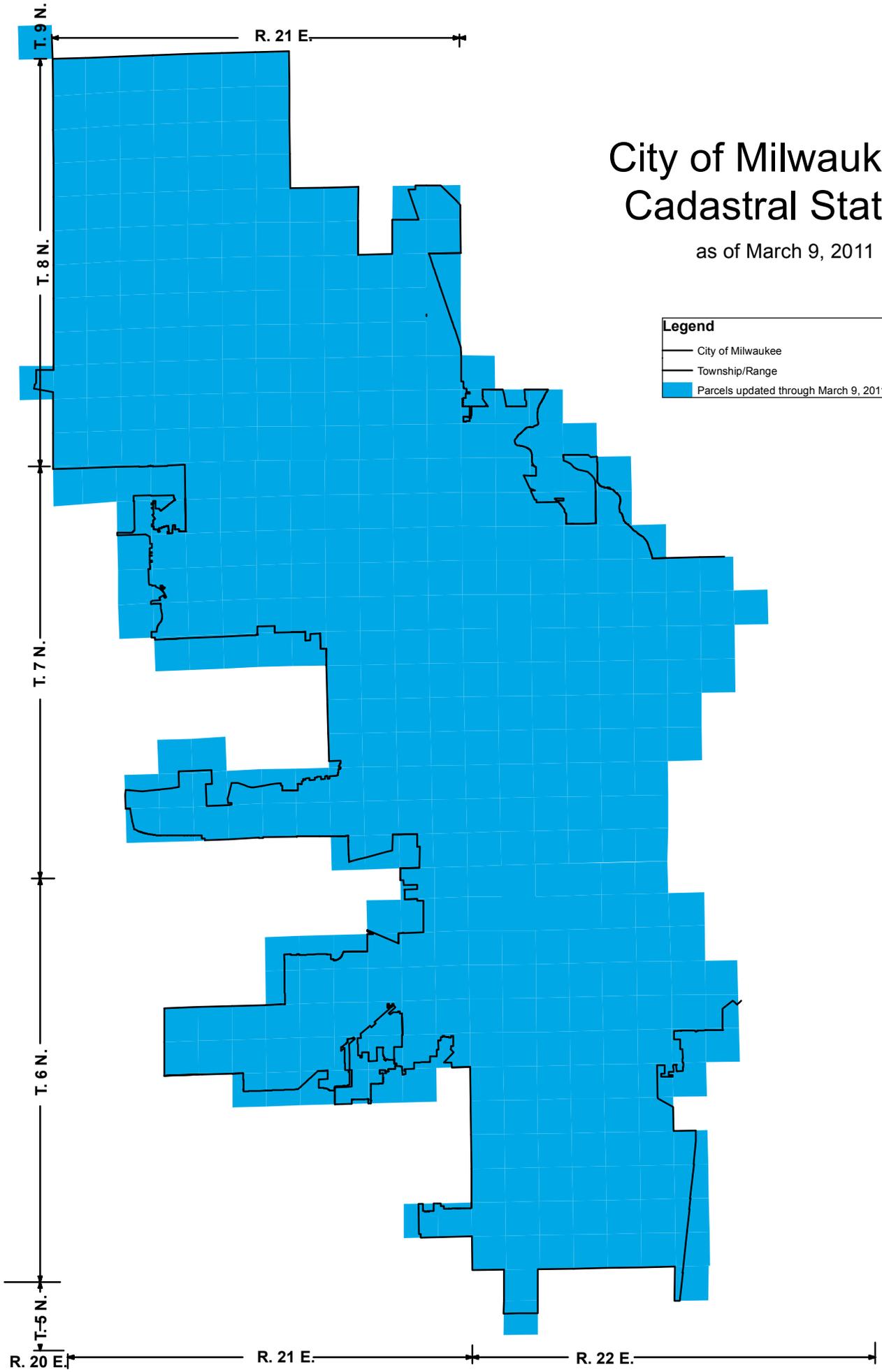
Source: MCAMLIS Project Manager

City of Milwaukee Cadastral Status

as of March 9, 2011

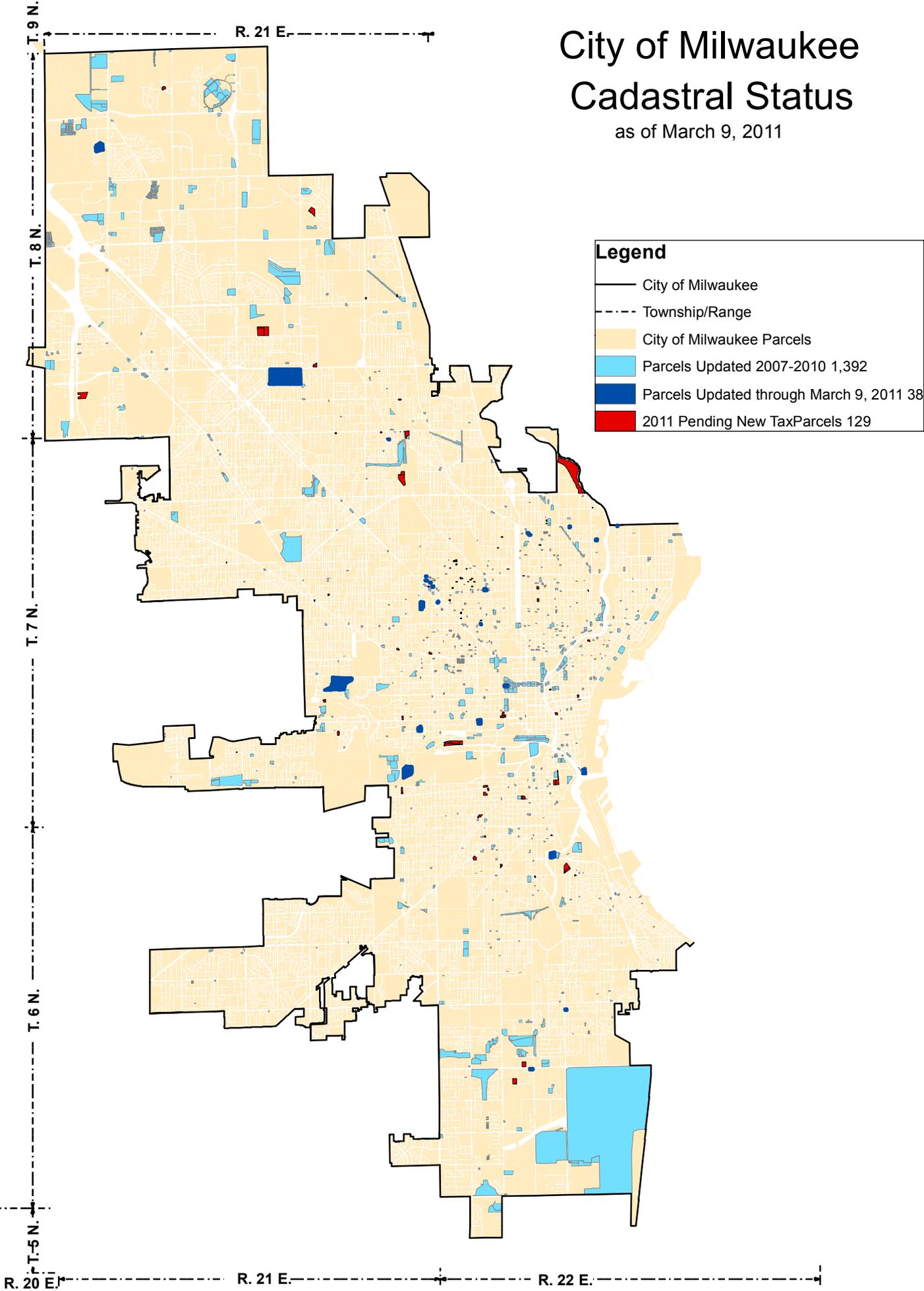
Legend

- City of Milwaukee
- Township/Range
- Parcels updated through March 9, 2011



City of Milwaukee Cadastral Status

as of March 9, 2011





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MILWAUKEE COUNTY LAND INFORMATION OFFICE**

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

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: March 9, 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 – 12/10 – 3/11

1. Deployed 4th qtr consolidated Milwaukee County and City of Milwaukee Cadastral Data
2. Delivered Building Feature data to City of Milwaukee County
3. Initiated discussions w/ ESRI to scope relevant functional capabilities within ArcGIS 10
4. Initiated construction of Street Centerline routable network freeway segments (see attach Status exhibits)

NEXT

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

Attach: Address_Model_Status_110228
Status of Routable Divided-Traffic Street Centerlines
Centerline Network exhibits

MCAMLIS EAS Address Model Status

Structure-to-Address Relationship

For Work Performed through 2-28-11

PROGRESS

Percentage of Addresses
Assigned to Structures

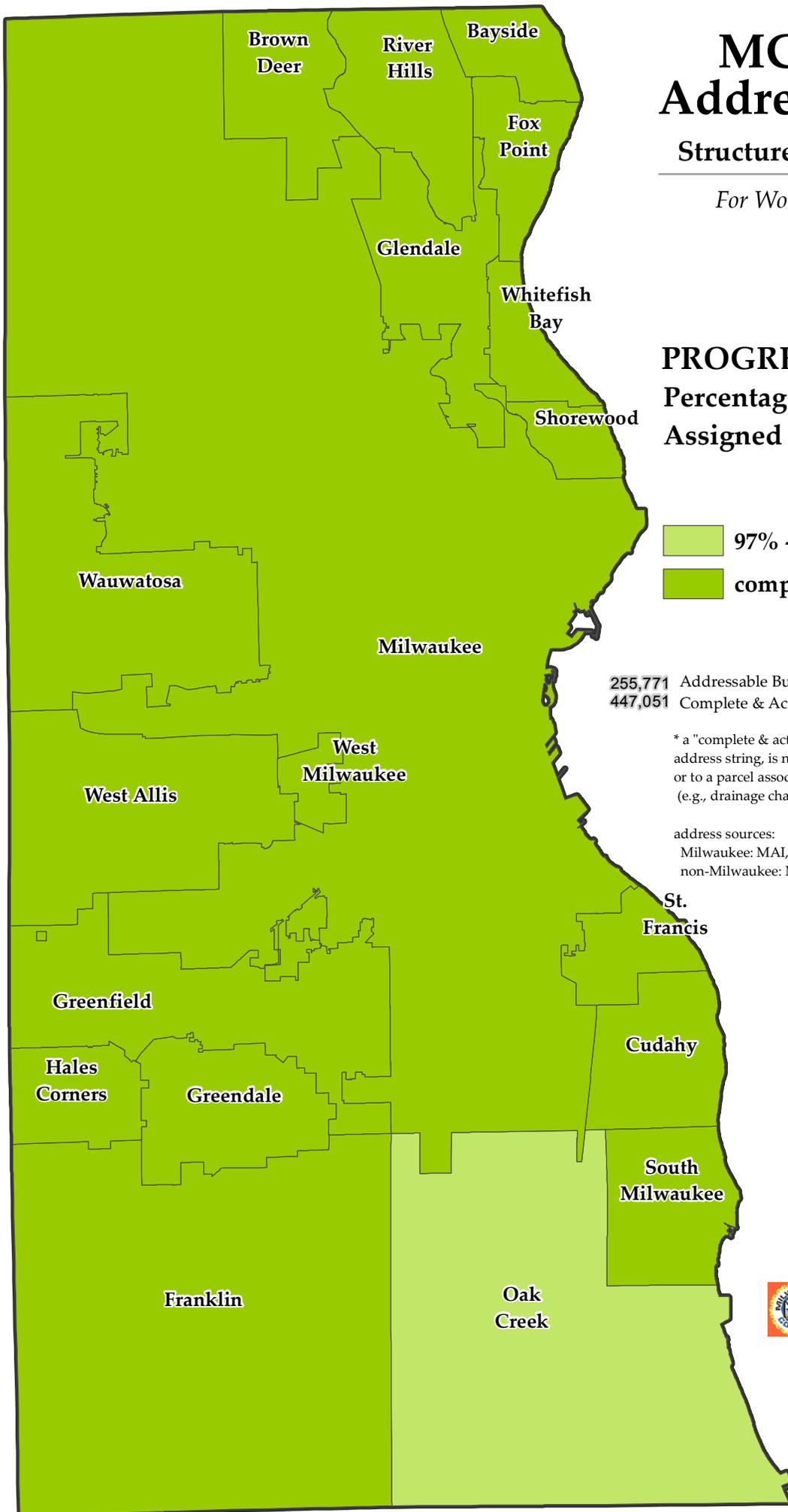
-  97% - 98.5% (field collection required)
-  complete / ongoing maintenance (>98.5%)

255,771 Addressable Building Polygons
447,051 Complete & Active Address Records*

* a "complete & active" address record includes enough data for a full address string, is not linked to a retired or vacant parcel or to a parcel associated with a non-addressable land use (e.g., drainage channel, right-of-way, etc.)

address sources:

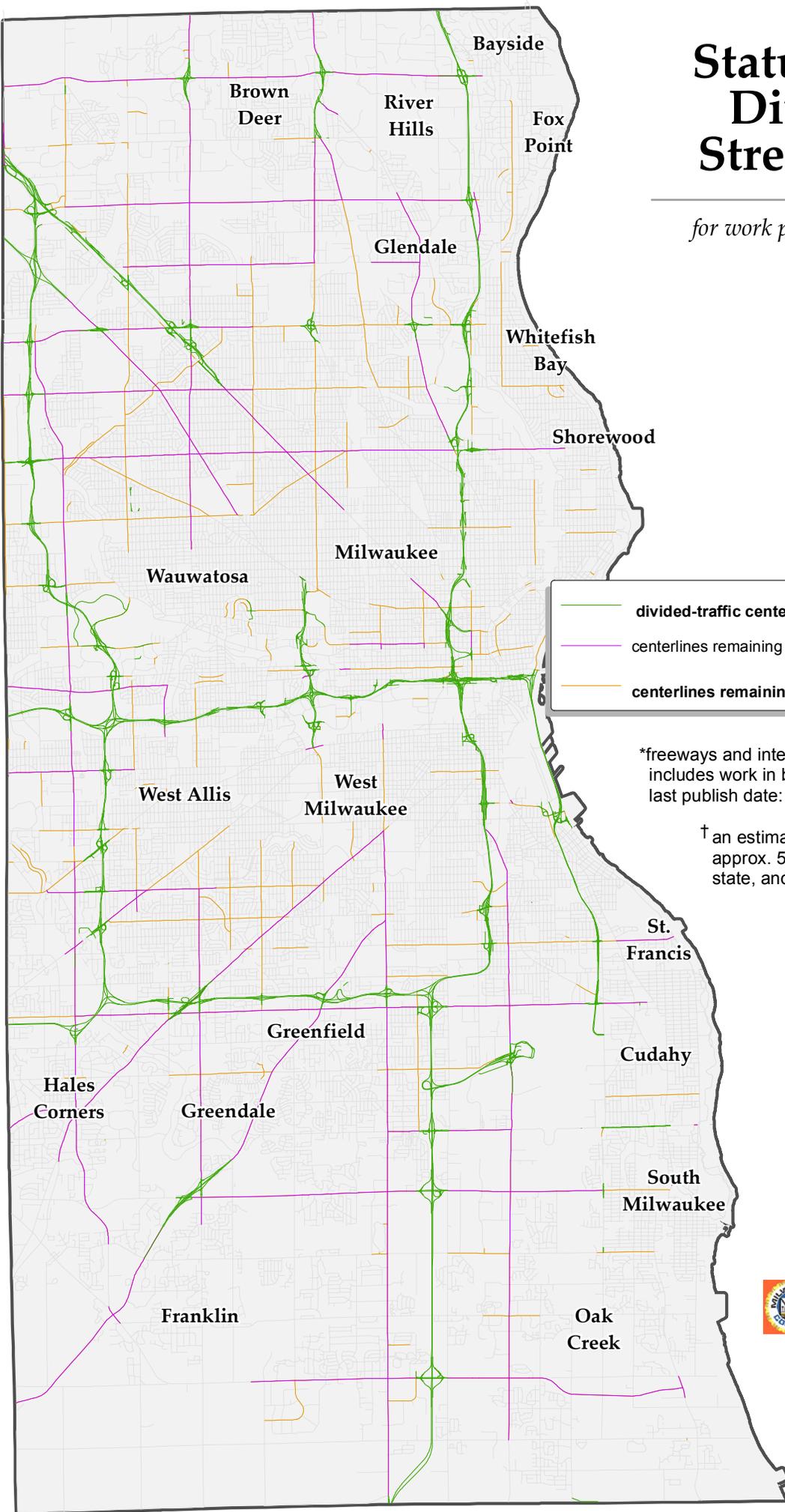
Milwaukee: MAI, Milwaukee Assessor, MPROP, We Energies
non-Milwaukee: MCAMLIS-maintained address table



Milwaukee County
Land Information Office

Status of Routable Divided-Traffic Street Centerlines

for work performed through March 1, 2011



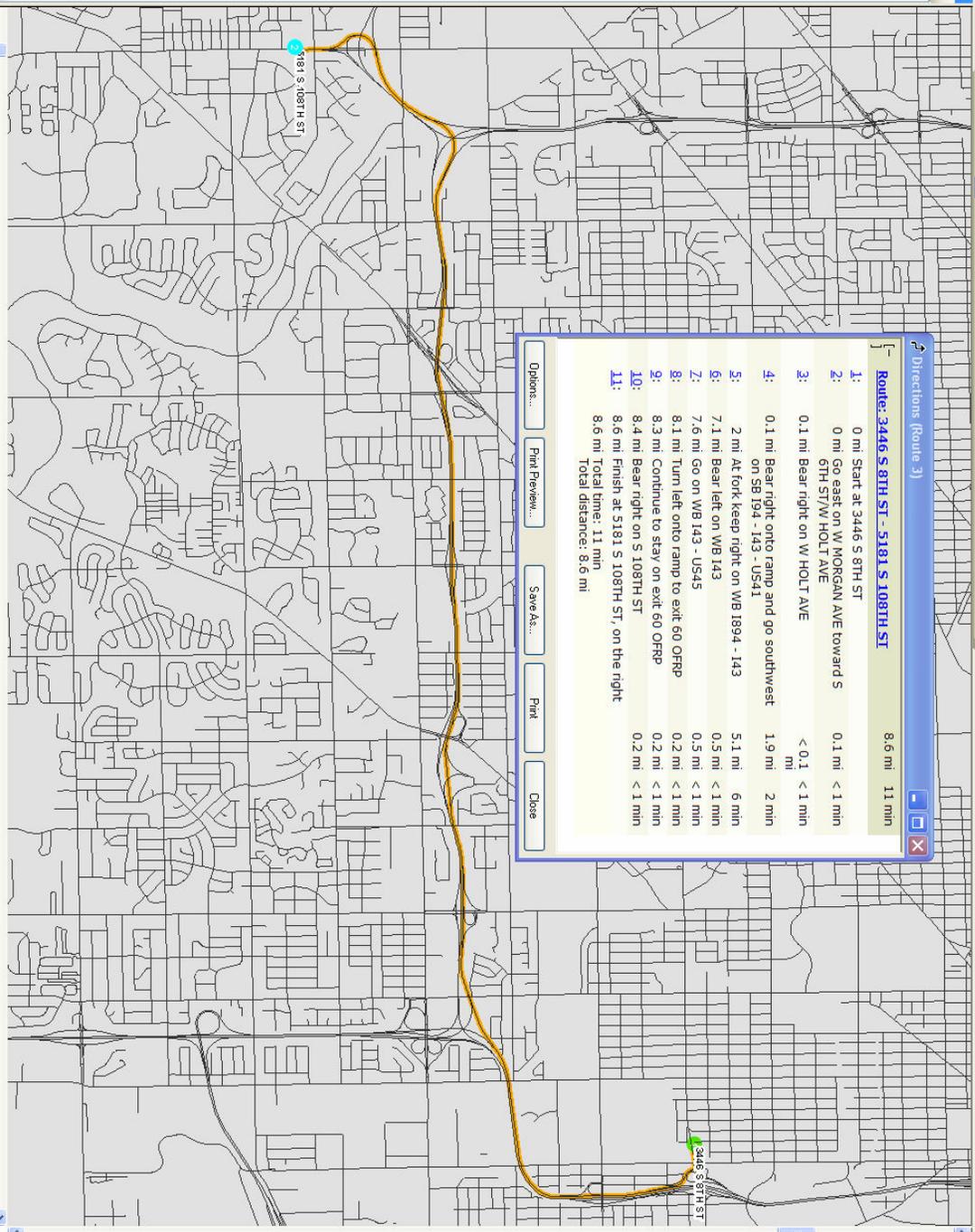
- divided-traffic centerlines added since last publish date*
- centerlines remaining to be modelled as divided-traffic: highway †
- centerlines remaining to be modelled as divided-traffic: non-highway †

*freeways and interchanges: 343 miles, 2261 segments
includes work in building a routable network attribute table
last publish date: 11/16/10

† an estimated 600 miles, 5500 segments remain
approx. 50% are surface-routed county,
state, and US highway routes



Milwaukee County
Land Information Office



Catalog

Home - Centerline_LAFNetwork

- centerline_network.mdb
- centerline_network_edit.mxd
- centerline_network_test.mxd

Folder Connections

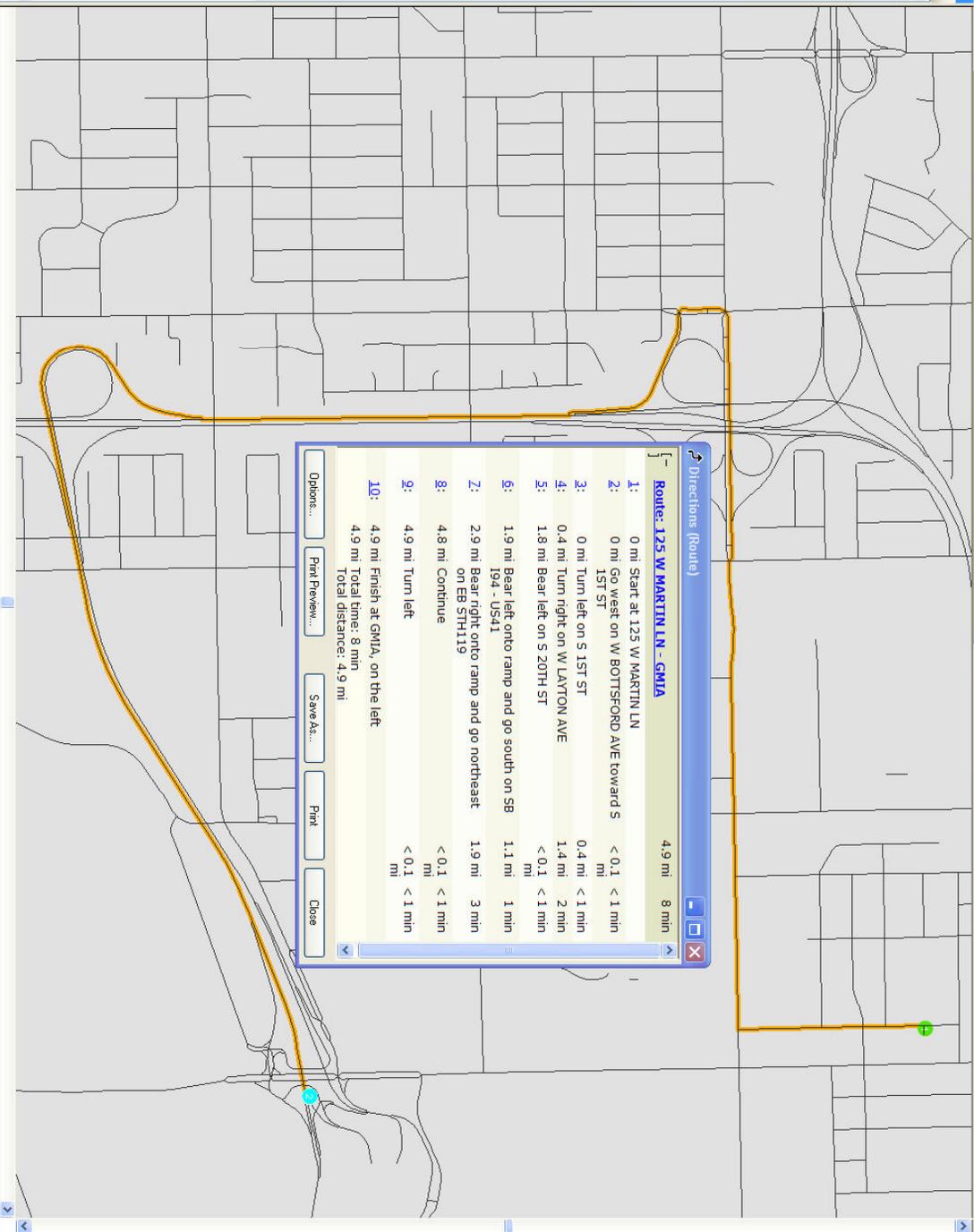
- Database Servers
- Database Connections
- GIS Servers
- Interoperability Connections

Name	Type
centerline_network_test.mxd	Map Doc.
centerline_network_edit.mxd	Map Doc.
centerline_network.mdb	Personal

2518652.246 3721201.086 Feet

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 - Routes
 - Routes
 - Line Barriers
 - Restriction
 - Scaled Cost
 - Polygon Barriers
 - Restriction
 - Scaled Cost
 - Route 2
 - Stops
 - Located
 - Unlocated
 - Error
 - Time Violation
 - Point Barriers
 - Restriction
 - Added Cost



Directions (Route)

Route: 125 W MARTIN LN - GM1A

1:	0 mi Start at 125 W MARTIN LN	4.9 mi	8 min
2:	0 mi Go west on W BOTTSFORD AVE toward S 1ST ST	< 0.1 mi	< 1 min
3:	0 mi Turn left on S 1ST ST	0.4 mi	< 1 min
4:	0.4 mi Turn right on W LAVTON AVE	1.4 mi	2 min
5:	1.8 mi Bear left on S 20TH ST	< 0.1 mi	< 1 min
6:	1.9 mi Bear left onto ramp and go south on SB 194 - US41	1.1 mi	1 min
7:	2.9 mi Bear right onto ramp and go northeast on EB 5TH119	1.9 mi	3 min
8:	4.8 mi Continue	< 0.1 mi	< 1 min
9:	4.9 mi Turn left	< 0.1 mi	< 1 min
10:	4.9 mi Finish at GM1A, on the left		

4.9 mi Total time: 8 min
4.9 mi Total distance: 4.9 mi

Options... Print Preview... Save As... Print Close

Catalog

Location: Home - Centerline LAPNetwork

- Home - Centerline LAPNetwork
 - centerline_network.mxd
 - centerline_network_edit.mxd
 - centerline_network_test1.mxd
- Folder Connections
- Toolboxes
- Database Servers
- Database Connectors
- GIS Servers
- Interoperability Connectors

Name Type

- centerline_network_test1.mxd Map Doc
- centerline_network_edit.mxd Map Doc
- centerline_network.mxd Personal



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

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

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: March 9, 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 the program goals.

ACTIVITIES THIS PERIOD – 12/10 – 3/11

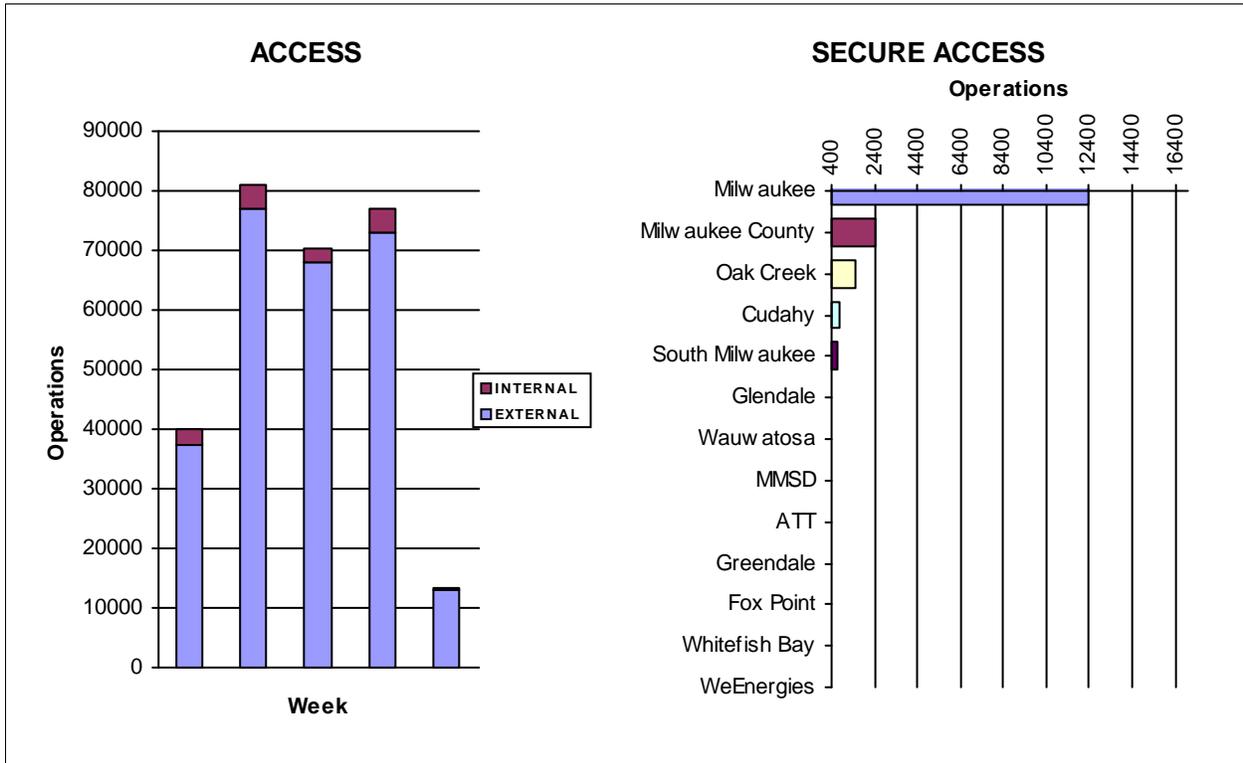
1. Develop, build, test and deploy Version 2.5 of the MCLIO Interactive Mapping Service (attached MCLIO Interactive Map Service Dashboard)
2. Incorporated updated style sheets, tutorial materials and announcements available to users of the MCLIO Interactive Mapping Service website
3. Presented MCLIO activities at the MMSD Technical Advisory Team meeting held 1/20/2011

NEXT

1. Continue MCLIO website training, data distribution and product enhancements
2. Present MCLIO activities to the Wisconsin Geospatial Infrastructure and Technology Association luncheon meeting to be held 4/14/2011 at MMSD office.

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

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: March 9, 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, Wauwatosa 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;

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

ACTIVITIES THIS PERIOD – 12/09 – 3/11

1. Completed State of Wisconsin Department of Commerce reporting requirements;
2. Received for all payment and audit certification agreements as part of the CDBG Grant requirements;

NEXT

1. No additional activities are planned. Project is complete

Attach: none

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:

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WALWORTH
WASHINGTON
WAUKESHA



MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: Kurt W. Bauer, PE, RLS, AICP
Milwaukee County Surveyor

DATE: March 15, 2011

SUBJECT: MILWAUKEE COUNTY SURVEYOR ACTIVITIES—2010

This memorandum is intended to provide the MCAMLIS Steering Committee with a report on the work of the Milwaukee County Surveyor for the calendar year January 1, 2010, through December 31, 2010. The office, and the duties and functions, of the County Surveyor are prescribed by Section 59.45 of the *Wisconsin Statutes*. In Milwaukee County the necessary work, pursuant to the direction of the County Board, is funded by document recording fees retained by the County pursuant to Section 59.43(2) of the *Wisconsin Statutes*. Since the MCAMLIS Steering Committee is charged by contract between Milwaukee County and the public and private utilities operating within the County with administering these retained recording fees, a report to the Committee on the activities of the County Surveyor is in order.

Within Milwaukee County, the U.S. Public Land Survey System has been combined with the State Plane Coordinate System and the National Geodetic Vertical Control System to provide the high order horizontal and vertical control survey network required for the preparation and maintenance of the MCAMLIS large-scale topographic and cadastral maps. Therefore, the work of the Milwaukee County Surveyor entails not only the maintenance of the U.S. Public Land Survey System as such, but also the maintenance of the MCAMLIS horizontal and vertical control survey network. Consequently, the work requires expertise in geodetic, as well as plane, surveying and in the legal aspects of property boundary determination.

Attachment 1 to this memorandum consists of a map of Milwaukee County on which are shown the location of all of the corners of the U.S. Public Land Survey System within Milwaukee County for which various types of perpetuation activities were undertaken in calendar year 2010. These activities involved the replacement of section, quarter section, center of section, and witness and meander corners which were reported as damaged, disturbed, destroyed, or proposed to be destroyed, by construction, or other activities or actions. The work involved the setting of new monuments, and, as necessary, the replacement of attendant witness marks and benchmarks. New records of U.S. Public Land Survey control station records -- dossier sheets -- were prepared for each corner concerned. The work also involved the completion of 7.0 miles of high order differential level lines as required to maintain the vertical control network. The leveling work involved the reestablishment of 12 benchmarks, and the establishment of 7 new benchmarks. A record of vertical control station form was completed for each of the benchmarks concerned.

It should be noted that, in accordance with Milwaukee County policies relative to the participation and use of disadvantaged business enterprises in the provision of County services, a contract was entered into with the firm of Dakota Intertek Corporation of Milwaukee, Wisconsin -- a minority owned firm -- to

provide assistance to the County Surveyor pertaining to the maintenance of the U. S. Public Land Survey System. More specifically, the contract provided for assistance in the remonumentation of broken or substandard concrete monuments marking the location of corners pertaining to the system. The contract specified 10 such monument locations where the contractor was instructed by the County Surveyor as to what type of work was to be performed and the specifications that were to be followed. After completion of such work, the County Surveyor performed an inspection of the monument installations, all of which were found to be in compliance with the specifications governing the work. Payment was made to the contractor in the amount of \$15,700.00 on September 8, 2010. This amount constituted 20 percent of the total cost of the County Surveyor services, thus exceeding the goal established by Milwaukee County for the participation of a disadvantaged business enterprise in this regard.

A copy of one of the new dossier sheets for a U.S. Public Land Survey corner, is provided in Attachment 2 to this memorandum as an example of a completed record form. As indicated on Attachment 1, a total of 45 U.S. Public Land Survey corners were involved in the perpetuation activity for the calendar year. In some cases, the perpetuation activity resulted in the determination of revised elevations for both the corners and the attendant benchmarks. In one case the State Plane Coordinates of a corner—the North one-quarter corner of U.S. Public Land Survey System Section 5, Township 6 North, Range 22 East—were changed. In these cases, control survey summary diagrams were updated to reflect these changes. A total of 26 diagrams required changes. A copy of one of the revised diagrams concerned is herewith provided as Attachment 3, also as an example of a completed sheet.¹

Pursuant to State Statutes, Registered Land Surveyors must provide to the County Surveyor for filing copies of all plats of surveys other than land subdivision plats and certified survey maps prepared for surveys conducted within the County. Through December 31, 2010, the County Surveyor received, indexed, and filed 710 copies of new land surveys completed within the County. In addition, the Commission completed a project incorporating into the filing system historic plats of surveys acquired from a now defunct land surveying firm, totaling literally thousands of plats. The MCAMLIS staff also incorporated historic plats of survey files in Milwaukee County offices, again totaling thousands of plats, bringing the total number of records of land surveys completed within the County, which have been filed with the County Surveyor since the inception of this work in 1984, to 79,487. The filed records are indexed to permit retrieval by name of the surveyor concerned, the property owner concerned, the address of the property concerned, if shown on the plat, the date of the survey plat, the civil division, and the U.S. Public Land Survey Township and Range, and Section and one-quarter section within which the plat is located.

Also in 2010, the County Surveyor assisted MCAMLIS staff in the coordination of an annual program to update the Milwaukee County website in order to incorporate the 710 copies of new land surveys received during the year and those to be received in subsequent years. The MCAMLIS staff produced digital scans of the 710 hardcopies, and merged the new files with the existing files to create a total of 79,487 plats of survey that have been filed with the County Surveyor as of December 31, 2010. The purpose and intent of this project was to create a single digital database from the separate databases maintained by the office of the County Surveyor and MCAMLIS, and to allow the digital images of the plats of survey to be accessed by the public through the MCAMLIS portion of the Milwaukee County website.

¹ Copies of all 45 dossier sheets and all 26 modified control summary diagrams have been provided with a copy of this memorandum to: 1) William C. Shaw, GIS Supervisor and MCAMLIS Project Manager; 2) Marcia G. Cornell, Manager Central Drafting and Records, City of Milwaukee; 3) Gregory G. High, Director, Architectural, Engineering and Environmental Services, Milwaukee County; 4) Daniel R. Talarczyk, Survey Services Supervisor, Milwaukee Metropolitan Sewerage District; and 5) Mary Dziewiontkoski, Project Programming, City of Milwaukee.

From time to time, the County Surveyor also assists MCAMLIS in the preparation of contracts and specifications for large-scale topographic and cadastral mapping and for special projects, such as the mapping of hazards to air navigation in the vicinity of General Mitchell International Airport, and the provision of quality control surveys and analyses for MCAMLIS large-scale topographic mapping projects.

* * *

KWB/lgh

#156358 v1 - MKE CO. SURVEYOR ACTIVITIES 2010

Attachments

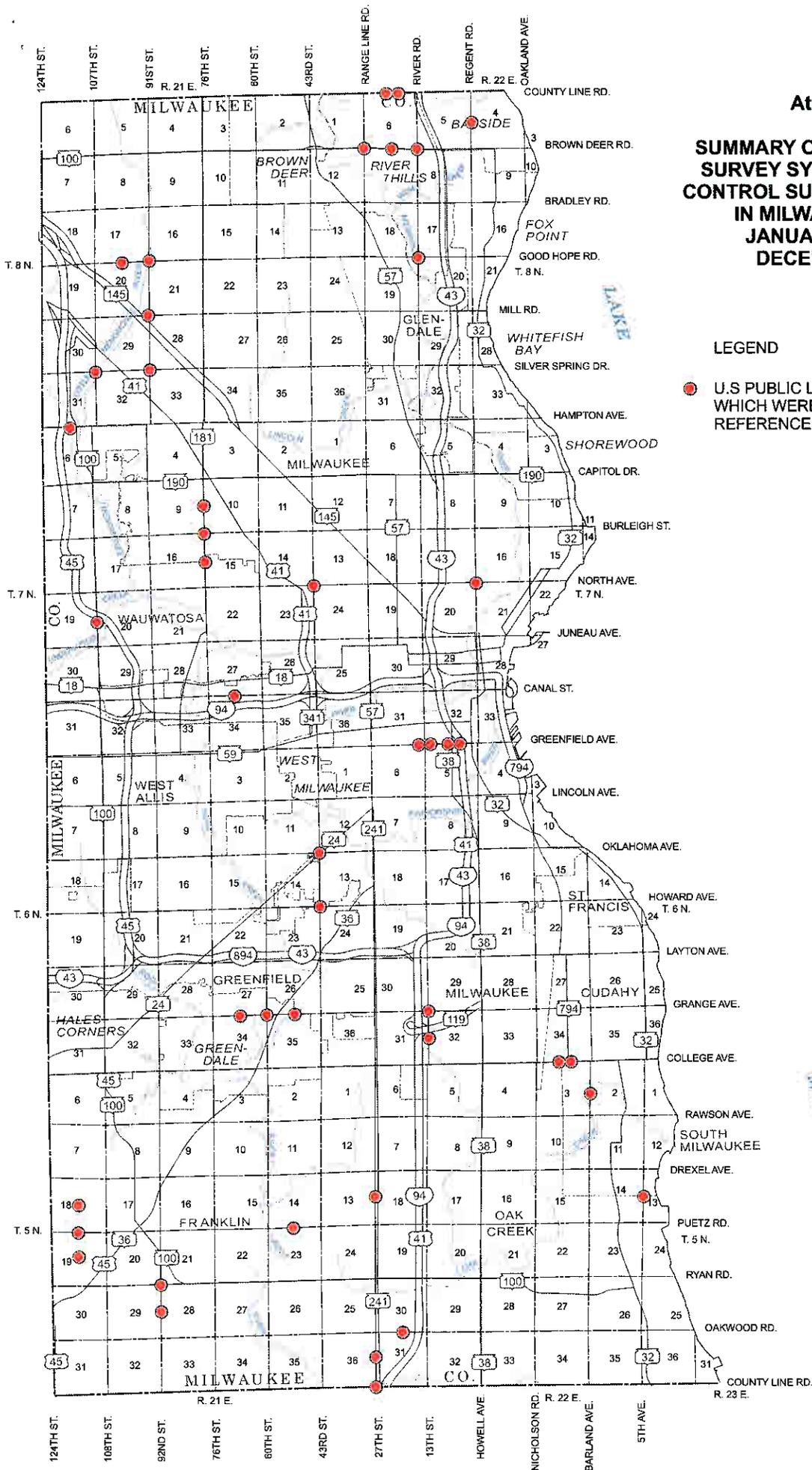
cc: Donald P. Simon

Attachment 1

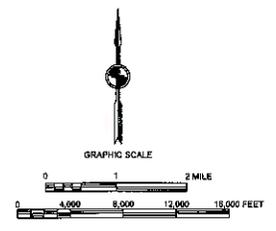
SUMMARY OF U.S. PUBLIC LAND SURVEY SYSTEM CORNER AND CONTROL SURVEY PERPETUATION IN MILWAUKEE COUNTY: JANUARY 1 THROUGH DECEMBER 31, 2010

LEGEND

-  U.S PUBLIC LAND SURVEY CORNERS WHICH WERE REMONUMENTED AND/OR REFERENCED IN 2010 (45)



MICHIGAN



Source: SEWRPC.

RECORD OF U. S. PUBLIC LAND SURVEY CONTROL STATION

U. S. PUBLIC LAND SURVEY CORNER 30 29 T 8 N, R 21 E, MILWAUKEE COUNTY, WISCONSIN
31 32

HORIZONTAL CONTROL SURVEY BY: AERO-METRIC ENGINEERING, INC. YEAR: 1988
 VERTICAL CONTROL SURVEY BY: SEWRPC YEAR: 1988/2010

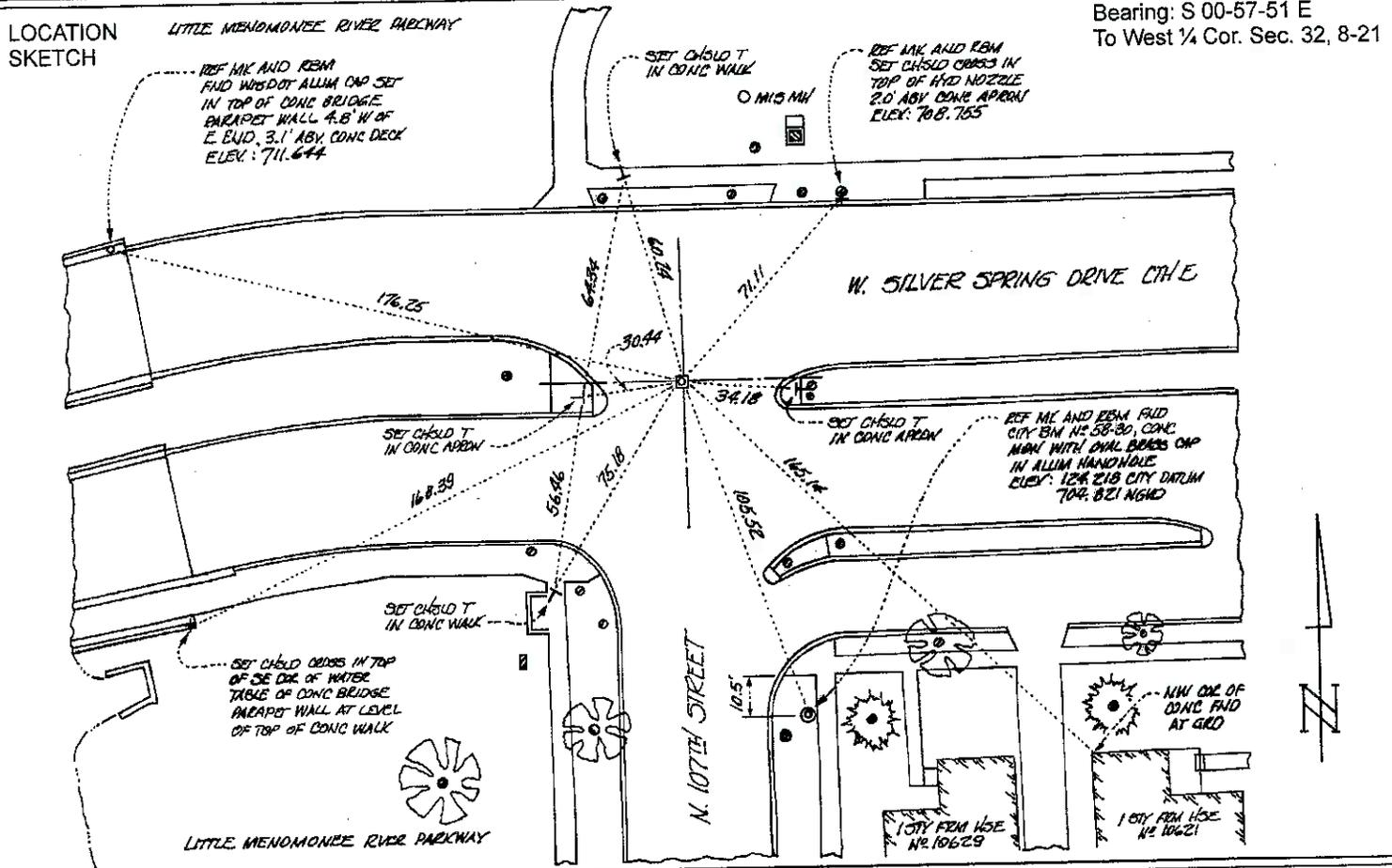
STATE PLANE COORDINATES OF: SECTION CORNER
 NORTH 414,079.68
 EAST 2,521,752.39

ELEVATION OF STATION: 707.271

HORIZONTAL DATUM: WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE
NORTH AMERICAN DATUM OF 1927

VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929 THETA ANGLE: +1-20-34

CONTROL ACCURACY:
 HORIZONTAL: THIRD ORDER, CLASS I VERTICAL: SECOND ORDER, CLASS II



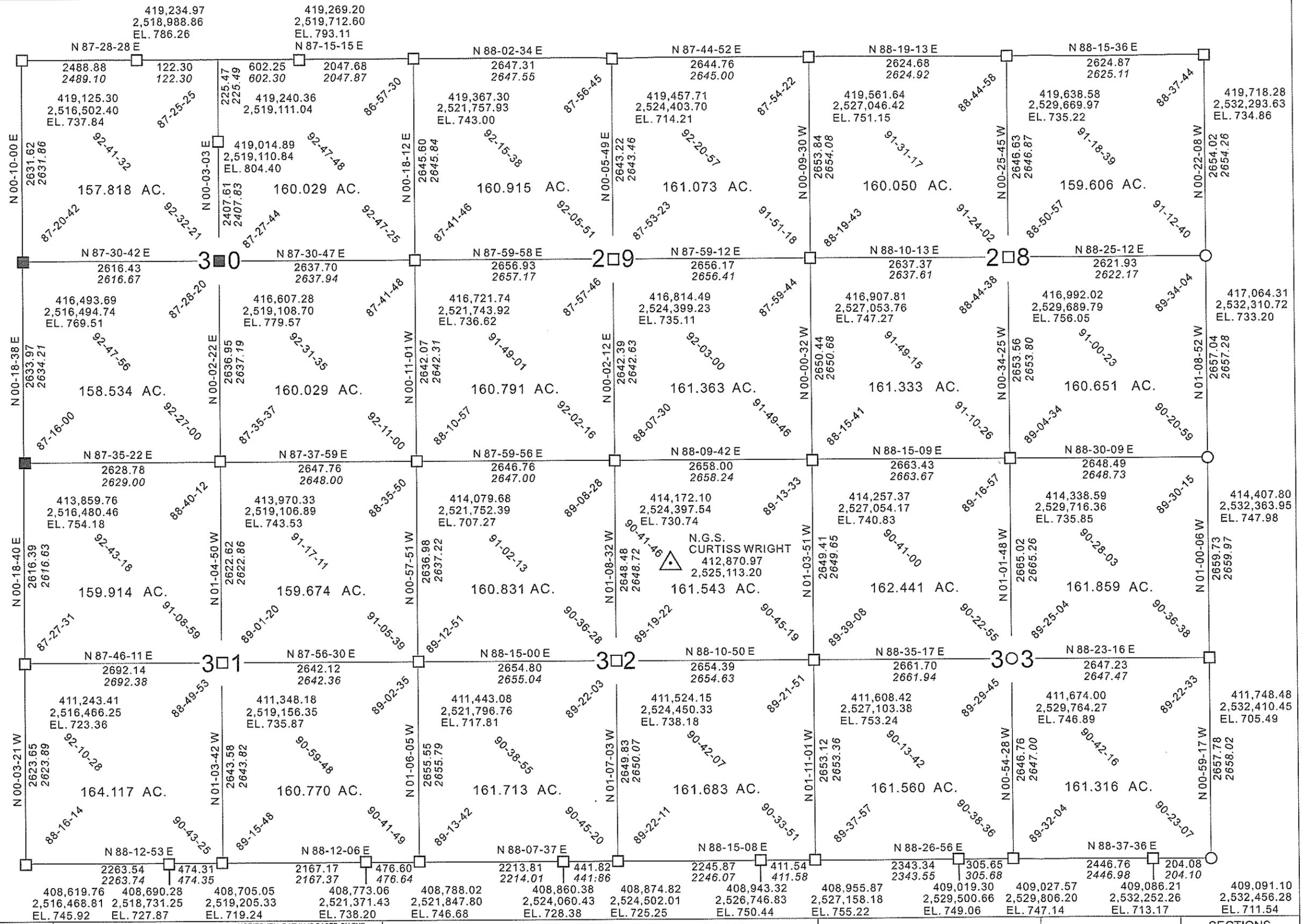
SURVEYOR'S AFFIDAVIT:
 STATE OF WISCONSIN) SS
 MILWAUKEE COUNTY)

As Milwaukee County Surveyor, I hereby certify that following highway reconstruction, I set a concrete monument with SEWRPC brass cap to mark the location of this corner; replacing a cast iron plug with cross set in the then existing concrete pavement found and referenced by me as Milwaukee County Surveyor on June 24, 1988; said cast iron plug with cross having been set to mark the location of this corner in October 1964 by Donald Fisk, State Highway Commission of Wisconsin Project Engineer, following highway reconstruction; replacing a similar cast iron plug with cross set in the then existing concrete pavement to mark the location of this corner; said cast iron plug with cross having been found in December 1953 by a Milwaukee County Department of Public Works Project Engineer and accepted as marking the location of this corner, using information maintained by the Milwaukee County Highway Department, dated March 1947, to perpetuate the location of this corner; said information also indicating that an old cut limestone monument set in the then existing pavement was found in October 1915 by a Milwaukee County Department of Public Works Project Engineer and accepted as marking the location of this corner; said limestone monument having been set to mark the location of this corner circa 1880 in the conduct of the remonumentation of the Town of Granville; replacing in turn a wood post set to mark this corner in march 1836 by William A. Burt, Deputy United States Surveyor, in the conduct of the original United States Public Land Survey; that I have referenced the same as shown hereon; and that this record is correct and complete to the best of my knowledge and belief.



DATE OF SURVEY: 19 August 2009
 REGISTERED LAND SURVEYOR

S - 157



LEGEND

- U.S. PUBLIC LAND SURVEY CORNER, MARKED BY 6" x 6" x 36" CONC. MONUMENT WITH SEWRPC BRASS CAP.
- U.S. PUBLIC LAND SURVEY CORNER, MARKED BY 6" x 6" x 36" CONC. MONUMENT WITH BRASS CAP.
- U.S. PUBLIC LAND SURVEY CORNER, MARKED BY OTHER MONUMENTATION.
- △ N.G.S. HORIZONTAL CONTROL STATION.

HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE (NAD-27), AND ALL BEARINGS ARE REFERRED TO GRID NORTH.

COMBINATION SCALE AND SEA LEVEL REDUCTION FACTOR: 0.99900963

DIMENSIONS SHOWN IN ITALICS INDICATE GROUND LEVEL DISTANCES.

VERTICAL DATUM IS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929

SUBTRACT 560.00 TO PLACE ELEVATIONS ON CITY OF MILWAUKEE DATUM.

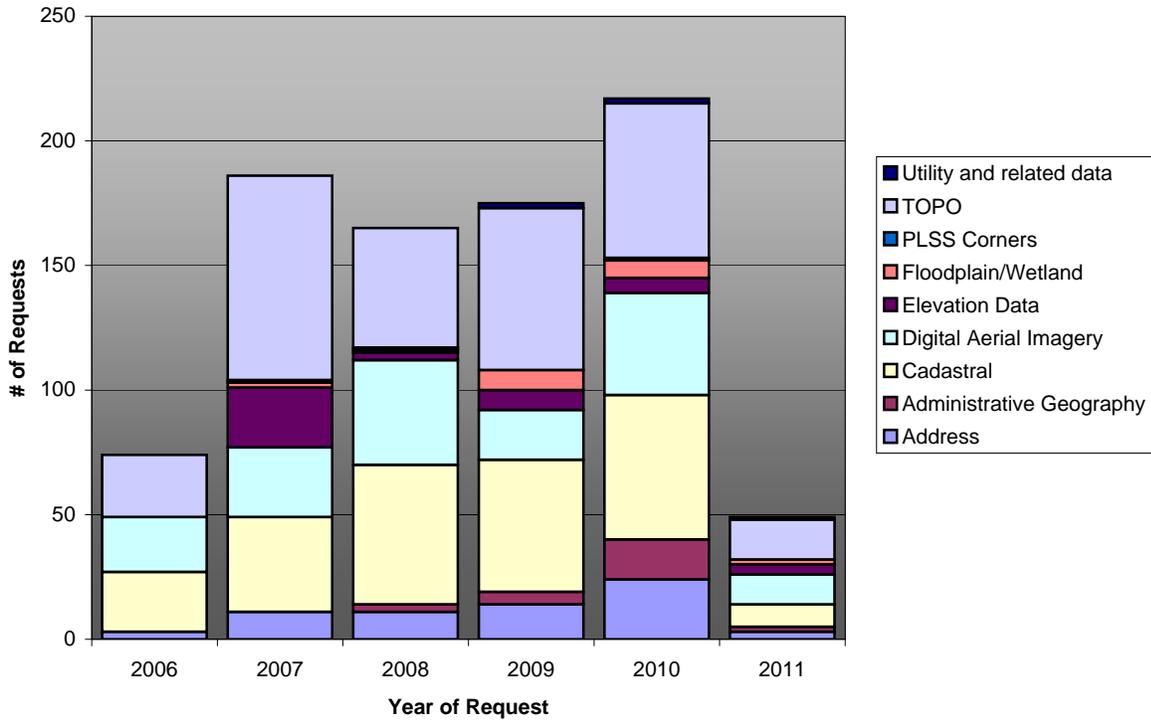
CONTROL SURVEY SUMMARY DIAGRAM
FOR
SECTION SURVEYS
IN THE
CITY OF MILWAUKEE
MILWAUKEE COUNTY, WISCONSIN

DRAWN BY: D. P. SIMON	DATE: NOV. 1978
CHECKED BY: L. H. KREBLIN	DATE: NOV. 1978
APPROVED BY: <i>[Signature]</i>	DATE: AUG. 1980
REVISED: N. A. NEJEDLO	DATE: NOV. 2010
REVISED: N. A. NEJEDLO	DATE: NOV. 2010

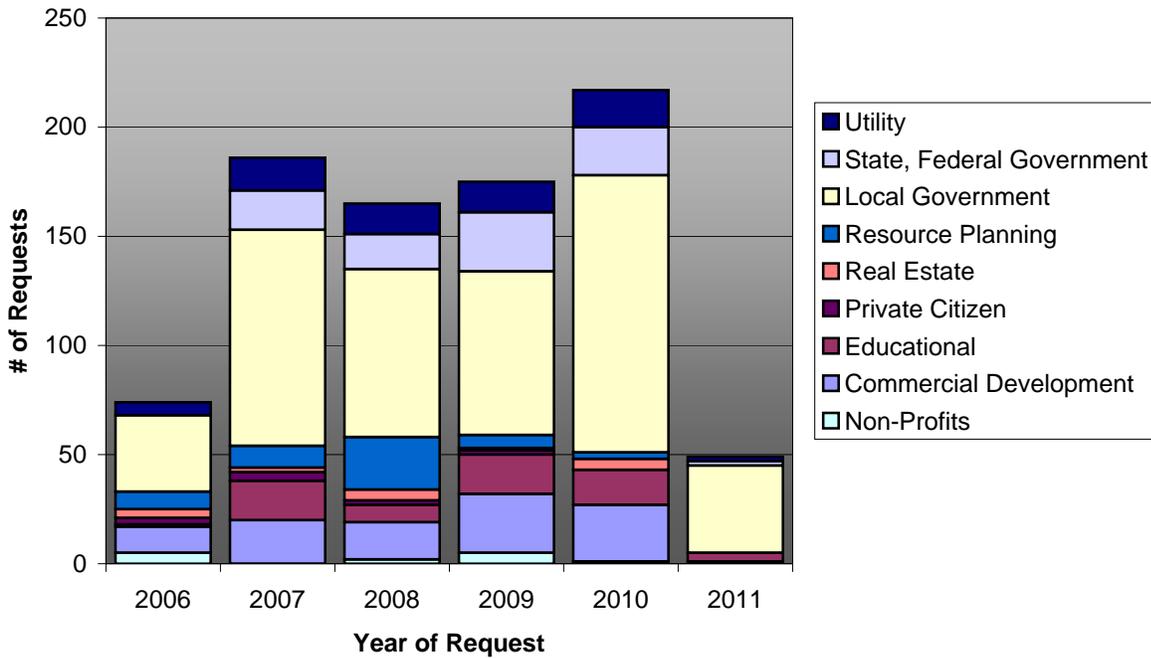
DOSSIER SHEETS CONTAINING ALL INFORMATION NECESSARY FOR RECOVERY AND USE OF CONTROL SURVEY STATIONS AVAILABLE FROM SEWRPC.

SECTIONS
30, 29, 28,
31, 32, 33
T. 8 N., R. 21 E.
MILWAUKEE
COUNTY

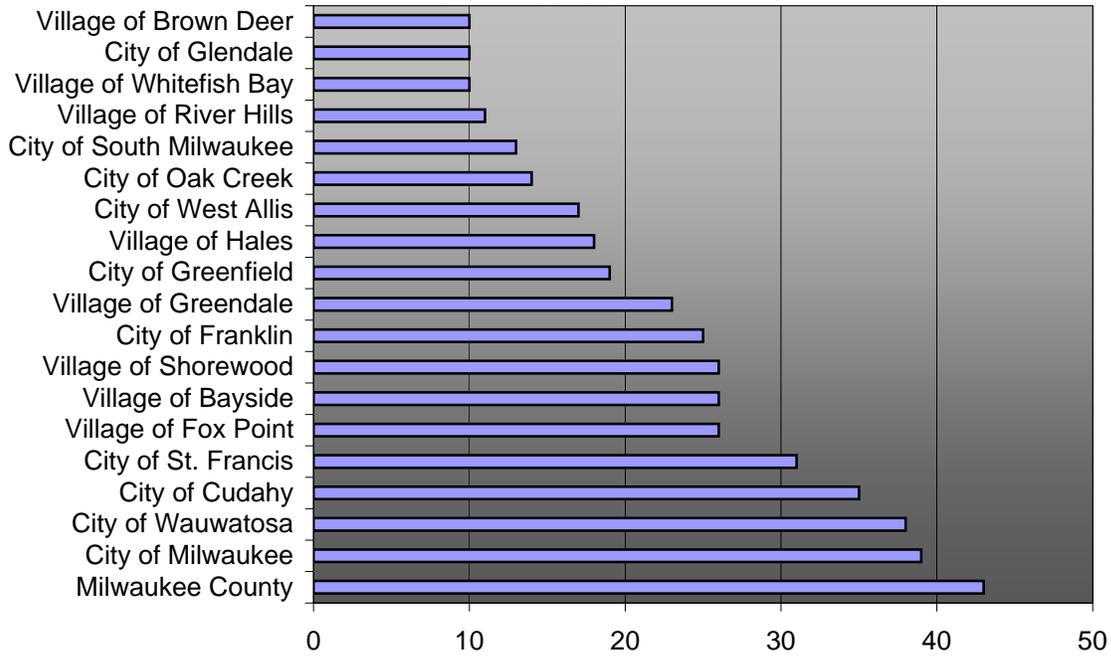
MCAMLIS Data Request by Type



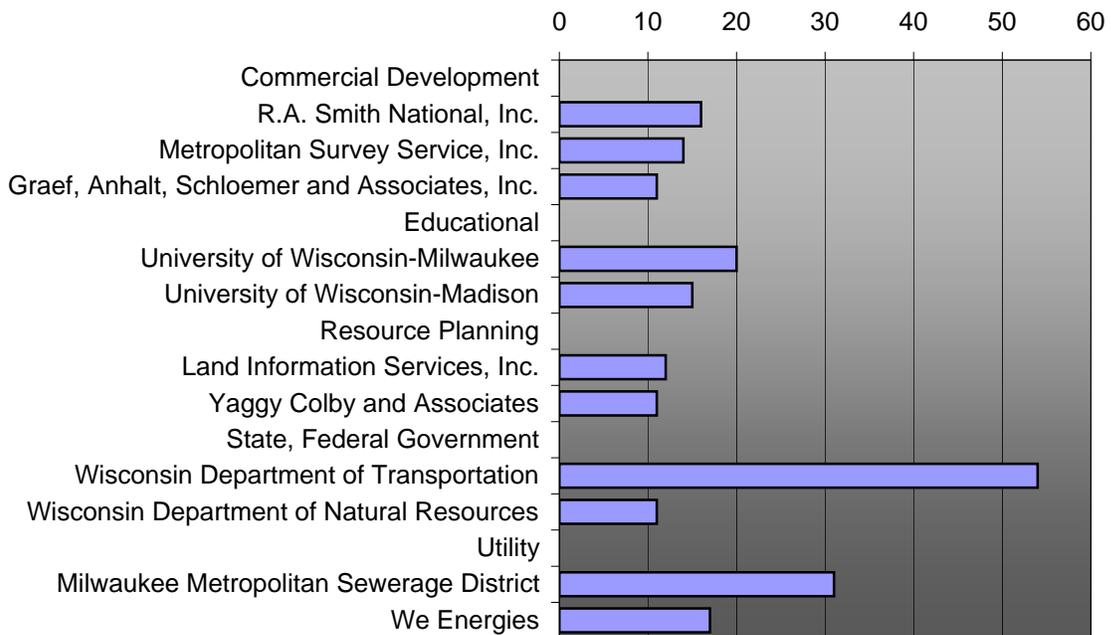
MCAMLIS Data Request by Category



MCAMLIS Local Government Data Requests 2006-2011



MCAMLIS Data Requests non-Local Govt. 2006-2011



2011 MCAMLIS Year-to-Date

\$6 Fee

2011 Income Statement as of March 9, 2011

REVENUES	
2011 Operating Cash Flow	\$120,881
2010 Encumbrances Carried Over	\$301,855
TOTAL	<u>\$422,736</u>
OPERATING EXPENSES	
2011 Actual Expenditures	\$80,643
2011 Encumbrances	\$459,042
TOTAL	<u>\$539,685</u>
2010 Net Income (Loss)	<u>(\$116,949)</u>

Fund Balance as of March 9, 2011

2010 Year-End Fund Balance		\$666,172
2011 Operating Revenues (Shown Above)	+	\$422,736
2011 Expenditures for \$6 Fee Projects (Incl. Encumbrances)	-	\$510,349
2011 \$6 Fee Other Expenditures (Invl. Encumbrances)	-	\$29,336
2011 Projected Year-End Fund Balance	=	\$549,223
2011 Reserve Revenue @ 10%		\$78,000
2011 Projected Fund Balance - Unrestricted		\$302,494
2011 Projected Fund Balance - Restricted		\$168,729

\$2 FEE

2011 Income Statement as of March 9, 2011

REVENUES	
2011 Operating Cash Flow	\$43,172
2010 Encumbrances Carried Over	\$15,110
TOTAL	<u>\$58,282</u>
OPERATING EXPENSES	
2011 Actual Expenditures	\$15,110
2011 Encumbrances	\$0
TOTAL	<u>\$15,110</u>
2010 Net Income (Loss)	<u>\$43,172</u>

Fund Balance

2010 Year-End Fund Balance		\$270,148
2011 Operating Revenues (Shown Above)	+	\$58,282
2011 Expenditures for \$6 Fee Projects (Incl. Encumbrances)	-	\$15,110
2011 \$6 Fee Other Expenditures (Invl. Encumbrances)	-	\$0
2011 Projected Year-End Fund Balance	=	\$313,320
2011 Reserve Revenue @ 10%		\$28,000
2011 Projected Fund Balance - Unrestricted		\$241,383
2011 Projected Fund Balance - Restricted		\$43,937

Est. Documents to be Recorded: 128,000

2010 MCAMLIS Year-End

\$6 Fee

2010 Income Statement

REVENUES	
2010 Operating Cash Flow	\$752,504
2009 Encumbrances Carried Over	\$361,159
TOTAL	<u>\$1,113,663</u>
OPERATING EXPENSES	
2010 Actual Expenditures	\$887,763
2010 Encumbrances	\$301,855
TOTAL	<u>\$1,189,618</u>
2010 Net Income (Loss)	<u>(\$75,955)</u>

Fund Balance

2009 Year-End Fund Balance		\$722,301
2010 Operating Revenues (Shown Above)	+	\$1,113,663
2010 Expenditures for \$6 Fee Projects (Incl. Encumbrances)	-	\$676,675
2010 \$6 Fee Other Expenditures (Incl. Encumbrances)	-	\$512,943
Adjustment	+	<u>\$19,826</u>
2010 Year-End Fund Balance	=	\$666,172
2011 Reserve Revenue @ 10%		\$60,500
2010 Projected Fund Balance - Unrestricted		\$605,672
2010 Projected Fund Balance - Restricted		\$0

\$2 FEE

2010 Income Statement

REVENUES	
2010 Operating Cash Flow	\$184,440
2009 Encumbrances Carried Over	\$0
TOTAL	<u>\$184,440</u>
OPERATING EXPENSES	
2010 Actual Expenditures	\$70,027
2010 Encumbrances	\$15,110
TOTAL	<u>\$85,137</u>
2010 Net Income (Loss)	<u>\$99,303</u>

Fund Balance

2009 Year-End Fund Balance		\$170,845
2010 Operating Revenues (Shown Above)	+	\$184,440
2010 Expenditures for \$2 Fee Projects (Incl. Encumbrances)	-	\$80,687
2010 \$2 Fee Other Expenditures	-	\$4,450
2010 Year-End Fund Balance	=	\$270,148
2011 Reserve Revenue @ 10%		\$15,000
2010 Projected Fund Balance - Unrestricted		\$211,211
2010 Projected Fund Balance - Restricted		\$43,937

Total Documents Recorded: 123,084

2010 MCAMLIS Year-End**\$2 & \$6 Fees Combined****2010 Income Statement**

REVENUES		
2010 Operating Cash Flow		\$936,944
2009 Encumbrances Carried Over		\$361,159
TOTAL		<u>\$1,298,103</u>
OPERATING EXPENSES		
2010 Actual Expenditures		\$957,790
2010 Encumbrances		\$316,965
TOTAL		<u>\$1,274,755</u>
2010 Net Income (Loss)		<u>\$23,348</u>

Fund Balance

2009 Year-End Fund Balance		\$893,146
2010 Operating Revenues (Shown Above)	+	\$1,298,103
2010 Expenditures for \$6 Fee Projects (Incl. Encumbrances)	-	\$676,675
2010 \$6 Fee Other Expenditures (Incl. Encumbrances)	-	\$598,080
Adjustment	+	<u>\$19,826</u>
2010 Year-End Fund Balance	=	\$936,320
2010 Reserve Balance		\$75,500
2010 Projected Fund Balance - Unrestricted		\$816,883
2010 Projected Fund Balance - Restricted		\$43,937

Total Documents Recorded: 123,084

2011 MCAMLIS YTD (March 9, 2011)**\$2 & \$6 Fees Combined****2010 Income Statement**

REVENUES		
2011 Operating Cash Flow		\$164,053
2010 Encumbrances Carried Over		\$316,965
TOTAL		<u>\$481,018</u>
OPERATING EXPENSES		
2011 Actual Expenditures		\$95,753
2011 Encumbrances		\$459,042
TOTAL		<u>\$554,795</u>
2011 YTD Net Income (Loss)		<u>(\$73,777)</u>

Fund Balance

2010 Year-End Fund Balance		\$936,320
2011 Operating Revenues (Shown Above)	+	\$481,018
2011 Expenditures for Fee Projects (Incl. Encumbrances)	-	\$525,459
2011 Other Expenditures (Incl. Encumbrances)	-	\$29,336
Adjustment	+	<u>\$0</u>
2011 Projected Year-End Fund Balance	=	\$862,543
2011 Reserve Balance		\$106,000
2011 Projected Fund Balance - Unrestricted		\$543,877
2011 Projected Fund Balance - Restricted		\$212,666

Est. Documents to be Recorded: 128,000

\$2.00 Fee Authorized Projects - 2010 as of 12/31/2010

Year Authorized	Project Description	Amount Authorized	Amount Paid 2002-2009	Amount Paid 2010	Amount Encumbered 2010	2010 Total Amount Paid (Encumbrances + Actual)	Total Amount Paid for Project (2002-2010)	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	\$ 90,375.24	\$ 29,624.76	\$ -	\$ 29,624.76	\$ 120,000.00	\$ -	Yes
2009	Improvements to Computer System VI	\$ 95,000.00	\$ -	\$ 35,952.63	\$ 15,110.00	\$ 51,062.63	\$ 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	\$1,693,465.24	\$65,577.39	\$15,110.00	\$80,687.39	\$1,774,152.63	\$43,937.37	

Data from John La Fave, Register of Deeds as of 9/10/09

NOTES

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

\$2.00 Fee Authorized Projects - 2011 as of 2/28/2010

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 March 3, 2011

Rev / Exp	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	\$ 120,546.00	\$ -	\$ (659,454.00)
3238	RET FEES -- \$2.00 PORTION	\$ 280,000.00	\$ 40,182.00	\$ -	\$ (239,818.00)
RECORD & FILING FEES		\$ 1,060,000.00	\$ 160,728.00	\$ -	\$ (899,272.00)
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	\$ 161,063.00	\$ -	\$ (903,937.00)
5001	DIRECT LABOR CHARGED	\$ -	\$ 12,139.00	\$ -	\$ (12,139.00)
5002	OFFTIME CHARGED	\$ -	\$ 2,348.00		\$ (2,348.00)
5003	FRINGE BENEFITS CHARGED	\$ -	\$ 13,434.00		\$ (13,434.00)
5004	INDIRECT OVERHEAD CHARGED	\$ -	\$ -		\$ -
5051	DIRECT LABOR APPLIED	\$ -	\$ (12,139.00)		\$ 12,139.00
5052	OFFTIME APPLIED	\$ -	\$ (2,348.00)		\$ 2,348.00
5053	FRINGE BENEFITS APPLIED	\$ -	\$ (13,434.00)		\$ 13,434.00
5199	SALARIES - WAGES BUDGET	\$ 129,271.00	\$ 14,292.00		\$ 114,979.00
5312	SOCIAL SECURITY TAXES	\$ 9,891.00	\$ 1,076.00		\$ 8,815.00
5407	OPEB LIABILITY	\$ 15,454.00	\$ -		\$ 15,454.00
5420	EMPLOYEE HEALTH CARE	\$ 31,622.00	\$ 3,234.00		\$ 28,388.00
5421	EMPLOYEE PENSION	\$ 24,575.00	\$ 2,873.00		\$ 21,702.00
5422	LEGACY HEALTHCARE	\$ 12,327.00	\$ -		\$ 12,327.00
5423	LEGACY PENSION	\$ 4,120.00	\$ -		\$ 4,120.00
PERSONAL SERVICES		\$ 227,260.00	\$ 21,475.00	\$ -	\$ 205,785.00
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	\$ 41,525.00	\$ 450,728.00	\$ 489,946.00
6149	PROF. SERV-NON RECURR OPER	\$ -	\$ -		\$ -
6636	INTERNET EXPENSES	\$ 297.00	\$ -	\$ -	\$ 297.00
6637	R/M COMPUTER EQUIP	\$ 22,700.00	\$ 21,865.00	\$ 4,750.00	\$ (3,915.00)
6803	AUTO ALLOWANCE	\$ 300.00	\$ 278.00	\$ -	\$ 22.00
6812	MEETINGS OTHER AUTH TRAVL	\$ 6,000.00	\$ -	\$ 1,835.00	\$ 4,165.00
SERVICES		\$ 1,056,996.00	\$ 63,668.00	\$ 457,313.00	\$ 536,015.00
7910	OFFICE SUPPLIES	\$ 630.00	\$ -	\$ -	\$ 630.00
7917	DP SUPPLIES	\$ 200.00	\$ -	\$ -	\$ 200.00
COMMODITIES		\$ 830.00	\$ -	\$ -	\$ 830.00
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	\$ 625.00		\$ 1,875.00
9768	APPLICATIONS CHARGES - NETW	\$ -	\$ -		\$ -
9769	APPLICATIONS CHARGES - MAINFR	\$ -	\$ -		\$ -
9771	HRIS APPLICATION	\$ 628.00	\$ 157.00		\$ 471.00
9774	WORKERS COMP & WC PAY	\$ 745.00	\$ 186.00		\$ 559.00
9776	TELEPHONE APPLICATION	\$ -	\$ -		\$ -
9777	INSURANCE SERVICES	\$ 8,985.00	\$ 2,246.00		\$ 6,739.00
9778	WORKERS COMP ADMIN	\$ 117.00	\$ 29.00		\$ 88.00
9779	CENTRAL SERVICE ALLOCATION	\$ -	\$ -		\$ -
9781	CH COMPLEX SPACE RENTAL	\$ 19,985.00	\$ -		\$ 19,985.00
9788	PERSONAL COMPUTER CHARGES	\$ -	\$ -		\$ -
CROSSCHARGES		\$ 75,131.00	\$ 3,243.00	\$ -	\$ 71,888.00
Total Expenses		\$ 1,381,966.00	\$ 88,386.00	\$ 457,313.00	\$ 834,518.00
Grand Totals		\$ (316,966.00)	\$ 72,677.00	\$ (457,313.00)	\$ (69,419.00)

\$6.00 Fee Authorized Projects - 2011 as of 3/9/2011

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
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	\$ -	\$ -	\$ -	\$ -	\$ 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	\$ 280,200.00	\$ 230,149.30	\$ 510,349.30	\$ 168,729.00

\$6.00 Fee Authorized Projects - 2010 as of 12/31/2010

Vendor Name	Description	Amount Authorized	Amount Paid - Prior Years	2010 Amount Encumbered	Amount Paid 2010 YTD	Total Amount Paid 2010 (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	\$ 77,175.00	\$ -	\$ -	\$ 77,175.00	\$ 77,175.00	\$ -
CITY OF MILWAUKEE	Cadastral Address Maintenance	\$ 87,852.00	\$ -	\$ 21,963.00	\$ 65,889.00	\$ 87,852.00	\$ -
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	\$ 89,000.00	\$ 47,230.00	\$ 28,761.95	\$ 13,008.05	\$ 41,770.00	\$ -
MILWAUKEE COUNTY	2010 Orthophotography Comparative Study	\$ 57,024.00	\$ -	\$ -	\$ 57,024.00	\$ 57,024.00	\$ -
	TOTAL	\$ 1,113,431.00	\$ 436,755.75	\$ 325,424.95	\$ 351,250.30	\$ 676,675.25	\$ -
Data from Milwaukee County Advantage System and Gary Drent, A&E as of December 31, 2010							



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

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

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: William C. Shaw, MCAMLIS Project Manager
DATE: March 16, 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 - 3/11

- 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.

Accommodation of Requests

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. 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 1 st .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 15, 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

2010 COUNTY LAND INFORMATION PLAN- PEER REVIEW

Plan's County Name: Milwaukee

Reviewer Name: Donald Dittmar

Reviewer County: Waukesha

Phone Number: 262-896-8270

Email Address: ddittmar@waukesha.gov

Review Date: 12/10/2010

Overall Summary of Compliance with Required Key Features:

Very Good Complete Revise/Clarify (*specific items noted in space below*)

Reviewer Comments:

Rankings are to be based on the submitted plan's adherence to the Uniform Instructions.

Refer to the plan review instructions for reviewing details. Room for comments has been allowed following each section or element if needed.

I. Executive Summary: Very Good Complete Revise/Clarify

- Identified county and name of person completing form.
- Identified those who participated in the process of preparing the plan with contact information.
- Provided a concise summary of this plan not exceeding one page.
- Provided the address for county's land information Website, if applicable.
- Provided the address(s) for any municipal Websites serving land information, if applicable.
- Reviewer Comments:*

II. Land Information Plan:

A. Goals and Objectives: Very Good Complete Revise/Clarify

- Stated goals and objectives with timeline for meeting them
 - Specified data/info the county needs that it currently uses or can acquire from other sources
 - Specified data/info the county needs that it does not have; described problems acquiring it
 - Described how/will the county ensure land info it has is or can be made available in standard format to others
 - Described how/will the county ensure land info is geographically referenced for use by others
 - Described how the county will ensure currency and continued maintenance of its digital land information?
- Described county's technology environment and database design
- Reviewer Comments:* The Goals section reflects the maturity of the Milwaukee County Land Information program. The Goals center on maintenance and integration activities. Goal 4 is especially appropriate as it describes how new countywide initiatives will be selected.

B. Progress Report on On-Going Activities: Very Good Complete Revise/Clarify

- Described county's progress towards achieving goals and objectives listed in previous section
- Described any significant changes in goals and objectives from those described in previous plan
- Reviewer Comments:*

C. New Initiatives: Very Good Complete Revise/Clarify

- Highlighted proposed projects
- Described assistance requested from the Department of Administration
 - Described county's strategy to secure technical assistance
 - Described county's plan to finance the costs to continue previous WLIP investments
 - Described county's strategy for ensuring access to county land information
 - Described county's plan to participate in a statewide GIS repository when one is made available
 - Described how county plans to maximize resources by utilizing competitive procurement processes
- Described problems encountered which have prevented progress in modernization efforts
- Reviewer Comments: Excellent discussion of issues related to updating topographic and planimetric features*

D. Custodian Responsibilities: Very Good Complete Revise/Clarify

- Identified land information the county has custodial responsibility for
- Identified source of authority
- Identified land information the county would like to assume custodial responsibility for
- Identified land information the county would assume custodial responsibility for if requested
- Reviewer Comments:*

E. Framework Data, System Implementation and Statewide Standards:

- Very Good Complete Revise/Clarify

Don't forget to return to the beginning of this section to enter your overall ranking once you have reviewed Items 1 through 15.

Key questions to be asked by reviewers for each Framework Data Element:

- Have key features have been discussed?
- Has adherence to related standards or plans to maintain or achieve compliance with standards been discussed?
- Have plans to assume or maintain custodial responsibility been discussed?
- Have plans to maintain the dataset been addressed?

1. Geographic Positioning Reference Frameworks- addressed applicable features:

- Geodetic control networks
- Public Land Survey System remonumentation and records automation

- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:*

2. Orthoimagery and Georeferenced Image Base Data- addressed applicable features:

- Photogrammetric base maps
- Digital orthophotography (DOP)
- Digital raster graphics
- Satellite imagery
- Oblique aerial imagery
- Historical aerial imagery
- Reviewer Comments:*

3. Elevation Data Products and Topographic Base Data- addressed applicable features:

- Digital elevation models (DEM)
- Digital terrain models
- Triangulated irregular networks (TIN)
- Contours
- LIDAR data
- IFSAR data
- Reviewer Comments:*

4. Parcel Mapping- addressed applicable features:

- Parcel maps prepared suitable for accurate land title boundary line or land survey line information
- Parcel maps prepared suitable for planning purposes
- Coordinate system
- Parcel ID
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:*

5. Parcel Administration and Assessment Information- addressed applicable features:

- Developed/developing LIS with integrated property/ownership records and boundary info including PIN referenced to PLSS
- Discussed activities associated with use of parcel level info including:
 - Parcel ID
 - Tax data
 - Site Address
 - Owner Name & Address
 - Description/current document pertaining to parcel
 - Document imaging
 - Real estate transactions
 - Easements and restrictions, including conservation easements
 - Tax exempt status
 - Zip codes (including +4)
 - Assessment classes

- Public lands
- Liens
- Evidence of title
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:*

6. Street/Road Centerline and Addresses- addressed applicable features:

- Transportation network
- Rights of way
- Centerlines
- Address ranges
- Site address database
- Address point, structure and/or driveway
- Road names
- Functional class
- Places/Landmarks
- Integration with the County's/City Master Street Address Guide (MSAG)
- Ability to support emergency planning, response and mapping
- Ability to support wireless 911
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:Noted that cadastral maps permit establishment of public street and centerlines as well as street addresses by block face.*

7. Hydrography, Hydrology and Wetlands Mapping- addressed applicable features:

- Hydrography
- Watersheds
- Hydrogeology
- Impacts on the environment
- Wetlands mapping activities
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:*

8. Soils Mapping, Land Cover and other Natural Resources Data- addressed applicable features:

- Soils mapping activities
- Land cover
- Forests
- Geology
- Hydrogeology
- Non-metallic mining
- Endangered resources
- Impacts on the environment
- Reviewer Comments:*

9. Land Use Mapping- addressed applicable features

- Mapping of existing land use

- Mapping of planned land use
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments: Planned activity*

10. Zoning Mapping- addressed applicable features

- Zoning districts
- Shorelands
- Floodplains and floodways
- Environmental corridors
- Burial sites
- Archeological sites
- Historic/cultural sites
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:Planned activity*

11. Election and Administrative Boundary System- addressed applicable features:

- Election districts
- Legislative districts
- Utility districts
- School districts
- Tax incremental financing districts
- Agency administrative districts and zip codes
- Census geographies
 - Blocks
 - Block groups
 - Tracts
 - Designated places
 - Urban areas
 - Traffic analysis zones
- Civil division boundaries
- Public Administered Lands, i.e. parks, forests, etc.
- Native American lands
- County boundaries
- State outline
- Lake districts
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:Noted cadastral data amenable to additonal administrative boundaries*

12. Critical Infrastructure and Facilities Management - addressed applicable features:

- Emergency service districts
- 911 call center service areas & center locations
- Fire/Police Districts
- Fire/Police Stations
- Hospitals and healthcare facilities
- Government facilities
- Utilities – not districts

- Parks & Recreational Trails
- Transit systems
- Bridges, culverts, traffic road signs
- Airports and airfields
- Harbors
- Boat landings
- Hazardous material sites
- Landfills
- Reviewer Comments:*

13. Data Base Design and System Implementation - addressed applicable features:

- Design Evaluation
- Project Approach
- Timeline
- Metadata policies
- Security/Privacy policies
- Implementation and maintenance strategy
- Data quality management
- Needs assessment
- Data structure and format
- GIS data model
- Data dictionary
- Coding schema
- Transaction management
- Organizational information flows
- Data conversion
- Ability to integrate with other databases and information systems (vertical and horizontal)
- Confirmed use of standards where applicable and specifically noted in the plan instructions
- Reviewer Comments:*

Before proceeding to Section F, please return to the beginning of this section to enter your overall Ranking for Section E- Framework Data Elements.

F. Public Access: Very Good Complete Revise/Clarify

Address applicable features:

- Use of technology to facilitate access
- Use of 3rd party technology for access
- Data sharing policies (copyright, licensing, fees, etc.)
- Open access to data in existing formats
- Subscription-based or public-facing web services
- Optional production of customized data on cost-recover or other basis
- Internet accessibility (ADA compliance, security)
- If land records are not accessible on the Internet, a goal for providing access to them on the Internet
- System security
- Privacy policies
- Use of \$1 fee designated for land information and housing data Sec. 59.72(5)(b)3
- Confirmed use of standards where applicable and specifically noted in the plan instructions

Reviewer Comments: Milwaukee County has always displayed innovation in the development of the Land Information Program through the creation of the MCAMLIS program prior to the WLIP. It seems to this reviewer that the activities of MCAMLIS need to be reflected in this plan. The data access policies developed by the MCAMLIS steering committee are referred to multiple times in this plan, are clearly stated in the MCAMLIS internet website material, but are not summarized in this plan. I would find it useful if a summary of MCAMLIS data access policies could be presented in this plan highlighting the use of copyright protection, public-private relationships, and any anticipated future changes to these policies.

G. Integration and Cooperation: Very Good Complete Revise/Clarify

- Described data sharing agreements
- Described formal or informal data maintenance agreements between departments/agencies
- Described cooperative arrangements
- Described consortia
- Described collaborative arrangements
- Described statutory relationships among counties and state agencies

- Identified what integrative/cooperative relationships the county would like to develop
- Identified potential partners and mutual projects the county plans to pursue
- Identified data to be shared and used with the two preceding items
- Described how the county allows for participation and coordinates funding allocations to all relevant departments so all benefit from the WLIP
- Described how the county allows for participation of municipalities and other agencies to benefit from WLIP

Reviewer Comments:

H. Communication, Education, Training and Facilitated Technical Assistance Very Good Complete Revise/Clarify

Addressed applicable features:

- Documentation of county data, models and processes
- Resources available
- Identification of customer needs
- Coordination of education/training with agencies, associations, and educational institutions
- Use of technology to facilitate education and training
- Use of or plan to participate in state clearinghouse/repository and LIO list server
- Use of LIO education and training funds

Reviewer Comments:

I. Administrative Standards not Associated With Framework Data Elements:

Very Good Complete Revise/Clarify

- Agreed to observe and follow statues relating to WLIP and other relevant statues
- Agreed to permit Wisconsin Department of Administration access to books, records, and projects for inspection and audit
- Agreed to complete the GIS Inventory Survey (survey required annually by WLIP)
- Agreed to update plan every 5 years and in the interim if the plan should change
- Acknowledged plan peer review process

Reviewer Comments:

Upon completion:

Verify that all major section heading rankings have been entered (i.e., Very Good, Complete, Revise/Clarify).

Verify that all required components and features have been covered.

Return to Page 1 to enter your overall ranking and record comments if you have any.

Email your completed review form to:

- **WLIP@wisconsin.gov**
- **LIO from the county whose plan you just reviewed.**

County Name:

County LIO:

LIO email:

MCAMLIS will continue to work with the Commission and the County Surveyor, to perpetuate the U. S. Public Land Survey system within the County and maintain the attendant control survey network. The designation of areas to be remapped will be determined by the MCAMLIS Steering Committee.

3. Parcel Mapping

Also as already noted, digital cadastral real property boundary line mapping has been completed under the MCAMLIS program for all of Milwaukee County. The completed mapping covers 100 percent of the total area of the County. The cadastral mapping has been prepared as a companion overlay to the topographic base data, is at a scale of one inch equals 100 feet, is referenced to both the U. S. Public Land Survey and State Plane Coordinate systems, and is based on a common geodetic control survey network, all as heretofore described. The cadastral map data meets accuracy standards long promulgated by the Regional Planning Commission for use within the Southeastern Wisconsin planning region. Those standards predate the creation of the Wisconsin Land Information Program and have proven by use over a period of almost four decades to be sound.

The cadastral data are topologically structured and all ownership parcels are recognizable as closed polygons through the appropriate use of computer software programs. The cadastral data identify in their proper location, orientation, and extent, all public street and alley rights-of-way, railway rights-of-way, major cross country utility easements, and major sanitary sewer and storm water drainage easements. The cadastral data contain parcel identification numbers that provide the linkage to associated non-graphic attribute data. The parcel identification scheme is compliant with Wisconsin Land Information Program standards.

Also as already noted, the maintenance of the cadastral maps current is a major initiative included under this updated land records modernization plan.

Also as already noted, street addresses are being assigned to major buildings located on individual parcels and the completion and maintenance of these among other major address coding initiatives being included under this updated Land Records Modernization Plan.

4. Parcel Administration

Milwaukee County has integrated and will continue to integrate its land ownership and tax assessment data into the MCAMLIS land information system. The Milwaukee County Register of Deed's office has installed optical imaging equipment for the storage, retrieval, and indexing of real estate documents. The Milwaukee County Register of Deeds acts as the County Land Information Officer.

5. Public Access

[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 therein are intended to embody a spirit of fair and reasonable access to the MCAMLIS digital materials

All of the data assembled to date under the MCAMLIS program is available for use under policies established by the MCAMLIS Steering Committee. As already noted, expansion of opportunities for public access is an initiative include under the updated Land Records Modernization Plan.

6. Additional Attribute Data: Zoning, Soils, Wetlands, Administrative Boundaries, Address by Block Face

It is the intent of the MCAMLIS program, as heretofore indicated in this plan, to compile additional attribute data and link such data to the geographic locations identified by the parcel identifiers. Such data will include existing land use, and zoning. Soils will not be included for the reasons heretofore given.

The MCAMLIS cadastral data captures county and minor civil division boundaries and are amenable to the ready addition of special purpose boundaries, such as utility districts, legislative districts, zoning districts, tax increment financing districts, school districts, watersheds and sub-watersheds, and similar geographic units. The cadastral maps permit the establishment of a complete system of public street and highway centerlines within the County and the identification of street addresses by block faces.



DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
MILWAUKEE COUNTY LAND INFORMATION OFFICE

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

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: William C. Shaw, MCAMLIS Project Manager

DATE: March 4, 2011

SUBJECT: UTILIZING THE \$2 LOCALLY RETAINED DOCUMENT FILING FEE

INTRODUCTION

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 list of projects that meet conditions for expenditure of the \$2 locally retained document filing fee for calendar years 2010-2013 and to request that the Milwaukee County Register of Deeds submit this list along with estimated fiscal requirements to the Steering Committee for its information, and for necessary committee action required to budget for the expenditure of these receipts as part of the overall MCAMLIS Program.

The requirements for expenditure of the \$2 locally retained document filing fee effect decisions on how to allocate available funds for future tasks e.g., Topographic Map Maintenance. 2009 Wisconsin Act 314 states that the \$2 receipts must be used "... for the provision of land information on the internet including the county's land information records related to housing."

The \$2 locally retained document filing fee will continue to be collected unless authorization is revoked or modified through changes to current law. Through 2009, there has been \$1,707,381 collected under the \$2 fee and the MCAMLIS Committee has authorized six separate Register of Deeds Improvement tasks in accordance with guidelines promulgated by the WLIB.

The Steering Committee has authorized a range of software and hardware upgrades intended to implement improvements to document recording practices within the Register of Deeds Office. The remaining 2010 authorization of \$124,625 is intended to carry on earlier digital imaging work tasks that began in 2004, providing for documents dating back to the mid 1980's. Most recently, the Steering Committee authorized an expenditure of \$65,000 from this fund in support of access to records through use of the Milwaukee County Interactive Mapping Service via the Internet.

UTILIZING THE \$2 LOCALLY RETAINED DOCUMENT FILING FEE

Continued use of the \$2 filing fee for purposes of digital imaging and indexing documents is moving to a new funding source. Beside the \$2 fee, Wisconsin Act 314 created specialized funding through a separate \$5 filing fee per recorded document. The \$5 fee was enacted to offset the cost of redacting personal identifiers e.g., individual social security numbers from recorded documents prior to electronic release. The process of redacting personal identifiers is currently performed as part of the Register of Deeds scanning procedures and is expected to continue to be funded through use of the newly authorized \$5 fee. Although the \$5 redaction fee is scheduled to sunset in 2014, it is expected that the current backlog of Register of Deeds documents that remain to be scanned can be completed prior to 2014.

Therefore this report will outline a plan for utilization of the \$2 Filing fee related to: Anticipated Revenue/Expenditure, Program Staffing, Technology and Project Summary/Commitments.

ANTICIPATED REVENUE 2010 THROUGH 2013

Anticipated MCAMLIS revenues for the period 2010 through 2013 are set forth in Table 1. Revenue amounts shown are estimates based upon staff analysis in consultation with the Milwaukee County Register of Deeds.

Table 1: Anticipated Revenue 2010-2013

2010	\$184,440
2011	\$256,000
2012	\$256,000
2013	\$256,000
Totals	\$952,440

Actual revenue from the \$2 document filing fee for 2010 was reported to be \$184,400. Revenue for the period 2011 through 2013 is projected based on an estimate of 128,000 documents or \$256,000 annually.

Total revenue available to fund the MCAMLIS \$2 work program may be expected to total \$952,440 for 2010 through calendar year 2013.

ANTICIPATED EXPENDITURE 2010 THROUGH 2013

The estimated budget to be available for funding MCAMLIS \$2 fee eligible work tasks for the period 2010 through 2013 are set forth in Table 2. Table 2 represents a filing fee structure whereby calendar years 2011 through 2013 estimates are based on a continued \$2 filing fee. The MCAMLIS Budget has been calculated for calendar year 2010 based on retained fees through the end of 2010. Table 2 sets forth a total estimated expenditure availability of \$256,000 for each of the three calendar years 2011 through 2013.

Table2: Estimated Expenditure Levels 2010-2013

	2010	2011	2012	2013
Beginning Fund Balance	\$170,845	\$255,148	\$284,430	\$368,249
Beginning Contingency Balance	\$0	\$15,000	\$25,600	\$25,600
Contingency Balance as a Percentage of Expected Revenue (Goal 10%)	0.0%	5.9%	10.0%	10.0%
Estimated Revenue	\$184,440	\$256,000	\$256,000	\$256,001
Less Contribution to Contingency	\$0	\$10,600	\$0	\$0
Plus Fund Balance	<u>\$170,845</u>	<u>\$255,148</u>	<u>\$284,430</u>	<u>\$368,249</u>
Funds Available for Expenditures	\$355,285	\$500,548	\$540,430	\$624,250
Maintenance Costs				
MC ROD Cadastral & Street Map Maintenance	\$0	\$42,171	\$42,171	\$42,171
City of Milw Cadastral & Street Map Maintenance	<u>\$0</u>	<u>\$90,010</u>	<u>\$90,010</u>	<u>\$90,010</u>
Total Maintenance Costs	<u>\$0</u>	<u>\$132,181</u>	<u>\$132,181</u>	<u>\$132,181</u>
Funds Available for Projects	\$355,285	\$368,367	\$408,249	\$492,069
Project Costs				
Remaining Authorization	\$85,137	\$43,937		
Annual Improvement Contingency	-	<u>\$40,000</u>	<u>\$40,000</u>	<u>\$40,000</u>
Total Project Costs	<u>\$85,137</u>	<u>\$83,937</u>	<u>\$40,000</u>	<u>\$40,000</u>
Increase/(Decrease) in Fund Balance	\$99,303	\$29,282	\$83,819	\$83,820
Ending Fund Balance	\$270,148	\$284,430	\$368,249	\$452,069

PROGRAM STAFFING

Table 2, herein recommends that the \$2 fee expenditures include sum-sufficient to staff the ongoing Cadastral Map and Street Address Database Maintenance performed by the Milwaukee County Register of Deeds and the City of Milwaukee. This is a shift from prior years whereby this effort was funded using the \$6 fee. Clearly the cadastral maintenance effort is a valid use of the \$2 fee because it serves as an essential component of available land information and it is consistently included at the top of the list regarding Internet availability and usage. The budget for this effort, although subject to change, is set at \$132,181 for 2011 and carried forward through 2013.

Additionally, Table 2 includes ongoing support of the ROD Improvement Projects through 2013 at an annual cost of \$40,000. This has been determined by the Register of Deeds to be sufficient to meet the demands of this office regarding Internet related improvements e.g., on-going infrastructure and systems improvement efforts.

UTILIZING THE \$2 LOCALLY RETAINED DOCUMENT FILING FEE

TECHNOLOGY

The MCAMLIS program early on, has generally been able to keep pace with an explosion of software technology utilized by computer desktop and hand held devices whose focus is on mapping and Geographic Information Systems. These devices are all part of a complex system of Web Mapping Environments that support critical municipal operations e.g., the display of event location maps and integrated applications used to coordinate real-time events. The evolution of web technology in the spatial data arena continues to expand at a rapid pace and MCAMLIS is uniquely positioned to serve as a resource to help local communities attain an effective level of capability and capacity; perhaps in some cases without having to independently develop similar solutions from the ground up.

Clearly, an example of this is the MCLIO Interactive Mapping Service environment (launched in March 2009) that exploits a wealth of spatially related technologies and utilizes the digital data that the MCAMLIS program has collected over decades. This service is used to generate, display and deploy maps and attribute databases e.g., Tax Parcel and Plats of Survey in a seamless web enabled interactive mapping environment. This level of integration provides that both map features and attribute features can be accessed and manipulated thru an integrated complex of software capable of supporting both PUBLIC and SECURE feature access over the Internet.

In order to position the MCAMLIS Program for an expanded role as a provider of web tools and data, MCAMLIS needs to continue to modernize and support the current MCLIO type of web service(s) and additionally support a growing demand for content rich basemap materials. Along with content rich basemap materials there needs to be a mechanism to supplying web enabled functionality capable of utilizing these. A key recommendation herein is to construct and serve MCAMLIS basemap materials over the web via a data access portal. A portal style deployment capability will serve multiple purposes in that its implementation would greatly improve access and standardize web enabled data content and it would also provide the capacity to serve web applications in support of a wide range of web based platforms e.g., wireless devices of all types.

In keeping with our history MCAMLIS needs to emphasize a continued advancement of capabilities and training necessary to assist communities in their ability to move forward in this arena.

PROJECT SUMMARY/COMMITMENTS

Address Database Maintenance Enhancement

At its meeting held August 22nd, 2006, the MCAMLIS Steering Committee authorized staff to proceed to further develop the MCAMLIS Address Database. The resulting program work effort has been completed and the data is now maintained as the MCAMLIS Enterprise Address System whereby street, parcel, building and unit addresses are fully integrated across the entire county. Customized maintenance automation tools are required to manage updates performed on this integrated parcel, address, building and street centerline database. The cost estimate for software development is \$20,000.

Plat-of-Survey Maintenance

At its meeting held March 24th, 2009, the MCAMLIS Steering Committee approved the consolidation of plat-of-survey records held by the Milwaukee County Surveyor and the Milwaukee County Register of Deeds Office to be digitally scanned and a system be devised to allow these to be presented to the public in a map parcel indexed format. In total, there were approximately 90,000 documents with the bulk of this work being completed through 2010. Annual maintenance is anticipated to include approximately 2,000 new surveys. The cost estimate for performing the annual scanning is estimated to be \$5,500.

Historical Aerial Photo Geo-rectification

Various land information programs in adjacent counties have successfully pursued recovery and geo-rectification of historical aerial black and white photography dating back to the mid 1930s. MCAMLIS staff has obtained variously dated un-rectified or poorly rectified digital datasets from UW Milwaukee AGS Library and UW Madison, Arthur Robinson Library. These data have not been fully geo-rectified and in some cases original prints would need to be re-scanned to obtain improved resolution. This effort should be undertaken in cooperation with the UW system libraries. There are multiple flights being considered: 1936-37, 1956, and 1963. Each flight series labor is estimated to cost approximately \$4,000 for a total estimate of \$12,000.

MCAMLIS Data Portal

Advancement in Data access and distribution technology has evolved to create specialized access points – referred to as portals. Allowing that data distribution requests have not been reduced and in fact have increased along with the interest in our Internet mapping materials it is important that we take advantage of this technique to make it easier for both the casual user and experienced developer to acquire route representations and data from MCAMLIS. Initial Data Portal development, implementation and deployment are estimated at \$12,000 with on-going upgrades and annual maintenance of \$6,000.

MCAMLIS Routable Street Centerline

From school bus routing to serving a court summons, routable networks are an essential core data element to these ends. The current structure of our Street Centerline database allows for address geo-coding but does not allow for routing and other forms of network analysis e.g., emergency evacuation and turn by turn directions. A medium effort enhancement to the MCAMLIS Street Centerline would allow for the support of route integration for use by the casual user as well as specialized access to non-proprietary routing tools. Making these available over the Internet is estimated at \$26,000

MCAMLIS User Group

A local community training and user group is referenced as part of four goals adopted by the MCAMLIS Steering Committee at its October 6th 2010 meeting. This task, while currently being supported by existing staff needs to be expanded to better focus efforts for purposes of providing support and training to municipalities throughout Milwaukee County. A small budget would be used to assist in developing materials, promotion and staging user training and group needs assessment. Estimate \$4,000 with continued annual support of up to \$4,000

UTILIZING THE \$2 LOCALLY RETAINED DOCUMENT FILING FEE

On-Line Geocoder

Along with maintenance enhancements to the Enterprise Address System (EAS) and the introduction of a routable centerline both of these can be further utilized by providing for an on-line geocoding application. This application would be capable of directly interacting with web applications requiring geocoding services e.g., field asset inventory, incident address validation and location referencing. This would be accomplished through a simple web interface and make use of the EAS database. Estimate \$8,000

ROD Property Records Access

The Milwaukee County Register of Deeds has indicated openness to the idea of building a link between the current MCLIO website and the FIDLAR Tapestry document retrieval system. There are no specific capabilities under consideration at this time and no estimate of costs. The Rod intends to initiate a discussion between MCAMLIS and FIDLAR staff in order to explore various options and further evaluate the feasibility of integrating these systems.

RECOMMENDED MCAMLIS \$2 WORK PROGRAM: 2010 THROUGH 2013

Based upon the preceding analysis of anticipated revenue and eligible work tasks, a recommended MCAMLIS \$2 fee work program for 2011, 2012, and 2013 is presented in Table 3. The emphasis of the work efforts herein are targeted toward furthering the Enterprise Address System database, the advancement and maintenance of a robust web mapping services environment, and to providing outreach and technical assistance to municipal and institutional government agencies. The work program set forth in Table 3 reflects this recommendation.

Table3: Recommended MCAMLIS \$2 Work Program 2010-2013

	2010	2011	2012	2013
Beginning Fund Balance	\$170,845	\$255,148	\$206,930	\$265,249
Beginning Contingency Balance	\$0	\$15,000	\$25,600	\$25,600
Contingency Balance as a Percentage of Expected Revenue (Goal 10%)	0.0%	5.9%	10.0%	10.0%
Estimated Revenue	\$184,440	\$256,000	\$256,000	\$256,001
Less Contribution to Contingency	\$0	\$10,600	\$0	\$1
Plus Fund Balance	<u>\$170,845</u>	<u>\$255,148</u>	<u>\$206,930</u>	<u>\$265,249</u>
Funds Available for Expenditures	\$355,285	\$500,548	\$462,930	\$521,249
Maintenance Costs				
MC ROD Cadastral & Street Map Maintenance	\$0	\$42,171	\$42,171	\$42,171
City of Milw Cadastral & Street Map Maintenance	<u>\$0</u>	<u>\$90,010</u>	<u>\$90,010</u>	<u>\$90,010</u>
Total Maintenance Costs	<u>\$0</u>	<u>\$132,181</u>	<u>\$132,181</u>	<u>\$132,181</u>
Funds Available for Projects	\$355,285	\$368,367	\$330,749	\$389,068
Project Costs				
Remaining Authorization	\$20,137	\$43,937		
Annual Improvement Contingency		\$40,000	\$40,000	\$40,000
Project 1 - EAS Maintenance	\$65,000	\$20,000		
Project 2 - Plat of Survey		\$5,500	\$5,500	\$5,500
Project 3 - User Group Support		\$4,000	\$4,000	\$4,000
Project 4 - Data Portal		\$12,000	\$6,000	\$6,000
Project 5 - Routable Street Centerline		\$26,000		
Project 6 - On-Line Geocoder		\$4,000	\$4,000	
Project 7 - Historical Aerial Photo		\$6,000	\$6,000	
Total Project Costs	<u>\$85,137</u>	<u>\$161,437</u>	<u>\$65,500</u>	<u>\$55,500</u>
Increase/(Decrease) in Fund Balance	\$99,303	(\$48,218)	\$58,319	\$68,319
Ending Fund Balance	\$270,148	\$206,930	\$265,249	\$333,568

SUMMARY

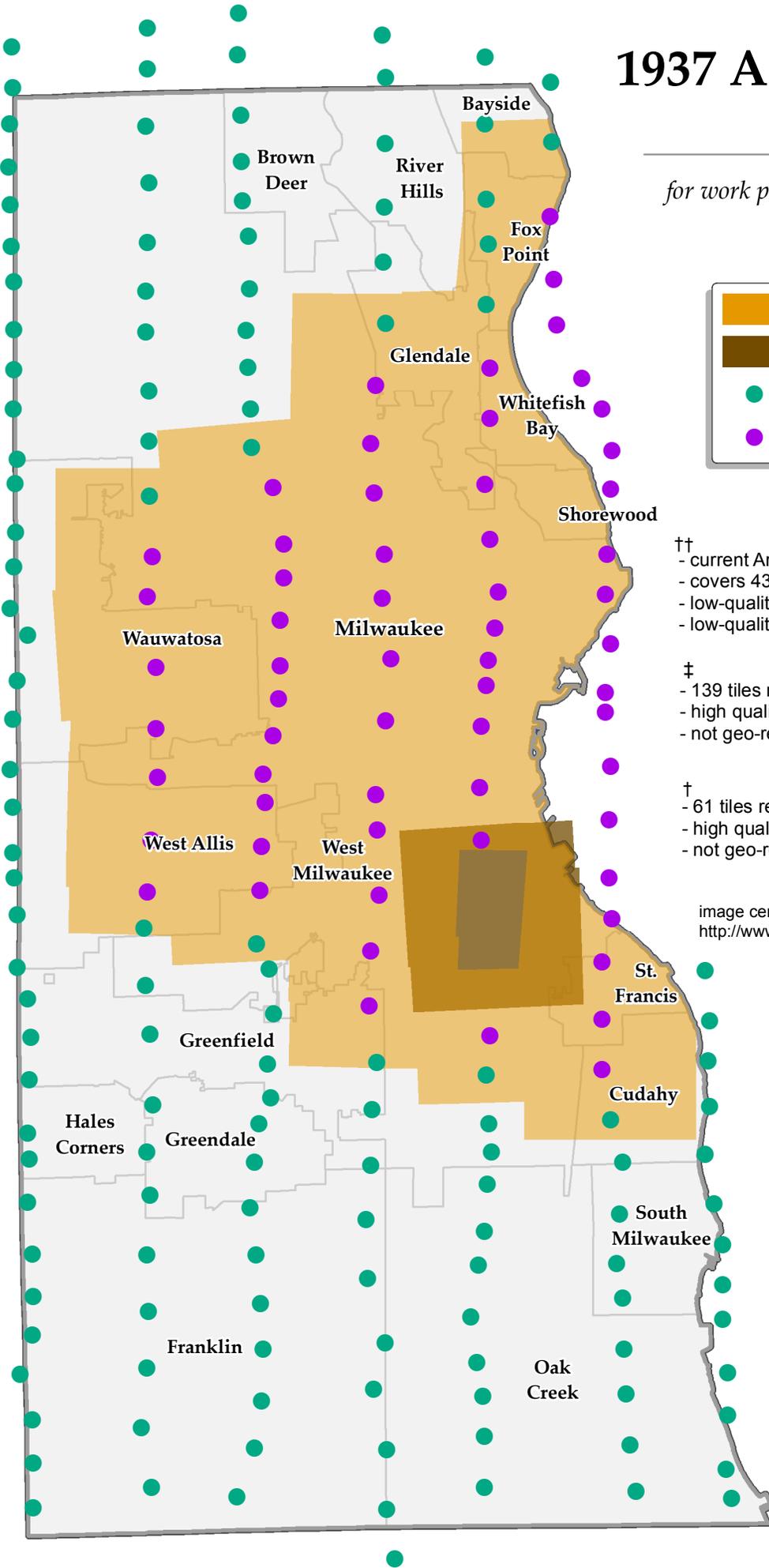
MCAMLIS Staff recommends that the MCAMLIS work program set forth in Table 3 be adopted to in order to direct the necessary resources to sustain and grow the MCAMLIS Program through the 2013.

* * * * *

UTILIZING THE \$2 LOCALLY RETAINED DOCUMENT FILING FEE

1937 Aerial Photo Project Status

for work performed through March 15, 2011



	imagery scanned & geo-rectified by UWM-AGSL ^{††}
	geo-rectified by MCLIO at request of MMSD
	available from UW-Madison Robinson Library ‡
	available from UW-Madison Robinson Library †

^{††}
 - current ArcSDE mosaicked raster (GREY_1937_12IN)
 - covers 43% of county area
 - low-quality scans
 - low-quality geo-rectification (warping & geo-referencing)

‡
 - 139 tiles required to fill in missing area
 - high quality scans
 - not geo-rectified (warped & geo-referenced)

†
 - 61 tiles required to replace AGSL-sourced imagery
 - high quality scans
 - not geo-rectified (warped & geo-referenced)

image center point source:
http://www.sco.wisc.edu/apcat/apcat_indexes.php?cat_id=1593





UWM Libraries
The American Geographical Society Library

P.O. Box 604
Milwaukee, WI
53201-0399
414 229-6282 phone
414 229-3624 fax

To: Bill Shaw
Milwaukee County

From: William Huxhold *WHA*
Lisa Schelling *LRS*
Co-Chairs, UWM GIS Day 2010

Date: December 28, 2010

Re: GIS Day Volunteer Efforts

We want to thank you very much for your contribution in making GIS Day 2010 a great success. We appreciate your willingness to lead a Speed Session at our event. These sessions are a key component of our activities, and are highly valued by GIS Day attendees.

We speak for the entire UWM GIS Council in thanking you for your contribution.



DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

MILWAUKEE COUNTY LAND INFORMATION OFFICE

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

January 18, 2011

Debbie Griffiths, Risk Manager
AT&T Wisconsin
435 S 95th St
Milwaukee, WI 53214

Dear Ms. Griffiths:

As you may know, AT&T is a longstanding (although inactive) member of the MCAMLIS Steering Committee. As such, I am writing you in an attempt to revive AT&T's participation in MCAMLIS. In your capacity as risk manager and AT&T's representative on the Diggers Hotline Board of Directors you are well aware of the importance of accurately mapping infrastructure, and the value of good and informed policy makers leading this type of program. Likewise, as Project Manager of the Milwaukee County Automated Mapping and Land Information System (MCAMLIS), I value these qualities as well. Therefore I would greatly appreciate an opportunity to assist in whatever way I can to reengage AT&T's active membership and participation on the MCAMLIS Steering Committee.

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, AT&T (a.k.a. Wisconsin Bell), the We Energies (a.k.a. Wisconsin Electric Power Company, and the Wisconsin Gas Company). A Steering Committee comprised of representatives from each of the above entities plus representatives from the City of Milwaukee and the Intergovernmental Cooperation Council of Milwaukee County oversees all activities of the consortium.

MCAMLIS was formed to develop and maintain the automated mapping base essential for the creation of a modernized land information system for Milwaukee County. In so doing, MCAMLIS is overseeing implementation of the Milwaukee County land records modernization plan set forth in the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) Community Assistance Planning Report No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System. This plan, published in October 1989, was formally adopted by the Milwaukee County Board of Supervisors on February 15, 1990, and was approved by the Wisconsin Land Information Board on January 7, 1991. This plan has since been updated on five-year

intervals, most recently dated 2010. The mapping effort detailed in the County plan builds upon historic, coordinated base mapping efforts carried out by Milwaukee County, the Milwaukee Metropolitan Sewerage District, some of the cities and villages in the County, and the SEWRPC.

COMMITTEE MEMBER REPRESENTATIVES

Kurt W. Bauer	Milwaukee County Surveyor
Donald R. Nehmer, Chairman	Capital Program Business Manager, Milwaukee Metropolitan Sewerage District
John L. La Fave, LIO	Milwaukee County Register of Deeds
Nancy A. Olson, Vice Chair	Chief Information Officer, Information and Technology Management Division, City of Milwaukee
Timothy Marquardt	Supervisor Electric GIS, We Energies
Gregory G. High	Director, Architecture, Engineering and Environmental Services Division, Milwaukee County Department of Transportation and Public Works, representing the Director, Milwaukee County Department of Transportation and Public Works
John M. Bennett	City engineer, City of Franklin, representing the Intergovernmental Coordinating Council of Milwaukee County
Josh Fudge	Department of Administration Services, representing Director, Milwaukee County Department of Administrative Services
Kevin S. Anderson (inactive)	Area Manager - Design, AT&T Milwaukee Metro South

The MCAMLIS Steering Committee meets on a quarterly basis. Meetings are typically 2-3 hours long. Meeting materials and agenda are sent out prior to the meetings and the business of the committee is recorded and distributed prior to the next meeting.

Please let me know if you or someone you feel may be suited to participate or if there are any questions regarding this invitation to participate.

Sincerely,

William Shaw

MCAMLIS Project Manager

Cc: Don Nehmer, Nancy A. Olson, Marcia Cornell