

MINUTES OF THE 58th MEETING

Milwaukee County Automated Mapping and Land Information System Steering Committee

DATE: November 18, 2003
TIME: 9:00 A.M.
PLACE: Milwaukee County Courthouse
901 N. 9th Street
Room 203-P
Milwaukee, WI

Members Present

Kurt W. Bauer, Chairman
John M. Bennett

Gregory G. High
(representing Thomas D. Kenney)
John LaFave
Thomas F. Lewandowski

David S. Misun

Nancy A. Olson
John C. Place
William C. Shaw

Members Absent
Dextra Hadnot

Milwaukee County Surveyor
City Engineer, City of Franklin, representing the
Intergovernmental Coordination Council of Milwaukee County
Director, Architectural and Engineering Services, Milwaukee
County Department of Public Works
Register of Deeds, Milwaukee County
Fiscal and Management Analyst, Milwaukee County Department
of Administrative Services
Facilities Information Supervisor, Milwaukee Metropolitan
Sewerage District
GIS Manager, City of Milwaukee
Manager, Maps and Records, WE Energies
Manager, Geographic Information Systems, WE Energies

Director, External Affairs, SBC

Guests and Staff Present

Kathleen A. Bach
Wendy J. Bradshaw
Jeffrey T. Fortin
Marcia G. Lindholm

Reinhard B. Meihnsner
Thomas D. Patterson
Kevin R. White

GIS Technician, Register of Deeds Office, Milwaukee County
SEWRPC Secretary
Planning and Zoning Administrator, City of Glendale
Central Drafting and Records Manager, Infrastructure Service
Division, City of Milwaukee
Consultant, Spatial Data Solutions, Inc.
MCAMLIS Project Manager
GIS Supervisor, Department of Public Works, Milwaukee County

Chairman Bauer stated his agreement with Ms. Reavey's assessment that no fruitful discussions concerning the current situation could occur until after the spring 2004 elections. He further opined that any changes would have to involve the incoming Mayor of the City and the County Executive, stating further that the Register of Deeds, the City Assessor, and the Steering Committee may be called upon to provide their opinions concerning an equitable and efficient process. He agreed further with Ms. Reavey's assessment that the current arrangement is inequitable for City of Milwaukee taxpayers, but noted that consolidations of this type would most likely require pressure from citizen groups and public organizations as these organizations continue to push for reduced governmental costs.

At the conclusion of the short ensuing discussion, it was the consensus of the Steering Committee that any additional action on this issue would indeed not be profitable until after the April 2004 elections. Therefore, on a motion by Mr. Bennett, seconded by Mr. High, and carried unanimously, further investigation and discussion of this issue was tabled until after the April 2004 elections.

Status of Proposed MCAMLIS Projects Tabled at the July 15, 2003, Meeting

Chairman Bauer recalled that the Steering Committee had, at the meeting of July 15, 2003, acted to table Agenda Items IV.B, IV.C, and IV.D related to the proposals for three MCAMLIS projects: the conversion of the MCAMLIS digital cadastral maps to a seamless map environment; the development of a transactional map update capability for the resulting MCAMLIS cadastral map layer; and the extension of the MCAMLIS street address database to include the City of Milwaukee street address database. He noted that since the County had not completed its geodatabase needs assessment, County staff were not ready to make recommendations concerning these three proposals. Therefore, he said, consideration of these three project proposals would continue to be postponed until the County staff are ready to make recommendations concerning these proposals.

Consideration of a Report on the MCAMLIS Digital Map Copyright and Attendant License Agreement Practices

Chairman Bauer recalled that the Committee had, at its meeting of July 15, 2003, approved a project staff memorandum reviewing the MCAMLIS digital map copyright and attendant license agreement practices. In accordance with that staff memorandum, the Steering Committee had authorized the project staff to contact individual Utilities Subcommittee members to brief them on the history of this issue, organize a meeting of the Utilities Subcommittee and interested County staff to consider the current interest in continuing the current practices; and to prepare a report for consideration by the Steering Committee that reflected the Utilities Subcommittee position on this matter. He noted that the project staff had retained Mr. Reinhard B. Meihnsner, consultant, Spatial Data Solutions, Inc., and a former member of the Steering Committee, to prepare the authorized report. He noted further that the Committee had received a copy of the report concerned for review prior to the meeting. Chairman Bauer then asked Mr. Meihnsner to review the report with the Committee.

Mr. Meihnsner proceeded to review the memorandum with the Steering Committee on a page-by-page basis. At the conclusion of that review, he noted the statement within the document that representatives of Wisconsin Electric Power Company and Wisconsin Gas Company, both now part of WE Energies, had stated that they were willing to relinquish control of the MCAMLIS digital mapping materials copyright. He further noted for the Committee's benefit that efforts to secure the participation of SBC at that meeting had been unsuccessful. He did note, however, that a letter had been received from Mr. Dextra Hadnot of SBC the day before this current Steering Committee meeting; copies of which Mr. Meihnsner then distributed to the Steering Committee (copy of Mr. Hadnot's letter attached to these minutes).

Mr. Meihnsner stated that based upon reading the letter and its attachment, he believed that SBC did not fully understand the issue under discussion, further stating that he believed SBC thought they were being asked about access to their corporate digital mapped information. He stated that further attempts would need to be undertaken to clarify the Steering Committee's intent and SBC's statement.

Chairman Bauer noted that it was stated on page 3 of Mr. Meihnsner's report that the group convened to discuss the copyright issue had acknowledged that the concurrence of SBC should be sought before any final action was taken on the release by the utilities of the copyright to the MCAMLIS digital map materials. Chairman Bauer noted that the relationship between the Steering Committee and the private utilities concerning the copyright is, in effect, a private contract and that it is not clear whether or not the Utilities Subcommittee can relinquish the copyright without unanimous concurrence of the utilities, which currently does not exist.

In response to a question from Mr. Shaw, Mr. Patterson stated that no distributions of MCAMLIS digital maps had been made to SBC for at least three years since there was no longer a contact person with SBC to receive the material. Attempts by both Mr. Meihnsner and Mr. Patterson to reestablish a contact have to date been unsuccessful.

A lengthy discussion ensued, the consensus of which was that a second meeting of the Utilities Subcommittee should be convened and that this should not be done until attempts to identify an appropriate SBC representative had been successful. It was further acknowledged that in the event that the Utilities Subcommittee was unanimous in its willingness to release the copyright, it would be necessary, as set forth in Mr. Meihnsner's memorandum, for the Steering Committee to determine if it would accept the relinquishment of the copyright from the utilities to the Steering Committee thereby keeping the current license agreements and practices in place; or to pass the copyright on to the County, as the County's representatives had suggested at the Utilities Subcommittee meeting, in which case the County would need to adopt its own set of distribution guidelines and practices.

There being no further questions or comments on the report, it was the consensus of the Committee that the report be placed on file via the minutes of the meeting (a copy of this report is attached to these minutes.)

NEW BUSINESS

Consideration of Proposed Agreement to Initiate Phase 2 of the MCAMLIS Floodland Mapping Project

Chairman Bauer noted that all Steering Committee members had received a copy of an agreement proposed to be entered into between the MCAMLIS Steering Committee and the Regional Planning Commission to initiate Phase 2 of the MCAMLIS floodland mapping project. Chairman Bauer recalled that the Steering Committee had, at its meeting held on November 24, 1998, authorized the preparation by the Regional Planning Commission of large scale flood hazard maps along identified stream reaches within Milwaukee County. This action had been taken in response to a request by the Milwaukee County Department of Emergency Government. He indicated that the project was envisioned as being conducted in two phases. The first phase, which covered an identified list of stream reaches in the Kinnickinnic River, Menomonee River, Milwaukee River, and Oak Creek watersheds; the Legend Creek and West Branch of Crayfish Creek portions of the Root River watershed; and the Fish Creek portion of the Lake Michigan Direct Drainage Area; was to have had an initial completion date of June 30, 2002. The agreement covering the Phase 1 work was approved by the Steering Committee at its meeting held on

July 13, 2000. The Steering Committee had subsequently extended the completion date of the Phase 1 work to June 30, 2003, at its meeting held on June 25, 2002.

Chairman Bauer stated that the Commission staff was now ready to initiate the second and final phase of the project which was to complete the flood hazard mapping along the remaining stream reaches within the Root River Watershed and for the Lake Michigan Coastal Flooding Area of the Lake Michigan Direct Drainage Area. He noted that the Steering Committee had, at its meeting held on July 10, 2001, approved an agreement governing the conduct of the Phase 2 work, but had then, at its meeting held on January 24, 2002, rescinded that approval pending approval by the Wisconsin Department of Natural Resources of the use of continuous simulation modeling in the hydrologic hazard area delineation. He noted that the proposed agreement specified the cost of the Phase 2 work at \$494,000, and specified a completion date of December 31, 2006. This total cost is to be shared by the Milwaukee Metropolitan Sewerage District and MCAMLIS; the former providing \$58,000 and the latter, \$436,000. Over a three year calendar period—2004, 2005, and 2006—MCAMLIS is to provide \$145,300; \$145,300; and \$145,400, respectively. The MCAMLIS funding would be provided in accordance with the Strategic Assessment or plan approved by the Steering Committee at its meeting held on June 10, 2003. He noted that formal action by the Committee was required on this agenda item.

Ms. Olson noted that the original reason for postponing the initiation of Phase 2 of the floodland mapping program was that approval had yet to be secured from the Department of Natural Resources (DNR) on the use of continuous simulation modeling, noting further that on the basis of the report given earlier in the meeting, this approval had still not been secured and she questioned why this agreement was being brought before the Steering Committee again with this approval still lacking. Chairman Bauer responded that since that time, the use of continuous simulation modeling has been approved by the Federal Emergency Management Agency (FEMA) for the work, that the DNR had approved the use of continuous simulation modeling for flood hazard mapping by the Commission in the Des Plaines River watershed, and noted that if Phase 2 of the project was not initiated shortly, it would push the completion date for Phase 2 further into the future. He noted further that the DNR has been made aware on several occasions of the importance of a timely decision in this regard because continuous simulation modeling is also used by the Milwaukee Metropolitan Sewerage District (MMSD) for its flood control construction projects.

Ms. Olson asked if the Regional Planning Commission staff was confident that the DNR will not object to moving ahead with the Phase 2 work pending final resolution of this question. Chairman Bauer responded that while the outcome of an issue such as this can never be certain, the Commission staff is reasonably confident that the DNR will eventually approve the use of continuous simulation modeling once DNR staff understand the technique.

Mr. High questioned the funding being supplied by the MMSD and further questioned the rationale for their involvement in the project. Mr. Patterson responded that the MMSD had previously contributed to the funding for the Phase 1 work, noting that there are certain reaches of streams for which MMSD has floodland management jurisdiction, and responsibility for management of those stream reaches. He noted further that planning work carried out for the District by the Regional Planning Commission had recommended mitigating action such as channeling, removal of structures, and the construction of upstream storage capacity, which were now being implemented by the MMSD as part of its management responsibility.

Mr. Shaw asked if there were any requirements for the Steering Committee to undertake this work. Mr. Patterson responded that the commitment for this work was made to the Milwaukee County Department of Emergency Government. He noted further that the projects in Milwaukee County were integrated with projects in the upstream reaches of streams flowing into Milwaukee County. None of the work outside Milwaukee County is funded by MCAMLIS, but is funded instead by other agencies. This work, he noted, was going on simultaneously with the work in Milwaukee County.

A lengthy discussion ensued concerning the merits of proceeding with this project lacking the concurrence of the DNR concerning the use of continuous simulation modeling. At the conclusion of this discussion, on a motion by Mr. Lewandowski, seconded by Mr. LaFave, and carried unanimously, the project staff was instructed to direct a letter to the DNR Secretary expressing the Steering Committee's concern at the continued inability to resolve this issue. Specifically, the Steering Committee requested answers from the DNR on two major points: 1) Given that FEMA has approved the use of continuous simulation modeling, why has the DNR failed to make any decision on the propriety of this technique; and 2) Given the fact that the DNR has approved floodplain delineations derived through the use of continuous simulation modeling in other watersheds in Southeastern Wisconsin, why has the DNR withheld approval of the use of this technique in Milwaukee County.

[Secretary's Note: Copy of letter to Mr. Scott Hassett, Secretary, Wisconsin Department of Natural Resources attached to these minutes.]

Mr. Shaw and Mr. Lewandowski inquired about the risks that might be involved in going ahead with the Phase 2 work if, indeed, the DNR would require the use of an alternative modeling technique. Chairman Bauer noted that the majority of the cost of these efforts was involved in the collection of the data needed for flood hazard delineation regardless of the type of modeling used. In answer to a question by Mr. Shaw, Chairman Bauer stated that he could not make a definitive statement about the proportion of the total cost of the floodland mapping project attributable to the necessary hydrologic modeling, and the amount, therefore, that would be at risk in the event that the DNR withheld approval of the use of continuous simulation modeling. He further stated that this information would be acquired and added to the minutes as a Secretary's Note.

[Secretary's Note: Evaluation of the detailed project budget indicated that approximately \$143,260, or about 29 percent, of the \$494,000 total proposed budget would be at risk in the event that the DNR withheld approval of the use of continuous simulation modeling for the Milwaukee County Floodland Mapping Program.]

There being no further questions or comments, on a motion by Mr. Bennett, seconded by Mr. High, and carried unanimously, the proposed agreement was approved (copy attached to these minutes) and the staff authorized to secure the necessary review of the Milwaukee County Corporation Counsel, Risk Manager, and Disadvantaged Business Director, and to complete the execution of the agreement between the Steering Committee and the Regional Planning Commission.

MCAMLIS Copyright Memorandum

October 10, 2003

MCAMLIS Copyright Memorandum

Date: October 10, 2003

To: Thomas D. Patterson
MCAMLIS Project Manager

From: Reinhard Meihnsner, President
Spatial Data Solutions, Inc.

Re: Report Summary, MCAMLIS Copyright Meeting

Time: Tuesday, September 23, 2003

Place: Milwaukee County Courthouse
Department of Administrative Services
Conference Room 308

Sub-committee Members Present

| | |
|---------------|--|
| William Finke | Counsel, WE Energies |
| John Place | Manager, Maps and Records, WE Energies |
| William Shaw | Manager, Geographic Information Systems, WE Energies |

Sub-committee Members Absent

| | |
|---------------|---------------------------------|
| Dextra Hadnot | Director, External Affairs, SBC |
|---------------|---------------------------------|

Milwaukee County Representatives Present

| | |
|-----------------------|--|
| Gary Dreat | Fiscal & Budget Manager, Architectural and Engineering Services Milwaukee County Department of Public Works |
| Greg G. High | Director, Architectural and Engineering Services Milwaukee County Department of Public Works |
| John LaFave | Register of Deeds, Milwaukee County |
| Thomas F. Lewandowski | Fiscal and Management Analyst, Department of Administrative Services, Milwaukee County |

Milwaukee Metropolitan Sewerage District (MMSD) Representative Present

| | |
|-------------|---|
| David Misun | Facilities Information Supervisor, MMSD |
|-------------|---|

MCAMLIS Staff Present

| | |
|---------------------|-------------------------|
| Thomas D. Patterson | MCAMLIS Project Manager |
|---------------------|-------------------------|

MCAMLIS Land and Utility Information System Internet Prototype

At its meeting held on August 29, 2000, the MCAMLIS Steering Committee approved a prospectus to investigate a Land and Utility Information System Prototype. The Southeastern Wisconsin Regional Planning Commission, acting on behalf of the Steering Committee, retained Ruekert/Mielke, Inc., to carry out the tasks outlined in the prospectus. A Technical Advisory Committee comprised of representatives from the MCAMLIS consortium and several representatives from the communities selected as pilot areas for the project, worked with Ruekert/Mielke, Inc., and SEWRPC to develop three reports that summarized the findings of the investigation. A fourth and final report provided the recommendations for the Steering Committee's consideration.

As part of the investigation into the feasibility of implementing a web-supported land information system, issues concerning the existing MCAMLIS copyright and attendant licensing agreement and data distribution practices were discussed by the Technical Advisory Committee. The Committee's conclusion was that the current licensing arrangement restricted the distribution of MCAMLIS digital mapping materials, unnecessarily controlled the use of this information, and, perhaps, limited enhancements that could benefit all users of the information. In the opinion of the Technical Advisory Committee, the distribution of MCAMLIS digital mapping materials in an Internet environment would be complicated by the existing copyright, the attendant license agreement requirement, and the associated data distribution guidelines. The Technical Advisory Committee recommended elimination of the copyright licensing requirement and associated distribution guidelines.

Copyright and License Agreement Background

Under a License Agreement entered into on December 9, 1993, Milwaukee County, the Milwaukee Metropolitan Sewerage District, Wisconsin Bell, the Wisconsin Electric Power Company, and the Wisconsin Gas Company -- the funding partners of the MCAMLIS program -- established a formal arrangement pertaining to matters of copyright ownership and use of MCAMLIS digital mapping materials (copy of License Agreement attached). The agreement distinguished between hard copy and digital mapping materials. Under the terms of the License Agreement, the Steering Committee retained copyright title to all hard copy maps. A subcommittee of the Steering Committee, comprised of Wisconsin Bell (now SBC Ameritech), Wisconsin Electric Power Company (now WE Energies) and Wisconsin Gas Company (also now WE Energies), was granted copyright title by the Steering Committee to the digital mapping materials prepared under the MCAMLIS work program.

Assignment of the copyright to the investor-owned utilities was, in large part, the result of two concerns. First, the utilities had an interest in knowing that the value of their individual \$520,000 investments would not be undermined by an outside party acquiring the data at minimal cost and using or reselling the data for profit. Second, there was an opinion that the licensing process might present an opportunity for the generation of revenue that could help to offset the costs of maintenance and the development of new applications for MCAMLIS. To date, no entity has expressed any substantive interest in acquiring the information at the \$520,000 amount and assessing an alternative charge over and above the cost to reproduce the data, but less than \$520,000, has not been considered by the Subcommittee or the MCAMLIS Steering Committee.

At its meeting held on October 17, 1995, the MCAMLIS Steering Committee adopted the "MCAMLIS Data Requisition and Distribution Guidelines" which implemented the above referenced License Agreement between the funding organizations. These guidelines required the execution of a separate License Agreement between the Utilities Subcommittee and the governmental unit or other entity wishing

to obtain access to the MCAMLIS digital mapping materials. The MCAMLIS Steering Committee was, and still is, comprised of representatives of the funding partners noted above with one additional representative each from the City of Milwaukee and the Intergovernmental Cooperation Council of Milwaukee County.

MCAMLIS Copyright and Attendant License Agreement Review

Based on the recommendation from the MCAMLIS Land and Utility Information System Committee report to eliminate the copyright and attendant licensing requirement, the MCAMLIS Steering Committee requested a staff review of the current copyright and attendant License Agreement practices. In addition to the review, the Steering Committee also requested the preparation of a memorandum report that would set forth the position of the Subcommittee concerning the continuation, modification, or abandonment of the licensing practices. Acting in its capacity as staff to the MCAMLIS Steering Committee, SEWRPC contracted with Spatial Data Solutions, Inc., to assist with the completion of the review and preparation of the report.

Meetings were arranged with appropriate individuals representing the subcommittee members who were not involved with the MCAMLIS program when the original copyright and licensing practices were established. These meetings were intended to brief the newer representatives on the history and current interest concerning the issue. A meeting was then arranged with the entire subcommittee to discuss the issues and to set forth a Subcommittee recommendation concerning the continuation, modification, or abandonment of the current License Agreement. At the conclusion of that meeting, the following positions had been established:

- WE Energies staff present at the meeting stated that the WE Energies subsidiary firms, Wisconsin Electric Power Company and Wisconsin Gas Company, did not see any benefit to their respective companies in continuing to hold the copyright to the MCAMLIS digital mapping materials; however, it was acknowledged that the concurrence of SBC Ameritech should be sought before the copyright was surrendered or abandoned by the Utilities Subcommittee.
- Meeting participants were of the opinion that if the utility subcommittee members were willing to surrender the rights and privileges granted by the copyright, then a decision concerning whether or not to abandon the copyright should be made by the MCAMLIS Steering Committee since the MCAMLIS Steering Committee had made the original grant of the copyright to the utilities subcommittee.
- Milwaukee County representatives present at the meeting stated that there might be value in the MCAMLIS Steering Committee holding the copyright, or in the event that the Steering Committee had no interest in holding the copyright, in assigning the copyright to Milwaukee County.
- Meeting participants agreed that in the event a copyright continued to be exercised with respect to the MCAMLIS digital mapping materials by any entity other than the Utilities Subcommittee, then Sections 2 and 8 of the copyright license agreement between the funding partners of the MCAMLIS program should be revised to reflect the fact that the investor owned utilities no longer held the copyright. This would also require revision of the current licensing requirements and practices for non MCAMLIS Steering Committee members who wished to acquire the MCAMLIS digital mapping materials.

- Meeting participants acknowledged that any decision to transfer or modify the assignment of the copyright would require appropriate revision to the current "MCAMLIS Data Requisition and Distribution Guidelines" document.
- Meeting participants recommended that any changes made to copyright ownership and licensing requirements be discussed with and reviewed by intellectual property counsel at Quarles & Brady, the firm that assisted the Steering Committee in establishing the initial copyright assignment and attendant licensing agreements.

* * * * *

RBM/TDP/lw
#87781 v1 - MCAMLIS Copyright Memo



SBC Wisconsin
722 N. Broadway
Floor 13
Milwaukee, WI 53202

November 17, 2003

From: Dextra Hadnot
Director, External Affairs

To: Mr. Hardy Mehsner, Consultant
MCAMLIS Steering Committee

Mr. Mehsner:

Attached is the statement approved by SBC Legal for your MCAMLIS Steering Committee Report due on Tuesday, November 18, 2003.

Please contact me if you have additional questions.

Sincerely,

A handwritten signature in cursive script that reads 'Dextra Hadnot'.

Dextra

SBC is not opposed in principle to some sort of web-based access to the digital mapping data, but it does oppose the proposal that SBC should give up or dilute its rights under the existing copyright and license. Therefore, although SBC does not support the proposed changes to the existing license and copyright, it is willing to support a new end-user license for the web application similar to the paper version which provides that the user would agree not to profit from the redistribution of the information.

LICENSE AGREEMENT

WHEREAS, Milwaukee County, AMERITECH (Wisconsin Bell), the Wisconsin Electric Power Company, the Wisconsin Gas Company, and the Milwaukee Metropolitan Sewerage District, have entered into a cooperative agreement establishing the Milwaukee County Automated Mapping and Land Information System, said system being governed by a Steering Committee comprised of representatives from Milwaukee County, AMERITECH (Wisconsin Bell), the Wisconsin Electric Power Company, the Wisconsin Gas Company, the Milwaukee Metropolitan Sewerage District, the City of Milwaukee, and the Intergovernmental Cooperation Council of Milwaukee County, to develop an automated mapping and land information system covering Milwaukee County, including, among other things, information and materials relating to U.S. Public Land Survey corner monumentation, control surveys, digital planimetric and topographic maps, digital cadastral map overlays, parcel identifiers, and other related documents and materials (all collectively the "Materials");

AND WHEREAS, in order to obtain certain financial support of AMERITECH (Wisconsin Bell), the Wisconsin Electric Power Company, and the Wisconsin Gas Company (the "Utilities") in connection with these activities, the Steering Committee has come to the following agreement relating to ownership, access, and use of the Materials:

1. Copyright Ownership. The Steering Committee shall own copyright title to all of said Materials with the exception of the "Digital Materials". The Digital Materials shall consist of all digital format (regardless of means of storage) Materials, including without limitation computer data bases. Copyright title to the Digital Materials shall be owned by a sub-committee of the Steering Committee (the "Sub-committee") comprised of AMERITECH (Wisconsin Bell), the Wisconsin Electric Power Company, and the Wisconsin Gas Company (the "Utilities").

2. License. All parties to the cooperative agreement creating the Milwaukee County Automated Mapping and Land Information System are hereby irrevocably and perpetually licensed (and granted the right to license others) to use, reproduce, modify, distribute, perform, and display the Materials (other than the Digital Materials) without restriction. With respect to the Digital Materials, all of the parties to the agreement creating the Milwaukee County Automated Mapping and Land Information System are hereby irrevocably and perpetually (albeit just for their own, including corporate affiliates, internal purposes), licensed to use, reproduce, modify, perform, and display the Digital Materials. This shall include the right to prepare and distribute non-digital form reports on one or more land parcels using the Digital Materials, and to distribute the reports to the public. However, except as provided below, absent the consent of a majority of both the Sub-committee and the Steering Committee, none of the members of the Steering Committee may permit distribution of copies of the Digital Materials (or digital form materials substantially based thereon) to others besides the Steering Committee. Distribution in violation of this paragraph shall be deemed to be a copyright violation. Each member of the Steering Committee shall prevent access by third parties to such digital items (except as provided below).

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

4. Nothing herein shall preclude the Milwaukee Metropolitan Sewerage District from complying with its obligations under any grant and aid agreement with the State of Wisconsin or the Federal Government or in complying with the requirements of Sections 19.32 to 19.39, Wisconsin Statutes.

WISCONSIN GAS COMPANY

Date 11/16/93

By Gerald R. Giroux

APPROVED
 ADDENDUM
ATTACHED
11/12/97
SW
LAW DEPT.

Attest _____

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

Date 11/17/93

By Robert H. Schaner

Attest Robert H. Schaner

MILWAUKEE COUNTY REGISTER OF DEEDS

Date Nov 8. 1993

By Walter D. Barczak

Attest [Signature]

DIRECTOR, MILWAUKEE COUNTY
DEPARTMENT OF ADMINISTRATION

Date 11-9-93

By [Signature]

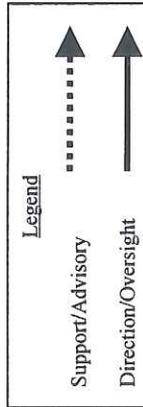
Attest Barbara Parissean

KWB/TDP/DHH
5MCAMLIS.AD5
11/03/93

Milwaukee County Land Information Program

Governance Structure

Draft 2
June 28, 2004



Milwaukee County Land Information Program Committee

Membership:

- Various County Department Heads or their designees (DAS, DPP)
- Elected County Officers or their designees (County Board Supervisor, Register of Deed's, Sheriff)
- Appointed Members (Faculty Member - UW/Marquette, 2 Private Citizens)

Roles/Responsibilities:

- Policy formulation and advice to County Executive's Office
- Set program priorities
- Program budget approval
- Project oversight
- GIS program sponsorship and leadership

Fiscal/Budgetary Responsibilities:

- Overall expenditure authority of Land Record Modernization retained fees pursuant Section 59.72 of Wisconsin Statutes

Municipal/Utility Sub-Committee

Membership:
Municipal and Utility Representatives

Roles/Responsibilities:

- Meets limited number of times each year to help direct future Land Information projects

Centralized Land Information (GIS) Section (Office)

Roles/Responsibilities:

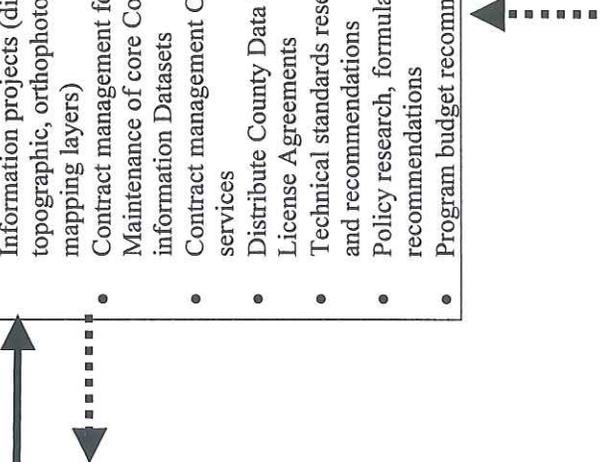
- Overall County Land Information Program Management
- Management of County's GIS IT infrastructure (ArcSDE Database, ArcIMS Web Server)
- Develop and Maintain County enterprise GIS IT applications and services.
- Contract management for Land Information projects (digital cadastral, topographic, orthophotography and other mapping layers)
- Contract management for creation and Maintenance of core County land information Datasets
- Contract management County Surveyor services
- Distribute County Data in accordance with License Agreements
- Technical standards research, formulation, and recommendations
- Policy research, formulation, and recommendations
- Program budget recommendations

GIS Technical Group

Membership:
Department GIS Technicians, IMSD

Roles/Responsibilities:

- Discuss Technical Issues
- Make recommendations for future GIS infrastructure improvements and enterprise applications



**ANTICIPATED EXPENDITURE LEVELS AND COMMITTED WORK TASKS:
2003 THROUGH 2006**

Anticipated 2003 Through 2006 Expenditure Levels

The amounts anticipated to be available for funding MCAMLIS work tasks for the period 2003 through 2006 are set forth in Table 4. The expenditure authority of \$1,000,000 shown for calendar year 2003 was approved by the Milwaukee County Board. Total estimated expenditure levels of \$750,000 for calendar year 2004 and \$650,000 for calendar years 2005 and 2006 are based upon the anticipated MCAMLIS revenues set forth in Table 3.

Table 4

COMMITTED MCAMLIS WORK PROGRAM: CALENDAR YEARS 2003 THROUGH 2006

| Work Task | 2003 | 2004 | 2005 | 2006 |
|--|--------------|------------|------------|------------|
| Estimated Total Expenditure Authority Available | \$ 1,000,000 | \$750,000 | \$650,000 | \$ 650,000 |
| Projects Obligated by Previous Action of the Steering Committee | | | | |
| WLIP 2001 Strategic Initiatives Project (Property Assessment and Property Tax Data) | 15,000 | -- | -- | -- |
| WLIP 2002 Strategic Initiatives Project (Floodland Data) | 13,600 | -- | -- | -- |
| City of Milwaukee Cadastral Map Transformation-Phase 7 | 129,345 | -- | -- | -- |
| City of Milwaukee Cadastral Map Transformation-Phase 8 | 110,000 | 16,185 | -- | -- |
| City of Milwaukee Cadastral Map Transformation-Phase 9A | 30,000 | 29,175 | -- | -- |
| City of Milwaukee Cadastral Map Transformation-Phase 9B | -- | 53,950 | -- | -- |
| ROD Federal Tax Lien Automation Project | 9,800 | -- | -- | -- |
| ROD Equipment Purchase (InGeo) | 20,000 | -- | -- | -- |
| ROD Document Imaging System Upgrade | 240,000 | -- | -- | -- |
| Subtotal | \$ 567,745 | \$ 99,310 | \$ -- | \$ -- |
| Projects Requiring Authorization from the Steering Committee for Continuation of Previously Committed Work Tasks | | | | |
| MCAMLIS Floodland Mapping Project - Phase 2 | \$ -- | \$ 218,000 | \$ 218,000 | \$ -- |
| City of Milwaukee Cadastral Map Transformation-Phase 10 | -- | -- | -- | -- |
| Subtotal | \$ -- | \$ 218,000 | \$ 218,000 | \$ -- |
| On-Going Project Management and Database Maintenance Tasks | | | | |
| MCAMLIS Cadastral Map and Street Address Database Maintenance Milwaukee County Surveyor ^a | \$ 60,000 | \$ 60,000 | \$ 60,000 | \$ 60,000 |
| MCAMLIS Project Management | 60,000 | 60,000 | 60,000 | 60,000 |
| Subtotal | 100,000 | 100,000 | 100,000 | 100,000 |
| Subtotal | \$ 220,000 | \$ 220,000 | \$ 220,000 | \$ 220,000 |
| Total | \$ 787,748 | \$ 537,310 | \$ 438,000 | \$ 220,000 |
| Estimated Amount Available to Undertake New Work Tasks | \$ 212,252 | \$ 212,690 | \$ 212,000 | \$ 430,000 |

^aBy County Board policy, expenses associated with the services of the Milwaukee County Surveyor are supported from MCAMLIS Program revenues.

In addition, in association with the assumption that the \$4 document filing fee will generate approximately \$650,000 annually to fund MCAMLIS work tasks, it needs to be noted that shortfalls in this amount would have significant impacts on the actual expenditure levels that can be budgeted annually. It should be further noted in this regard that in two of the six most recent years of collection of this fee, fund collections were less than \$650,000--approximately \$610,000 in 2000 and approximately \$645,000 in 1997. Occasional collection shortfalls of this magnitude could probably be dealt with

WISCONSIN LAND INFORMATION PROGRAM

2003 STATUS REPORT

MILWAUKEE COUNTY

Milwaukee county

Section 1: Organizational Information

1. Who is the Land Information Officer in your county?

John La Fave

2. What is the telephone number of the LIO?

414-278-4011

3. What is the fax number of the LIO?

414-223-1257

4. What is the email of the LIO?

regdeeds@milwcnty.com

5. To whom does the LIO report?

Register of Deeds

6. Does your Land Information Office have a website?

- Yes
- No

7. If yes, what is the URL(s) (website address)?

8. Does the Land Information Officer have other duties?

- Yes
- No

If yes, identify the percent of the job that is LIO related. 10 %

9. Including the Land Information Officer, indicate the total number of full time equivalent staff positions allocated to Land Information Office activities.

3

10. Please provide: Name, Title, and Phone Number for each person who completed the survey

| Name | Title | Phone |
|---------------------|---------------------------|--------------|
| John La Fave | Register of Deeds | 414-278-4011 |
| Kurt W. Bauer | Milwaukee County Surveyor | 262-547-6721 |
| Kevin White | DPW GIS Supervisor | 414-278-2176 |
| Thomas Lewandowski | DOA Budget Analyst | 414-278-5330 |
| Thomas D. Patterson | MCAMLIS Project Manager | 262-547-6721 |
| | | |
| | | |
| | | |
| | | |
| | | |

11. Comments:

John La Fave has served as the Land Information Officer and Register of Deeds for Milwaukee County since January 6, 2003.

Milwaukee county

Section 2: GIS Software

1. Which of the following GIS software programs are used by your county?
Please check all that apply

| | |
|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | AutoCad by Autodesk |
|-------------------------------------|---------------------|

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | AutoCad Map by Autodesk |
| <input checked="" type="checkbox"/> | Microstation by Bentley Systems |
| <input checked="" type="checkbox"/> | ArcGIS by ESRI |
| <input checked="" type="checkbox"/> | ArcView by ESRI |
| <input checked="" type="checkbox"/> | Map Objects IMS by ESRI |
| <input checked="" type="checkbox"/> | ARC IMS by ESRI |
| <input checked="" type="checkbox"/> | ARC SDE by ESRI |
| <input type="checkbox"/> | GenMap by Genasys II |
| <input type="checkbox"/> | FRAME by Intergraph |
| <input type="checkbox"/> | MGE by Intergraph |
| <input type="checkbox"/> | GeoMedia by Intergraph |
| <input type="checkbox"/> | GeoMedia Professional by Intergraph |
| <input type="checkbox"/> | MapInfo |
| <input type="checkbox"/> | Smallworld |
| <input checked="" type="checkbox"/> | Other <i>please specify</i> GGM-Printtrak |

2. Which of the following database software systems are used by for your land records?

check all that apply

| | |
|-------------------------------------|------------------|
| <input checked="" type="checkbox"/> | Oracle |
| <input checked="" type="checkbox"/> | Microsoft Access |
| <input checked="" type="checkbox"/> | Microsoft SQL |
| <input type="checkbox"/> | Informix |
| <input type="checkbox"/> | AS/400 |
| <input type="checkbox"/> | FoxPro |
| <input type="checkbox"/> | |

| | |
|--------------------------|----------------------|
| <input type="checkbox"/> | Other please specify |
|--------------------------|----------------------|

3. Please indicate the primary vendor of GIS mapping software possessed by various county departments

| County Office | Package 1 | Package 2 | Package 3 | Other |
|--|-------------|-------------|--------------|-------------------|
| Agricultural/ Extension | --Specify-- | --Specify-- | --Specify-- | |
| Emergency Government | --Specify-- | --Specify-- | --Specify-- | |
| Forestry | --Specify-- | --Specify-- | --Specify-- | |
| Highways/ Transportation | --Specify-- | AutoCad | Microstation | Paver, Cartograph |
| Information Services/ Data Processing | --Specify-- | --Specify-- | --Specify-- | |
| Land Conservation | --Specify-- | --Specify-- | --Specify-- | |
| Land Information Office | ArcView | ArcView | --Specify-- | |
| Parks and Recreation | AutoCad | AutoCad | --Specify-- | |
| Planning | --Specify-- | --Specify-- | --Specify-- | |
| Public Health | --Specify-- | --Specify-- | --Specify-- | |
| Public Works/ | | | | |

| | | | | |
|---------------------------------------|-------------|-------------|--------------|--------------|
| Infrastructure/ Solid Waste | AutoCad | MGE | ArcView | |
| Real Property Lister | --Specify-- | --Specify-- | --Specify-- | |
| Register of Deeds | ArcView | ArcView | --Specify-- | |
| Sheriff | --Specify-- | --Specify-- | --Specify-- | GGM Printrak |
| Surveyor | --Specify-- | --Specify-- | Microstation | AutoCad |
| Treasurer | --Specify-- | --Specify-- | --Specify-- | |
| Zoning | --Specify-- | --Specify-- | --Specify-- | |
| Other, please specify Transit | ArcView | AutoCad | --Specify-- | |
| Other, please specify County Board | ArcView | --Specify-- | --Specify-- | |

4. Identify metadata software used.

Please check all that apply

| | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Arc Catalog |
| <input checked="" type="checkbox"/> | Spatial Metadata Management Software (SMMS) |
| <input checked="" type="checkbox"/> | Other please specify TKME |

5. Comments?

[Empty comment box]

Milwaukee county

Section 3: Geodetic Control Networks

The WLIP geographic reference frameworks foundational element includes geodetic control networks (e.g., horizontal and vertical networks), the Public Land Survey System (section corner remonumentation and coordinates), and geographic control data (e.g., features captured on planimetric and topographic base maps, and by aerial photography and digital orthophotography).

Horizontal Geodetic Control Networks

In the early 1990's, the Wisconsin Department of Transportation (WisDOT), together with the National Geodetic Survey (NGS), developed a High Accuracy Reference Network (HARN) to provide primary horizontal control for Wisconsin.

- 1. Does your county have a horizontal geodetic control network that pre-dates or is not based on the Wisconsin HARN?
 - Yes
 - No
- 2. Has your county developed a densified horizontal control network using the Wisconsin HARN?
 - Yes
 - No, but our county plans to, Skip to Question #5
 - No, and there are no plans to, Skip to Question #5

3. If yes, were WLIB, FGCS, and/or WisDOT guidelines followed in the densification of the HARN?

Check all that apply.

| | |
|--------------------------|--|
| <input type="checkbox"/> | Yes, WLIB Specifications and Guidelines to Support Densification of the Wisconsin High Accuracy Reference Network (HARN) Using Global Positioning System (GPS) Technology – June 1995 were used. |
| <input type="checkbox"/> | Yes, Federal Geodetic Control Subcommittee guidelines were used. |
| <input type="checkbox"/> | Yes, WisDOT guidelines were used. |
| <input type="checkbox"/> | No, none of these guidelines were used. |

4. If densification of the horizontal control network has been initiated, how much densification work has been completed within your county?

| | Number of stations completed in your county | Additional stations needed or planned |
|--|---|---------------------------------------|
| HARN | | |
| Primary Stations (1 part per million) | | |
| Secondary Stations (2 parts per million) | | |
| Tertiary Stations (4 parts per million) | | |
| Tertiary Stations (10 parts per million) | | |

5. Were the horizontal control stations for your county blue booked (i.e. conform to the Input Formats and Specifications of the National Geodetic Survey Data Base of the Federal Geodetic Control Subcommittee) and submitted to the National Geodetic Survey for inclusion in their national database?

Yes
 No

Vertical Geodetic Control Networks

6. Has your county developed a densified vertical control network based on the National Spatial Reference System?

- Yes
- No, but our county plans to
- No, and there are no plans to

7. Comments?

A densified control system based upon the National Geodetic Vertical Datum of 1929 was completed before the Harn was proposed.

Milwaukee county

Section 4: Coordinate Data

1. What is the primary coordinate system used by your county for digital mapping/GIS?

State Plane Coordinates - South Zone

2. What is the primary horizontal datum used by your county for digital mapping/GIS?

North American Datum of 1927 (NAD27)

3. What is the primary vertical datum used by your county for digital mapping/GIS?

National Geodetic Vertical Datum of 1929 (NGVD 29)

4. Does your county have the ability to convert non-compliant data to the coordinate system used by your county?

- Yes, we process it internally
- Yes, we contact it out
- No

5. Comments?

Milwaukee county

Section 5: Public Land Survey System

1. Does your county have an active remonumentation program?
 - Yes
 - No
 - Planned

2. How many PLSS corners (section, 1/4, meander) in your county have been remonumented meeting or exceeding 1970 Wisconsin statute requirements?

corners of corners total.

3. When PLSS corners in your county are being remonumented or reestablished, are coordinates developed and tied to the geodetic control network?
 - Yes
 - No
 - Planned

4. How many PLSS corners in your county have FGCC Third Order Class 1 coordinate values?

corners of corners total.

5. Comments?



Milwaukee county

Section 6: Digital Base Maps

A base map can be defined in several different ways. For the purposes of this survey, a base map consists of natural and human-made features (those that can be identified and mapped using photogrammetric or field methods) in a digital vector format (represented through points, lines, and polygons). Examples of base map features may include waterways and tree lines as representations of natural features and building outlines and street pavement edges as representations of human-made features. A list of base map features is included in Question #3. Image bases (including digital orthophotography) and digital elevation data (contours, spot elevations, digital elevation models, etc.) are addressed in later sections of this survey.

1. Has your county created or acquired a digital base map in vector format?

- Yes
- No, but my county intends to
- No, and there are no plans to

2. Which of the following features do you include as part of your digital base map?

Please check all that apply

| Feature | Percent Complete | Plan to Complete? | Plan to Maintain or update? |
|---|------------------|--------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> Building footprints | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Building Centroids | % | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | |

| | | | | |
|-------------------------------------|--|----------------------------|--------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> | Address points | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | Surface hydrography | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Wetlands and swamps | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Street centerlines | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | Center of right-of-way | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | Street edge of pavement | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Railroads | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Driveways | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Parking lots | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Sidewalks | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Trees and wooded areas | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Utility poles and towers | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> | Fencelines | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | Municipal and County boundaries | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | Other Please Specify: <input type="text"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | Other Please Specify: <input type="text"/> | <input type="checkbox"/> % | <input type="checkbox"/> | <input type="checkbox"/> |

3. Which of the following best represents the compilation scale of digital base mapping maintained by your county?

- 1:1200 scale (1"=100') or larger scale
- 1:1201 to 1:2400 scale (1"=200')

- 1:2401 to 1:4800 scale (1"=400')
- 1:4801 to 1:9600 scale (1"=800')
- 1:9601 to 1:12,000 scale (1"=1000')
- 1:12,001 to 1:24,000 scale (1"=2000')
- Smaller scale than 1:24000 scale (1"=2000')

4. Have cities, villages, and towns in your county developed their own digital base maps?

- Yes
- No

If yes, please list the cities.

5. Comments?

Milwaukee county

Section 7: Digital Elevation Data

Digital Elevation Data

1. Has your county created or acquired digital elevation data?

- Yes
- No, but our county plans to, *Skip to Next Section*
- No, and there are no plans to, *Skip to Next Section*

2. If yes for Question #1, what is the format of the digital elevation data maintained by your county?

Please check all that apply

| Format of Digital Elevation Data | Contour Interval | Resolution (grid cell size) | Vertical Accuracy (+/-) | Percent Complete |
|---|------------------|-----------------------------|-------------------------|------------------|
| Contours | 2' | N/A | 1' | 100 % |
| Other Elevations (e.g. spot elevations, mass points, and break lines) | N/A | N/A | 0.5' | 100 % |
| Terrain Matrices (e.g. raster array, such as the USGS DEM) | N/A | | | % |
| Triangulated Irregular Network (TIN) | N/A | N/A | | % |
| Other, <i>Please Specify:</i> | | | | % |

3. Comments?

Milwaukee county

Section 8: Image Base Maps

Image Bases

1. Has your county created or acquired digital orthophotography?

- Yes
- No, but our county plans to, *Skip to Question #4*
- No, and there are no plans to, *Skip to Question #5*

2. If yes to Question #1, how much of your county is complete?

100 %

Is it in your primary county coordinate system?

- Yes
- No

3. Does your county intend to acquire or update digital orthophotography?

- Yes
- No

If no, Please skip to Question 4

If yes, Please specify the resolution of the next update: 1'

and the year: 2005

4. Please provide information about the date, scale, and resolution of the digital orthophotography for the appropriate source(s):

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| Source | Date of photography | Scale of image product | Resolution of DOPs (grid cell size) | Color or Black and White |
|--|---------------------|------------------------|-------------------------------------|--------------------------|
| Digital Orthophoto Quarter Quadrangles by the U.S. Geological Survey | | | --Select Resolution-- | --Specify Color-- |
| County or County Consortium | | | --Select Resolution-- | --Specify Color-- |
| Regional Planning Commission | 2000 | 1:2400 | 12 inch | Black and White |
| Other <i>Please Specify</i> | | | --Select Resolution-- | --Specify Color-- |

5. Comments?

Milwaukee County

Section 9: Parcels

1. What is the current number of tax parcels in your county (please include woodland tax law lands, private forest croplands, managed forest lands, county forest crop, and tax-exempt parcels)?

265000

2. Has your county created or acquired digital parcel mapping?

- Yes
- No, but our county plans to
- No, and there are no plans to

3. What percentage of the total parcels in your county are in digital form, including cities, villages, and towns?

100 %

4. Have cities, villages, and towns in your county developed their own digital parcel mapping?

- Yes
- No

5. For the parcels you have mapped, what percentage were based on each or any of the following methods? Note, the percentage may total more than 100 %.

| Compilation Method | Percent Complete |
|---|------------------|
| Developed parcel boundary lines by digitizing existing paper/mylar/linen maps, but with no adjustment to a known geographic reference framework. | % |
| Developed parcel boundary lines by digitizing existing paper/mylar/linen maps and adjusting them to the best available PLSS coordinates | 60 % |
| Created digital parcel boundary lines using coordinate geometry from property descriptions, but with no adjustment to a geographic reference framework. | % |
| Created digital parcel boundary lines using coordinate geometry from property descriptions into a geographic reference framework. | 40 % |
| Digitized existing maps using orthophotos/aerial photography to adjust the boundaries. | % |
| Incorporated digital data (e.g. certified survey maps) from an outside | % |

| | | |
|---|--|---|
| source. | | |
| Other compilation method, Please Specify: | | % |

6. Digital parcel mapping for your county was:

- Completed by an outside vendor
- Completed "in-house" by county staff
- Combination % by county

7. Digital parcel maps for your county are now maintained:

- Maintained by an outside vendor
- Maintained "in-house" by county staff
- Combination 40 % by county

8. Which of the following graphic features do you consider as part of your digital parcel mapping?

Check all that apply.

| | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Deed/title boundaries (ownership parcels) |
| <input checked="" type="checkbox"/> | Parcel overlaps and gaps |
| <input checked="" type="checkbox"/> | Tax parcel boundaries |
| <input checked="" type="checkbox"/> | PLSS framework |
| <input checked="" type="checkbox"/> | Subdivision boundaries |
| <input checked="" type="checkbox"/> | Administrative/political boundaries |
| <input checked="" type="checkbox"/> | Road rights-of-way |
| <input checked="" type="checkbox"/> | Railroad rights-of-way |
| <input checked="" type="checkbox"/> | Easements |
| <input checked="" type="checkbox"/> | Meandered water bodies |
| <input checked="" type="checkbox"/> | All water bodies (streams, rivers, ponds, and lakes) |
| <input checked="" type="checkbox"/> | Building footprints |

| | |
|-------------------------------------|---|
| <input type="checkbox"/> | Building centroids |
| <input checked="" type="checkbox"/> | Text strings |
| <input type="checkbox"/> | Owner names |
| <input checked="" type="checkbox"/> | Hydrography |
| <input checked="" type="checkbox"/> | Bearings and distances |
| <input type="checkbox"/> | Other, please specify: <input type="text"/> |

9. Does your county's digital parcel mapping have topology? (For the purpose of this survey, topology is defined as digital parcels structured as polygons with all lines ending at a node without under- or over-shoots.)

- Yes
 No

10. Are digital parcels coded with unique parcel identification numbers?

- Yes
 No

11. If yes, what standards are used for developing unique parcel identification numbers?

Check all that apply.

| | |
|-------------------------------------|---|
| <input type="checkbox"/> | WLIB Parcel Identification Numbering System |
| <input checked="" type="checkbox"/> | Standard developed by county government |
| <input type="checkbox"/> | If not WLIB Standard, please describe or provide document name <input type="text"/> |

12. Can a linkage be made between digital parcel mapping and tax roll/assessment databases? (e.g., to support thematic mapping of attributes such as assessed value, assessment class, and ownership)

- Yes, such a linkage is simple
 Yes, but on a project-by-project basis with some additional manipulation of digital parcel mapping and/or the tax roll/assessment database

No

13. Comments?

The City of Milwaukee maintains its own digital parcel mapping capability outside of the system developed in the balance of the County. The City's digital parcel maps are being integrated into the County system in a transition effort that will require about five years to complete. At

Milwaukee county

Section 10: Zoning

1. Does your county have zoning?

Yes
 No

If no, skip the rest of this section.

2. Has your county created or acquired digital mapping of zoning boundaries?

Yes
 No

If no, does your county intend to create or acquire digital mapping of zoning boundaries?

Yes
 No

If no, skip the rest of this section.

3. Does your county have separate series of maps depicting the following zoning elements in digital form?

Please check all that apply and include the percent complete for the entire county.

| Zoning Element | Percent Complete | Plan to complete? | Plan to maintain or update? |
|---|----------------------------|------------------------------|------------------------------|
| Shoreland zones | <input type="checkbox"/> % | No <input type="checkbox"/> | No <input type="checkbox"/> |
| Wetland zones | 100 % | N/A <input type="checkbox"/> | Yes <input type="checkbox"/> |
| Floodplain zones | 80 % | Yes <input type="checkbox"/> | Yes <input type="checkbox"/> |
| General ordinance zones (residential, commercial, industrial, agricultural, etc.) | <input type="checkbox"/> % | No <input type="checkbox"/> | No <input type="checkbox"/> |
| Environmental corridors | 100 % | N/A <input type="checkbox"/> | Yes <input type="checkbox"/> |
| Urban Service Areas | <input type="checkbox"/> % | No <input type="checkbox"/> | No <input type="checkbox"/> |
| Steep Slopes | <input type="checkbox"/> % | No <input type="checkbox"/> | No <input type="checkbox"/> |
| Other, please specify <input type="text"/> | <input type="checkbox"/> % | No <input type="checkbox"/> | No <input type="checkbox"/> |

4. Is general ordinance zoning (residential, commercial, industrial, etc.) administered on a countywide basis?

- Yes
- No

5. Does the county presently have the capability to integrate multiple types of zoning boundaries into a single comprehensive zoning map in a digital format?

- Yes, for county and municipal zoning
- Yes for county zoning only
- No

6. Comments?

Milwaukee County has no remaining unincorporated territory. All zoning is under the jurisdiction of the County's cities and villages. Some of these jurisdictions have developed or are planning to develop digital zoning maps.

Milwaukee county

Section 11: Soils

Soils

The primary source of digital soils mapping in Wisconsin is the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). (NRCS was formerly known as the Soil Conservation Service). The Soil Survey Geographic Database (SSURGO) is the most detailed level of digital soil mapping done by NRCS. SSURGO digitizing duplicates the original soil survey maps. SSURGO is designed for use by landowners, townships, and county natural resource planning and management.

1. **Has your county acquired digital soils data from the U.S. Department of Agriculture, Natural Resources Conservation Service?**

- Yes
- No *Skip to Question #3*

2. **If yes, has your county modified or refined NRCS digital soils data?**

- Yes
- No

If yes, please briefly describe the modifications or refinements made.

3. **Has your county acquired or developed digital soils data from another source?**
(Note: This refers to the source of the digital data only; the original source material -- soil surveys -- may still be from NRCS)

- Yes
- No

If yes, please describe the source for digital soils other than NRCS.

Less than half of Milwaukee County is covered by an operational soil survey. Those areas covered utilize the digital soil survey created by the Southeastern Wisconsin Regional Planning Commission from SCS source material.

If yes, is it in a format consistent with the counties primary coordinate system?.

- Yes
- No

4. **Comments?**

Milwaukee county

Section 12: Wetlands

The primary source of digital wetlands mapping in Wisconsin is the Wisconsin Wetlands Inventory (WWI). The custodian and sole distributor of digital WWI data is the Wisconsin Department of Natural Resources, Bureau of Fisheries Management and Habitat Restoration. WWI maps are the regulatory base for all state wetland protection programs.

1. Has your county acquired digital Wisconsin Wetlands Inventory data from the Wisconsin Department of Natural Resources?

- Yes
- No Skip to Question #4

If no, why not.

Milwaukee County utilizes the digital wetlands data compiled by the Southeastern Wisconsin Regional Planning Commission. These digital files were developed cooperatively with the Wisconsin DNR.

2. If yes, has your county modified or refined digital Wisconsin Wetlands Inventory data?

- Yes
- No

If yes, please briefly describe the modifications or refinements made.

3. Has your county acquired or developed digital wetlands data from another source?

- Yes
- No

If yes, please describe the source for digital wetlands other than WWI.

The Southeastern Wisconsin Regional Planning Commission.

4. Comments?

Milwaukee county

Section 13: Administrative Boundaries

1. Does your county have digital mapping of administrative boundaries?

- Yes
- No, but our county plans to.
- No, and there are no plans to.

2. Which of the following administrative boundaries are locally produced?

Please check all that apply

| Administrative Boundary | Source | Percent Complete | Plan to Complete? | Plan to Maintain or update? | Consistent with Parcel Mapping? |
|--------------------------------|--------|------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| County Boundaries | Local | 100 % | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Minor civil divisions (cities, | Local | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

| | | | | | | | | | |
|---|-------------------------------------|-------------|-------------------------------------|--------------------------|-------------------------------------|--|--|-------------------------------------|--|
| villages, and towns) | | | | | 100 % | | | | |
| Sewerage districts | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Water supply districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Electric utility districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Gas utility districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Phone utility districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Cable television utility districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Legislative districts | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Voting ward boundaries | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Tax increment financing districts | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| School districts | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Lake districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Census geographies (tracts, block groups, blocks) | <input checked="" type="checkbox"/> | Local | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Native American reservations | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Agency administrative districts | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Zip codes | <input checked="" type="checkbox"/> | Fed (TIGER) | <input checked="" type="checkbox"/> | 100 % | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> | |
| Public lands | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| 911 / E911 Service areas | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Other, Please Specify: | <input type="checkbox"/> | --Source-- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | |
| Other, Please Specify: | | | | | | | | | |

| | | | | | | | |
|----------|--|------------|---|--|--|--|--|
| Specify: | | --Source-- | % | | | | |
|----------|--|------------|---|--|--|--|--|

3. Comments?

All district boundaries affected by the recent legislative redistricting process were revised during 2002 as the new boundary information became available.

Milwaukee county

Section 14: Street Network System

1. What type of street network mapping does the county have?

 - Digital
 - Hard Copy Only
 - None
2. If the county has digital and/or hardcopy street network mapping, how much of the county is complete?

Digital

Hard Copy
3. If the county does not currently have street network map in digital form, do you intend to create one?

 - Yes

- No
- N/A

Format of Street Network Mapping

4. Which of the following features do you include as part of your street network system?

Please check all that apply

| Digital | Hardcopy | Features |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Street centerlines |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Street edge of pavement |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Street Rights-of-Way |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Bridges |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Address ranges |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Other, <i>Please Specify:</i> <input type="text"/> |

5. How current is your street network data

Digital

Hard Copy

6. What are the methods used for compiling street network data?

Please check all that apply

| Digital | Hardcopy | Compilation Method |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Compiled for the county using photogrammetric methods. |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Digitized by or for the county from existing paper or mylar source. |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Digitized by or for the county from orthophotos or aerial photography. |

| | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Modified from TIGER/Line files. |
| <input type="checkbox"/> | <input type="checkbox"/> | Created using coordinate geometry (COGO) software from an existing source. |
| <input type="checkbox"/> | <input type="checkbox"/> | Acquired from vendor (e.g. GDT, TeleAtlas, etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> | Other, Please Specify: <input type="text"/> |

Street Addressing

7. Does the digital street network system for the county include information on individual street addresses?

- Yes
- No
- Planned

8. Does the digital street network system for the county include information on street address ranges?

- Yes
- No
- Planned

9. Is address information linked to digital mapping of the street centerline for the county?

- Yes
- No
- Planned

10. Is address information linked to digital mapping of buildings for the county?

- Yes
- No
- Planned

11. Does your county follow United States Postal Service addressing standards?

- Yes
- No

12. What type of addressing system is generally used by your county?

Urban Addressing

Numbers / Unit

/

eg. 100 / Block
1000 / Mile

Other, Please Specify

13. Comments?

Milwaukee county

Section 15: Land Use Mapping

1. What type of land use mapping does the county have?

| Existing Land Use | Future Land Use |
|--|--------------------------------------|
| <input checked="" type="radio"/> Digital | <input type="radio"/> Digital |
| <input type="radio"/> Hard Copy Only | <input type="radio"/> Hard Copy Only |
| <input type="radio"/> None | <input type="radio"/> None |

2. If the county has digital and/or hard copy land use mapping, how much of the

county is complete?

| Existing Land Use | | Future Land Use | |
|-------------------|-------|-----------------|-------|
| Digital | 100 % | Digital | 100 % |
| Hard Copy | 100 % | Hard Copy | 100 % |

3. If the county has digital and/or hard copy land use mapping, what time period does that mapping represent?

| | | | |
|-------------------|------|-----------------|------|
| Existing Land Use | 2000 | Future Land Use | 2020 |
| Digital | yr | Digital | yr |
| Hard Copy | 2000 | Hard Copy | 2020 |
| | yr | | yr |

4. If the county does not currently have land use mapping in digital form, do you intend to create it?

| Existing Land Use | Future Land Use |
|---------------------------|---------------------------|
| <input type="radio"/> Yes | <input type="radio"/> Yes |
| <input type="radio"/> No | <input type="radio"/> No |
| <input type="radio"/> N/A | <input type="radio"/> N/A |

5. What classification system do you use for land use mapping?

- Wisconsin Department of Revenue Land Use Classification System
- Land Use Based Classification Standards (American Planning Association)
- Standard Land Use Coding Manual (Federal Highway Administration and Department of Housing, 1965)
- Modified SLUCM
- Standard Industrial Code / North American Industrial Classification System

- (SIC/NAICS)
- Modified SIC/NAICS
 - USGS Land Use and Land Cover Classification System (Anderson et al., 1976)
 - SEWRPC Land Use Codes
 - County-created system
 - Other
- Other, *Please specify*:

6. What is the source for digital land use mapping in the county?

Please check all that apply

- Interpretation of aerial photography
- Field surveys
- Linkage of tax assessment class to digital parcel mapping
- Other, *Please specify*:

7. Comments?

Digital land use mapping for 2000 utilizing digital orthophotography obtained during 2000 was completed during 2003.

Milwaukee county

Section 16: Natural Resources

1. Does your county have digital mapping of natural resources?

- Yes

- No, but my county intends to. *Skip to Next Section*
- No, and there are no plans to. *Skip to Next Section*

2. Which of the following natural resources are mapped in digital format?

Please check all that apply

| Natural Resource | Source | Percent Complete | Plan to Complete? | Plan to Maintain or update? |
|----------------------------|------------|---------------------------------|--------------------------|-------------------------------------|
| Land cover | --Source-- | <input type="text" value=""/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| Geology | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Watersheds | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Hydrogeology | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Forests | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Hydrography | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Endangered resources | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Impacts on the environment | --Source-- | <input type="text" value=""/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| Other, please specify: | --Source-- | <input type="text" value=""/> % | <input type="checkbox"/> | <input type="checkbox"/> |
| Other, please specify: | --Source-- | <input type="text" value=""/> % | <input type="checkbox"/> | <input type="checkbox"/> |

3. Comments?



Milwaukee county

Section 17: Infrastructure and Facilities Management

1. Does your county have digital mapping of infrastructure systems?

- Yes
- No, but my county intends to. *Skip to Next Section*
- No, and there are no plans to. *Skip to Next Section*

Please check all that apply

| Facility | Source | Percent Complete | Plan to Complete? | Plan to Maintain or update? |
|---------------------|------------|------------------|-------------------------------------|-------------------------------------|
| Railroads | --Source-- | % | <input type="checkbox"/> | <input type="checkbox"/> |
| Harbors | --Source-- | % | <input type="checkbox"/> | <input type="checkbox"/> |
| Transit systems | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Airports | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Recreational trails | --Source-- | % | <input type="checkbox"/> | <input type="checkbox"/> |
| Natural gas network | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Electric network | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Sewer network | Local | 50 % | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

| | | | | | |
|----------------------------|-------------------------------------|------------|-------|-------------------------------------|-------------------------------------|
| Water network | <input checked="" type="checkbox"/> | Local | 50 % | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Phone network | <input checked="" type="checkbox"/> | Local | 100 % | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Telecommunications network | <input type="checkbox"/> | --Source-- | | <input type="checkbox"/> | <input type="checkbox"/> |
| Government facilities | <input checked="" type="checkbox"/> | Local | 25 % | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other, please specify: | <input type="checkbox"/> | --Source-- | | <input type="checkbox"/> | <input type="checkbox"/> |
| Other, please specify: | <input type="checkbox"/> | --Source-- | | <input type="checkbox"/> | <input type="checkbox"/> |

2. Comments?

Digital infrastructure systems for natural gas distribution, electric distribution, and telephone services have been developed by the private utilities concerned. Digital infrastructure systems for water distribution, sewerage, and government facilities are being developed by

Milwaukee county

Section 18: Completion Time for Foundational Elements

1. When do you contemplate completing the following spatial data elements in digital form?

| Activity | Expected Completion |
|---|---------------------|
| Densification of horizontal control from (HARN) | Not planned |
| Densification of vertical control network | Already Complete |
| | |

| | |
|--|---------------------|
| Remonumentation of PLSS section corners | Already Complete |
| Coordinate values on PLSS section corners | Already Complete |
| Digital base map in vector format | Already Complete |
| Image bases (digital orthophotography) | Already Complete |
| Vector elevation data (contours/spot elevations) | Already Complete |
| Raster elevation data (DEM) | Complete after 2006 |
| Parcels | Already Complete |
| Zoning | Complete after 2006 |
| Soils | Already Complete |
| Wetlands | Already Complete |
| Administrative boundaries | Already Complete |
| Street centerlines | Already Complete |
| Street addresses | Already Complete |
| Land use mapping | Already Complete |
| Natural resources | Complete after 2006 |
| Infrastructure and facilities management | Complete after 2006 |

2. Comments?

Milwaukee county

Section 19: Data Integration

1. Has the county acquired and/or combined digital spatial data from municipalities within the county to study a cross-jurisdictional issue?

- Yes
- No, but this is technically feasible
- No, data are not available or are incompatible

If yes, please briefly describe the most significant data integration project within the county, including data themes shared, successes, problems (technical and institutional), and lessons learned.

The county has implemented a temporary parcel layer with parcel outlines and ID's, a rights-of-way layer and a storm sewer layer. The biggest issue was creating a consistent format between the different software platforms (DGN, SHP, DWG) involved.

2. Has the county acquired and/or combined digital spatial data with adjacent counties to study a cross-jurisdictional issue?

- Yes
- No, but this is technically feasible
- No, data are not available or are incompatible

3. Comments?

Milwaukee county

Section 20: Institutional Arrangements

1. Does your county have formal (written) or informal arrangements with other entities?
- Yes
 No

If no, please skip to next section.

2. Please list the institutional arrangements that exist for your county. Indicate which agencies participate and if the nature of the arrangement is formal (written) or informal (verbal) or are to be negotiated in the future.

| Multi-Departmental/Single Governmental Unit | Nature of Arrangement |
|---|-------------------------|
| Cartographer | --Type of Arrangement-- |
| Conservationist | --Type of Arrangement-- |
| Data Processing Department | Formal |
| Emergency Government | Informal |
| Forest and Park Administration | Formal |
| Land Information Office | Formal |
| Planning and Zoning | --Type of Arrangement-- |
| Real Property Lister | Informal |
| Register of Deeds | Formal |
| | |

| | |
|------------------------|-------------------------|
| Sheriff | Informal |
| Solid Waste Department | --Type of Arrangement-- |
| Surveyor | Formal |
| Transportation | Formal |
| Treasurer | --Type of Arrangement-- |
| Zoning | --Type of Arrangement-- |
| Other (Please specify) | --Type of Arrangement-- |

3. Indicate the number of formal (written) or informal (verbal) arrangements your county has with each of the following types of entities.

| | Formal | Informal |
|-----------------------------------|--------|----------|
| Municipalities within the county | 19 | 0 |
| Municipalities outside the county | 0 | 0 |
| Other counties | 6 | 0 |
| Regional agencies | 2 | 0 |
| State agencies | 5 | 0 |
| Federal agencies | 0 | 0 |
| Private sector organizations | 79 | 0 |

4. Copy and paste a sample arrangement into the text box below, if applicable.

5. Comments?

Milwaukee county

Section 21: Communications, Education, and Training

1. Rate the following activities based on the amount of activity. Communications is the mechanism to disseminate information. Education and training is based on learning concepts and "hands-on" experience. Please rank the amount of activity from 1-5, where 5 indicates a high degree of activity.

Communications

Education and training

2. Does your county support any of the following activities?

Publishes a land information newsletter

Yes

No

Provides financial support to attend land information conferences

Yes

- No
- Sponsors land information conferences
 - Yes
 - No
- Sponsors land information training seminars for staff members
 - Yes
 - No
- Sponsors land information training seminars and short courses for professionals outside the county
 - Yes
 - No
- Provides support for staff to obtain degrees in related fields
 - Yes
 - No

3. Comments?

A land information newsletter is planned.

Milwaukee county

Section 22: Public Access

1. Does your county use any of the following means to provide public access to digital spatial data?

Please check all that apply

- Public access terminal
- Electronic kiosk
- Compact disc or other media
- Internet web site --- please specify URL
- Dial-up or FTP access please --- please specify IP Address
- Other --- please specify

2. If your county has a web site for public access, what functions are available?

- View spatial data
- View tabular data
- View static maps
- View static tables
- Make maps
- Query tabular data
- View GIS product catalog
- View Metadata
- Download data
- Order data
- View information policies
- Track land information events
- Other, --- please specify:

3. Does your county have plans to provide access to digital spatial data through the Wisconsin Land Information Clearinghouse (WISCLINC)?

- Yes
- No, but we plan to in the future

No, we have no plans to because:

4. Does your county have plans to provide access to metadata about digital spatial data through the Wisconsin Land Information Clearinghouse (WISCLINC)?

Yes
 No, but we plan to in the future
 No, we have no plans to because:

5. Has your county developed a formal information sharing policy that addresses issues such as pricing, copyright, privacy, liability, data sharing, etc.?

Yes
 No, but we plan to in the future
 No, we have no plans to do so

6. Does your county utilize any of the following when providing digital spatial data to other government agencies?

Please check all that apply

- Copyright
- License agreement
- Restrictions on dissemination of data
- Charge for the cost of reproduction
- Charge in addition to the cost of reproduction
- Other restrictions -- please specify

7. Comments?

Milwaukee county

Section 23: Modernization Stages

Development of an automated land information system for a variety of users can be categorized into six different stages based upon the kinds of activities for which that system is being used. These six stages are listed in the question below. [Note: This question was originally asked as part of a 1996 survey in Wisconsin on evaluating the diffusion of Multipurpose Land Information Systems in local governments.]

1. Which of the following stages most accurately describes the current stage of land information system development by your local government organization or the one with which you work most closely?

Please check all that apply

- no modernization activities-- activities are limited to manual processes and there are currently no planned modernization efforts;**
- system initiation stage -- activities are directed toward establishing the prerequisites for such a system (e.g., database design, needs assessment, procurement);**
- database development stage --building databases to support land information management (e.g., geographic frameworks, resource boundaries, parcel map construction);**
- recordkeeping stage --existing data are used in routine queries and selective information retrieval (e.g., tax assessment, number of new building permits);**
- analysis stage --existing data enable the performing of complex queries (e.g., 911 emergency routing, land-fill siting);**
- democratization stage --existing data enable agency decision-makers and the public to conduct spatial analyses (e.g., alternative scenarios for future land and resource use or**

evaluation of social services).

2. Comments?

Milwaukee county

Section 24: WLIP & Survey Questions

1. What do you consider the most significant benefit to your county that has resulted, thus far, from the Wisconsin Land Information Program?

The creation of a dedicated funding mechanism for land records modernization activities.

2. In the last year, how would you rate the performance of the Wisconsin Land Information Board?

- Excellent
- Very good
- Good
- Fair
- Poor

Comments:



3. What are your impressions of the survey?

- The survey was too short and did not cover enough detail about county LIS activities.
- The survey was reasonable in length and covered county LIS activities in adequate detail.
- The survey was too long and covered county LIS activities in too much detail.

4. How many people were involved in completion of this survey?

People

(Please make sure that all persons who completed the survey are listed in Section 1, Question 10, thanks)

5. What was the total staff time devoted to completion of this survey?

Hours

6. Describe any specific benefits deriving from the county's land records modernization activities. Your responses will help demonstrate the effectiveness of the WLIP.

The program has allowed Milwaukee County to develop a uniform set of digital mapping layers across the entire county. The availability of these materials have permitted a number of County cities and villages to speed up their GIS implementation activities by making it

7. Estimate the annual investment of county fiscal resources above & beyond that amount directly attributable to WLIP Grants and retained fees.

On the order of \$300,000 to \$350,000 on an annual average basis.

Any additional comments on this section:

Milwaukee County

Section 25: Retained Fees

Retained Fees

The County is required to use \$1 of each \$5 fee retained to develop and maintain a computerized indexing of the county's land information records relating to housing, including the housing element of the county's land use plan under s. 66.1001(2)(b), Wis. Stats., in a manner that would allow for greater public access via the Internet. There were four categories of eligible activities specified in the guidelines:

- Property Assessment and Tax Information accessible via the Internet;
- Current Housing Supply and Forecasted Demand of Residential, Commercial, Industrial and other Lands;
- Affordable and Special Needs Housing Information;

- Housing Sales Information.

Eligible Expenditures of this \$1 retained fees to achieve the above would include:

- Computer Hardware;
- Computer Web-Enabled Software;
- Vendor Contracting;
- Metadata Development.

1. The total retained fees represented by the collection of the additional \$1 for the 2003 calendar year:?

295988

2. Indicate total retained fees of the additional \$1 for the 2003 calendar year which have been expended on these activities?

35000

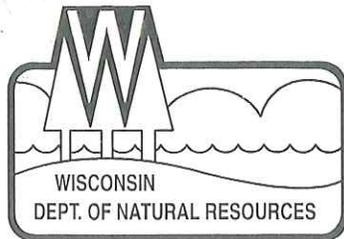
3. Please briefly describe the activities that have led to the accessibility of property assessment, tax housing, and/ or sales information via the internet. This space accommodates 4- 5 Sentences.

During 2003, Milwaukee County purchased hardware and software to continue and expand ongoing efforts in the Register of Deeds office to convert additional data to digital form for eventual uploading to a web accessible site as Internet capability is expanded in the County.

4. Please list all URLs (web site addresses) for those internet sites that demonstrate activity in the area of the providing property assessment, tax, housing and / or sales data accessible via the internet for your country.

www.landrecords.net/index.asp

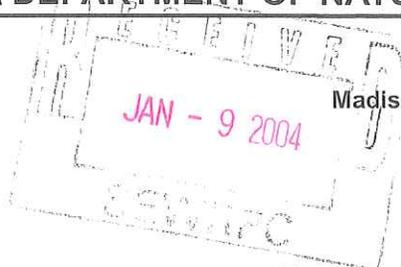
III B



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897



File Ref:H 574

December 30, 2003

Mr. Kurt Bauer
Chairman, MCAMLIS Steering Committee
PO BOX 1607, W239 N1812 Rockwood Drive
Waukesha, WI 53718-1607

Subject: Floodplain Mapping

Dear Mr. Bauer:

This is in response to your letter dated November 26, 2003 regarding DNR review and approvals of several flood studies.

As you know, the Department, in cooperation with FEMA, has undertaken a major flood remapping initiative. The attached fact sheet describes this effort. As part of this process we are looking forward to seeing Ozaukee, Milwaukee, Washington, and Waukesha Counties being the first set to be remapped on a countywide basis. As part of this effort we will be reviewing all applicable flood studies including those referenced in your letter. We especially appreciate SEWRPC's support and technical capabilities that they've offered to help us complete the flood map modernization effort in Wisconsin.

As we have previously indicated as part of our review of the Pike River study, the issue is not with the fact that a continuous simulation model was used, but rather the application of those models for floodplain mapping purposes. We are currently working with FEMA to establish criteria we both can use for reviewing models such as those already submitted. It is our understanding that FEMA will have this effort completed in the next month or two.

We agree with you that it is important to get the issue resolved and are confident that once this review criteria is established, we'll be able to move forward and complete our review process.

Sincerely,

Scott Hassett
Secretary

Cc: Mike Hahn, SEWRPC
Gloria McCutcheon

Flood Map Modernization in Wisconsin

Introduction

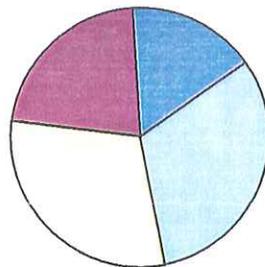
Floods are the nation's most frequent and costly natural disaster. The Federal Emergency Management Agency (FEMA) is the federal agency responsible for developing and maintaining the nation's flood hazard maps. Lending institutions use them to determine who needs flood insurance for federal bank loans and community zoning administrators use them when evaluating land use permit applications. Additionally, these maps are used by emergency management staff when responding to flood disasters. FEMA flood hazard maps are an essential tool for reducing flood damages in the U.S. Many of the nation's floodplain maps are outdated and of poor quality. The Federal Emergency Management Agency (FEMA) – the federal agency responsible for maintaining the floodplain maps – estimates modernizing the maps will cost \$1 Billion.

FEMA has encouraged States to take on additional responsibility in conjunction with Flood Map Modernization. Those activities include flood map needs assessment, project scoping, project management, contract management, map production, serving flood data to public via the web, outreach and maintenance.

Background

Floods cause a significant threat to life and property in Wisconsin. Wisconsin is tenth in the nation in documented flood damages. Flooding has been a principle cause in 16 out of last 24 Presidential Disaster Declarations in Wisconsin.

As shown in the figure below, most of the flood hazard maps in Wisconsin are outdated.



Age of Effective Map Panels

| | | |
|---|-----------------|-------|
|  | <5 years old | (16%) |
|  | 5-10 years old | (21%) |
|  | 10-15 years old | (30%) |
|  | >15 years old | (33%) |

In many cases, the older maps reflect outdated flood hazard information that limits their utility for insurance and floodplain management purposes. Additionally, most of the maps were prepared using now outdated road network information and manual cartographic techniques, which make the maps difficult for State and local customers to use and expensive to maintain. In addition, FEMA has not produced flood maps for many of the streams in Wisconsin. Landowners on these unmapped streams are building homes unaware that they are in a flood hazard area.

Flood Map Modernization in Wisconsin

To address this problem, Congress passed a budget for Fiscal Year (FY) 2003 (which started on October 1, 2002) that increased the funding from \$50 to \$200 million. This past October, Congress increased the FY 04 funding to \$250 million. Similar funding levels are proposed for subsequent fiscal years.

State Role in the Flood Hazard Mapping Program

FEMA plans to remap all the floodplain maps in the state. The Wisconsin DNR ranked each county to determine the order in which the counties' mapping needs should be addressed. Priorities were established based on availability of elevation data, benefit cost ratio, floodplain mapping efforts underway and distribution of workload.

WDNR is requesting funding from FEMA to perform and/or manage all of the mapping activities in Wisconsin.

Summary

The Department of Natural Resources' floodplain management program has been in existence since 1967. WDNR has requested authorization and funding to direct/manage the Wisconsin's portion of FEMA's Flood Map Modernization Initiative.

WDNR has developed a list of contractors qualified to do floodplain modeling and mapping in Wisconsin. These Wisconsin engineering consultants are more familiar with Wisconsin standards and mapping needs than FEMA's contractors located in St. Louis, Kansas City, Chicago and Washington D.C.

WDNR has received a \$800,000 grant for floodplain mapping for this fiscal year. Over half of the funding will go to Wisconsin engineering consulting firms to conduct the necessary engineering analysis and map production tasks. Seven county-wide floodplain mapping projects will be started this fiscal year:

- Waukesha,
- Dane,
- Ozaukee,
- Milwaukee,
- Washington
- Rock.
- Brown

Projections indicate that Wisconsin will receive somewhere between \$10 and \$20 million over the next five years for flood map modernization.

III H.

REQUESTED 2005 BUDGET

DEPT: MILWAUKEE COUNTY AUTOMATED LAND INFORMATION SYSTEM

UNIT NO. 1923

FUND: General - 0001

FUND General-0001

OPERATING AUTHORITY & PURPOSE

Pursuant to Sections 15.105(16), 16.971, 20.505(4)(im) and 59.72 of the Wisconsin Statutes and County Board Resolution File 90-707(a), approved on November 8, 1990, the Milwaukee County Automated Land Information System (MCAMLIS) may design, develop and implement a land information system integrating property and ownership records with U.S. Public Land Survey referenced parcel-identified boundary information; prepare boundary-referenced parcel property maps suitable for producing accurate land title or survey boundary line information; and prepare maps of documented accuracy suitable for local planning.

Pursuant to Section 59.43, funding for a land information office, modernization of land records and the State of Wisconsin Land Information Program and Board is collected via a seven-dollar surcharge on the County's existing four dollar Recording Fee. Four dollars of the additional seven-dollar surcharge are retained locally and specifically designated for expenditures associated with the creation, maintenance, and enhancement of the Milwaukee County

Automated Land Information System within guidelines established by the Wisconsin Land Information Board (WLIB). One dollar of the additional seven-dollar surcharge is also retained locally and specifically designated for expenditures associated with initiatives to develop and maintain a computerized indexing of the County's land information records relating to housing, including the housing element of the County's land use plan under Section 66.001(2)(b) (Smart Growth law) also within guidelines established by the WLIB. (No portion of the four dollar and one dollar surcharges are available for general County purposes.) Two dollars of the additional seven-dollar surcharge are forwarded to the WLIB. The County continues to retain its four dollar share of the Recording Fee.

| | |
|--|-------------|
| Previous Register of Deeds Recording Fees | \$4 |
| Fee for MCAMLIS | 4 |
| Fee for Land Records Modernization Initiatives | 1 |
| Fee for State Land Information Board | <u>2</u> |
| | \$11 |

BUDGET SUMMARY

| | 2003 Actual | 2004 Budget | 2005 Budget | 2004/2005 Change |
|--|----------------|----------------|----------------|---------------------|
| Services | \$ 866,757 | \$ 911,500 | \$ 953,000 | \$ 41,500 |
| County Service Changes | 0 | 1,000 | 1,000 | 0 |
| Abatements | (1,975) | 0 | 0 | 0 |
| Total Expenditures | \$ 864,782 | \$ 912,500 | \$ 954,000 | \$ 41,500 |
| Encumbrances | 0 | 0 | 0 | 0 |
| Total Expenditures & Encumbrances | \$ 864,782 | \$ 912,500 | \$ 954,000 | \$ 41,500 |
| State Grants | \$ 223,055 | \$ 100,000 | \$ 79,000 | \$ (21,000) |
| Sewer District & Utility Contributions | 0 | 0 | 0 | 0 |
| Recording Fee Surcharge | 1,474,750 | 812,500 | 875,000 | 62,500 |
| Total Revenue | \$ 1,697,805 | \$ 912,500 | \$ 954,000 | \$ 41,500 |
| Contribution to Reserve Account | 833,023 | 0 | 0 | 0 |
| Property Tax Levy | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

REQUESTED 2005 BUDGET

DEPT: MILWAUKEE COUNTY AUTOMATED LAND INFORMATION SYSTEM

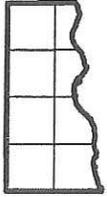
UNIT NO. 1923

FUND: General - 0001

BUDGET HIGHLIGHTS

- This appropriation provides 2005 expenditure authority of \$954,000 for the Automated Land Information System. Revenue of \$700,000 is projected to be received from the four-dollar surcharge collected by the Register of Deeds earmarked for land information modernization by Section 59.72(5) of the *Wisconsin Statutes*. Revenue of \$175,000 is projected to be collected from the one-dollar surcharge which is also collected by the Register of Deeds. An additional \$79,000 is expected to result from grants to be awarded to the County by the Wisconsin Land Information Board (WLIB). Contributions to this project from the Private utilities, SBC, Wisconsin Electric and Wisconsin Gas, of \$520,000 each, were completed in 1994. A contribution from the Milwaukee Metropolitan Sewerage District, also in the amount of \$520,000 was completed in 2000. Milwaukee County is not required to provide tax levy dollars.
- Expenditure authority of \$954,000 is comprised of \$717,000, to continue to develop and maintain the automated base map and parcel-based land information system as provided for in the plan approved by the County Board and to undertake selected plan development work; \$175,000 to develop and maintain a computerized indexing of the County's land information records related to housing in a manner consistent with the requirements of Section 66.001(2)(6) *Wisconsin Statutes*; \$60,000 for surveying services provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) in performance of its duties as the Milwaukee County Surveyor under the requirements of Section 59.635, *Wisconsin Statutes*; \$1,000 to obtain subdivision and map survey prints from the Register of Deeds; and \$1,000 for meeting and travel expenses.
- With the exception of that portion of the County comprised of the City of Milwaukee, work on the initial digital base map was largely completed by the end of 1998. By the end of 1999, work on the creation of a street address and real property parcel database linked to the digital maps was also completed, again for that portion of the County outside the City of Milwaukee. Also during 1999, activities related to an ongoing maintenance effort were initiated to ensure that the automated base map is kept up-to-date for that portion of the County outside the City of Milwaukee. These activities continued during 2000, 2001, 2002, 2003, and 2004.
- During 1999, an update and extension of the County Land Records Modernization Plan was prepared and submitted to the Wisconsin Land Information Board (WLIB) in accordance with program requirements. The preparation of the updated Land Records Modernization Plan was needed to maintain County eligibility to retain Register of Deeds filing fees and to continue to receive grants under the provisions of the Wisconsin Land Information Program. The updated and extended plan was approved by the WLIB during 2000.
- The automated mapping base is to be enhanced by the creation of additional layers of information useful to County and local government. For example, during 2000, a digital land use mapping layer was completed. During 2002, an integrated set of administrative, legislative, and statistical area boundary overlay maps was completed. The preparation of a flood plain layer was initiated in 2001. This work continued during 2004 and will continue during 2005.
- During 1999 a major multi-year project to integrate the existing City of Milwaukee digital cadastral mapping into the County-wide system was initiated. This effort, expected to be completed by the end of 2004, will have required a total expenditure of about \$1.73 million at the time of its completion.

IV A.



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: Thomas D. Patterson, MCAMLIS Project Manager
DATE: July 7, 2004
SUBJECT: Proposed MCAMLIS Replacement Digital Topographic Mapping Program

Introduction

Replacement of the older existing digital topographic mapping in Milwaukee County has been discussed by the MCAMLIS Steering Committee on numerous occasions over the past several years. Indeed, such a replacement mapping program was recommended in the MCAMLIS Program Strategic Assessment document adopted by the Steering Committee at its meeting held on October 8, 2002, and again in the update to that Strategic Assessment document adopted by the Steering Committee at its meeting held on June 10, 2003. The major impediment to undertaking such a replacement program has been the inability to secure a sustained stream of funding sufficient to carry out the program over a relatively short period of time. The discovery at the end of 2003 of an amount in excess of \$3 million in previously unreported MCAMLIS Program reserve funds now makes the initiation of a replacement digital topographic mapping program feasible. Accordingly, a proposal for a four year program for the replacement of the existing MCAMLIS digital topographic mapping is set forth herein for Steering Committee consideration.

The Need for Replacement of Existing Topographic Mapping

The ages of existing digital topographic mapping are shown on the map attached hereto as Map 1. Approximately 82 percent of the existing digital, topographic mapping is now between ten years and 20 years old. All digital topographic mapping carried out since 1992 has been acquired under the auspices of the MCAMLIS Program and was digitally compiled directly from three-dimensional stereoscopic models constructed from aerial photography acquired specifically for that purpose. All digital topographic mapping prepared prior to 1992 was prepared using older technology and was converted to digital format either by board digitizing or by scanning of hard copy maps, rendering these digital maps moderately more cumbersome to use, but in no way compromising the accuracy of the features portrayed on the maps. Increasingly, comments from users of these maps indicate that the continually advancing age of the mapping adversely affects the map's utility for the users; not only from the standpoint that newer development is absent from these maps, but also from the standpoint that more recent demolitions, public works reconstructions, and private redevelopment projects are not shown.

Proposed Digital Topographic Mapping Replacement Program

A proposed program for the replacement of the older MCAMLIS digital topographic mapping within Milwaukee County is illustrated on the map attached hereto as Map 2. The proposal does not include replacement of the two most recently completed digital topographic mapping projects carried out by the MCAMLIS Steering Committee. These two projects: the 1999 Cudahy – St. Francis – South Milwaukee – General Mitchell International Airport Project and the 2002 Lincoln Creek project are relatively recent and were both carried out using still current “state-of-the-art” map compilation techniques including the preparation of a digital terrain model.

*included
terrain
models*

The proposed program would replace all other existing digital topographic mapping over a four year period as identified on Map 2. The estimated cost to carry out this program is approximately \$2,700,000, which amount would be spread over a four year period as set forth in the table below.

PROPOSED MCAMLIS REPLACEMENT DIGITAL TOPOGRAPHIC MAPPING PROGRAM

Cost Estimates

| | | |
|-------------|------------------------------------|--------------|
| First Year | (approximately 47.25 square miles) | \$ 607,870 |
| Second Year | (approximately 54.50 square miles) | 701,140 |
| Third Year | (approximately 45.50 square miles) | 585,360 |
| Fourth Year | (approximately 61.75 square miles) | 794,410 |
| | Total | \$ 2,688,780 |

Assumptions: Average cost will be about \$12,865/square mile:
\$440/square mile for paneling and aerial photography;
\$12,000/square mile for mapping;
\$425/square mile for quality control and digital file structure review.

The cost of this program is proposed to be funded through the use of the available surplus funds estimated to total about \$3,784,000 as of December 31, 2003, along with any additional amounts taken from yearly operating budgets, if needed, as may be necessary to complete the work in a timely fashion.

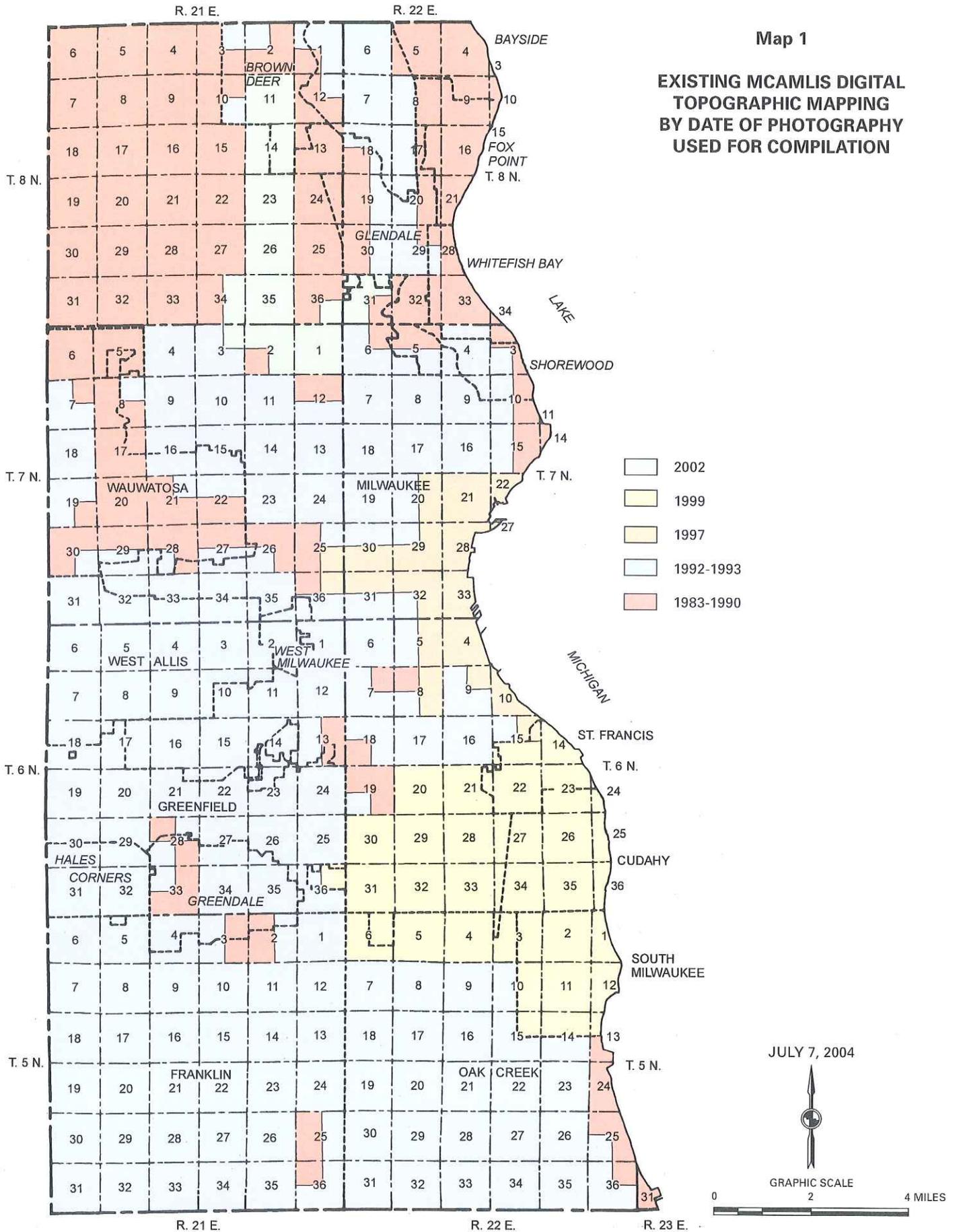
Recommendations

Project staff recommends that the Steering Committee commit to a four year program leading to the preparation of replacement of digital topographic mapping as set forth in the above table and as delineated on Map 2. It is also recommended that the MCAMLIS Steering Committee enter into an agreement, with the Southeastern Wisconsin Regional Planning Commission to acquire the necessary digital topographic mapping over a four year period. The Regional Planning Commission will in turn subcontract with a qualified photogrammetric engineer judged to be capable of completing the desired mapping to previously adopted MCAMLIS digital topographic mapping specifications and standards. Finally, it is recommended that this program begin immediately using aerial photography acquired by AeroMetric, Inc. for the two northern most townships in Milwaukee County during the Spring of 2004. This photography, acquired by AeroMetric, Inc. was designed for producing digital two foot contour interval topographic base maps to MCAMLIS specifications and standards.

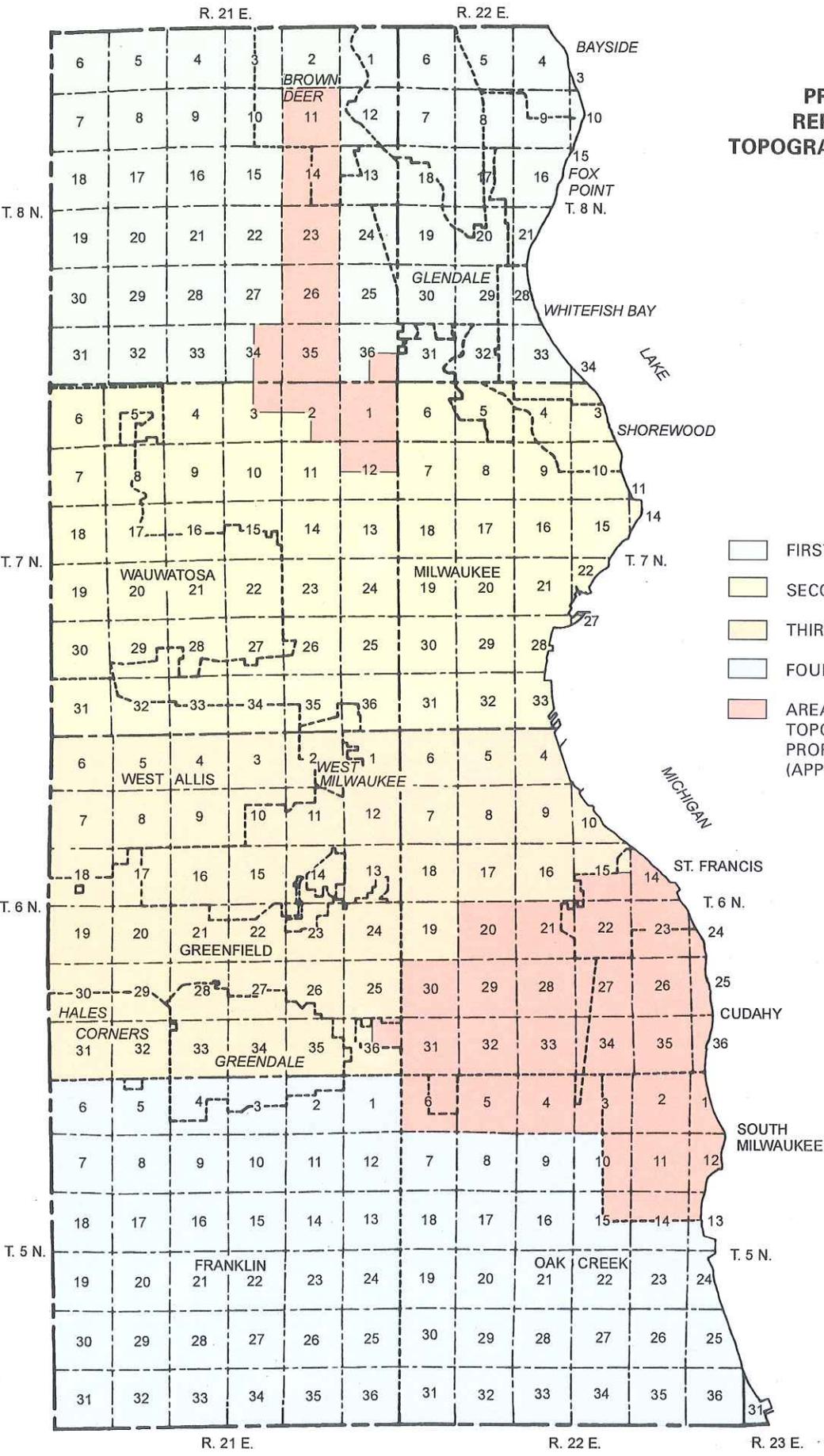
* * *

Map 1

**EXISTING MCAMLIS DIGITAL
TOPOGRAPHIC MAPPING
BY DATE OF PHOTOGRAPHY
USED FOR COMPILATION**



Source: MCAMLIS Project Manager.



Map 2

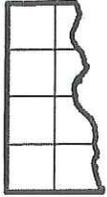
**PROPOSED MCAMLIS
REPLACEMENT DIGITAL
TOPOGRAPHIC MAPPING PROGRAM**

- FIRST YEAR (APPROX. 47.25 SQ. MILES)
- SECOND YEAR (APPROX. 54.50 SQ. MILES)
- THIRD YEAR (APPROX. 45.50 SQ. MILES)
- FOURTH YEAR (APPROX. 61.75 SQ. MILES)
- AREAS FOR WHICH EXISTING DIGITAL TOPOGRAPHIC MAPPING IS NOT PROPOSED TO BE REPLACED (APPROX. 33.50 SQ. MILES)

FEBRUARY 17, 2004



Source: MCAMLIS Project Manager.



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: Thomas D. Patterson
MCAMLIS Project Manager
DATE: July 12, 2004
SUBJECT: PROPOSAL FOR THE MCAMLIS PROGRAM TO SUPPLY PARTIAL
FUNDING SUPPORT TO INITIATE THE REGIONAL WATER SUPPLY
SYSTEM PLAN

Introduction

In September of 2002, the Southeastern Wisconsin Regional Planning Commission at the request of several of its constituent counties and municipalities issued a document, *Regional Water Supply Planning Program Prospectus*, identifying eight factors contributing to the urgent need for the preparation of a Regional Water Supply Plan for the Southeastern Wisconsin Region, including Milwaukee County. These factors are:

1. Constraints on the use of Lake Michigan Water
2. Increasing demand for water west of the subcontinental divide
3. Underutilization of existing Lake Michigan water treatment plant capacity
4. The need to address groundwater quality concerns
5. The need to coordinate public and private water supply planning efforts
6. The need to coordinate water supply system planning with land use, transportation, sanitary sewerage, park and open space, and natural resource protection planning
7. The need to address growing concerns over the security of the water supply facilities of the region
8. Statutory planning requirement

The preparation of the regional water supply system plan recommended by the Prospectus was envisioned as being carried out by the Regional Planning Commission staff on behalf of the seven Southeastern Wisconsin counties, including Milwaukee County.

Statutory Planning Requirement

The State Legislature in 1999 enacted legislation, which revised and expanded municipal, county, and regional planning requirements. Specifically, Section 66.1001 of the *Wisconsin Statutes* requires that the comprehensive plan for the development of a region, county, or local unit of government, as adopted or

amended under Section 66.0309 of the *Wisconsin Statutes*, must consist of at least nine elements. Two of those nine elements, in effect, require the preparation of a regional water supply plan. One of the nine elements referenced in the new State legislation is an agricultural, natural, and cultural resources element. This element must address, among other considerations, the effective management of ground and surface waters within the planning area.

Another one of those nine elements is a utilities and community facilities element, an element that must address among other considerations, water supply. The element must describe the location, use, and capacity of existing water supply facilities; provide forecasts of the need for the rehabilitation and expansion of existing water supply facilities; and for the creation of new facilities.

Meeting the letter of the new planning legislation will require the Regional Planning Commission to prepare a water supply plan for the Southeastern Wisconsin Region. The Statutes implicitly envision such a regional water supply plan as a framework plan within which county and municipal water supply planning can proceed in a sound and efficient manner.

Relationship of the Section 66.1001 Planning Requirement to the Wisconsin Land Information Program

The emphasis of the Section 61.1001 legislation is on the preparation and adoption of regional, County and local comprehensive plans; the emphasis of the Wisconsin Land Information Program is on the modernization of land records. However, there is substantial subject matter overlap between the two programs. More specifically overlap occurs in at least the content areas of housing; transportation; utilities and community facilities; agricultural, natural, and cultural resources; land use; and intergovernmental cooperation. Given the degree of interrelationship between subject matter in these two programs, there are opportunities for Milwaukee County to pursue the development of information and maps that contribute to the implementation of both programs. The regional water supply system plan is such a program and participation by the County and the MCAMLIS Steering Committee would be responsive, in part, to the changing gubernatorial and legislative priorities manifested in recent biannual budgets as fee collections are transferred from local land records modernization support to local comprehensive planning support.

The completion of the regional water supply system plan would fulfill a portion of Milwaukee County's requirements under Section 66.1001, *Wisconsin Statutes*, and would further provide important information and maps useful to Milwaukee County municipalities in meeting their requirements under this same legislation. Importantly, it would serve to also create information useful in the implementation of Milwaukee County's Land Records Modernization Plan, specifically in the areas of utilities infrastructure, natural resources, and intergovernmental cooperation. In this respect, the regional water supply plan would be in conformance with and would contribute toward the implementation of the adopted Milwaukee County Land Records Modernization Plan.

Funding Plan

At the meeting of the Regional Planning Commission held on March 20, 2003, the Prospectus was approved and a funding formula allocating the study costs to the seven counties comprising the Southeastern Wisconsin Region on the basis of equalized real property values was adopted. This funding formula is set forth in the table below.

**FUNDING ALLOCATIONS FOR SOUTHEASTERN WISCONSIN
REGIONAL WATER SUPPLY PLANNING PROGRAM**

| County | Local Cost Prorated to Counties Based Upon Equalized Property Value | | |
|------------|--|-----------|----------------------------------|
| | Percent | Amount | Cost per Year for Three Years |
| Kenosha | 7.54 | \$ 55,136 | \$ 18,380 |
| Milwaukee | 35.80 | 261,787 | 87,262 |
| Ozaukee | 6.38 | 46,654 | 15,550 |
| Racine | 8.22 | 60,109 | 20,035 |
| Walworth | 6.94 | 50,749 | 16,916 |
| Washington | 7.21 | 52,723 | 17,574 |
| Waukesha | 27.91 | 204,091 | 68,030 |
| Total | 100.00 | \$731,248 | \$243,747 |

Under the provisions of this adopted funding formula, Milwaukee County would be asked to supply \$261,787 over a three year period as its contribution towards completion of the Regional Water Supply Planning Program, or \$87,262 annually. The seven counties, in caucusing with respect to the manner in which to fund the Regional Water Supply Planning Program, determined that they did not want this planning effort funded in the traditional manner, that is through the tax levy funding collected annually by the SEWRPC; there already being numerous other demands upon this source of funding. Rather, through their SEWRPC representatives the counties jointly determined that each county should examine its own resources and secure its share of the required funding from a source of its own choosing. With respect to Milwaukee County, County Executive Walker has indicated, through his staff, that the Milwaukee County portion of the required funding should be provided through the MCAMLIS annual operating budget rather than through tax levy funds.

Recommendations

It is recommended that the MCAMLIS Steering Committee, on behalf of Milwaukee County, participate in the Regional Water Supply System Plan preparation effort as set forth in the SEWRPC document *Regional Water Supply Planning Program Prospectus*. It is further recommended that the MCAMLIS Steering Committee act to commit \$87,262 annually over a three year period as Milwaukee County's requested funding portion for completion of the plan. A proposed Agreement to carry out these recommendations is attached hereto for review.

Finally, it is recommended that the MCAMLIS Steering Committee direct project staff to secure the execution of the attached Agreement on behalf of SEWRPC and the MCAMLIS Steering Committee; secure the required review of this Agreement by the Milwaukee Corporation Counsel, the Milwaukee County Risk Manager, and the Milwaukee County DBD Director and return the fully executed Agreement to the SEWRPC for initiation of the work called for under the Agreement.

AGREEMENT

THIS AGREEMENT, entered into this ____ day of _____, 2004, by and between the Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as the "Commission"); and the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee (hereinafter referred to as the "Steering Committee").

WITNESSETH:

WHEREAS, the Commission is authorized by Section 66.0309 of the Wisconsin Statutes to make studies and prepare plans for, and to provide advisory services to local governments, and to act as a coordinating agency for planning activities within its jurisdictional area; and

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

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

WHEREAS, by resolution adopted on November 8, 1990, the Milwaukee County Board of Supervisors authorized the execution of a Cooperative Agreement between Milwaukee County and the public and private utilities serving Milwaukee County, which Cooperative Agreement created a public-private partnership to implement the proposed Milwaukee County automated mapping and land information system, whereby the County and the utilities involved agreed to jointly fund the development of the Milwaukee County automated mapping and land information system; and

WHEREAS, the aforementioned Cooperative Agreement further created a Steering Committee to provide oversight in the implementation of the Milwaukee County automated mapping and land information system and delegated to the Steering Committee full responsibility for all policy matters relating to the conduct of the work program, including proposed contracts and specifications, the selection of contractors, and interaction with the State of Wisconsin Land Information Program; and

WHEREAS, the Commission adopted the *Regional Water Supply Planning Program Prospectus* in September of 2002; and

WHEREAS, the adopted *Regional Water Supply Planning Program Prospectus* calls for the fiscal participation of Milwaukee County in conjunction with the other six counties constituting the Southeastern Wisconsin Regional Planning area; and

WHEREAS, the completion of a Regional Water System Plan would be in conformance with and would serve to implement Milwaukee County's adopted Land Records Modernization Plan; and

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

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

I. Scope of Services

The Commission, working in conjunction with Milwaukee County and the other six counties within the Southeastern Wisconsin Regional Planning area, will complete the Regional Water System Supply Plan as set forth in the *Regional Water Supply Planning Program Prospectus*, dated September, 2002.

II. Compensation

The Steering Committee will provide the amount of \$261,787 as Milwaukee County's portion of the cost of preparing this plan.

III. Method of Compensation

The total amount of compensation of \$261,787 shall be paid to the Commission in the form of three annual installments as follows:

| | |
|------|----------|
| 2004 | \$87,262 |
| 2005 | \$87,262 |
| 2006 | \$87,263 |

IV. Timing

The work to be performed under this Agreement shall be completed within 36 months of initiation of the project by the SEWRPC.

V. Indemnity

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

VI. Insurance

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

VII. Records and Audits

The Commission shall allow Milwaukee County, the Milwaukee County Department of Audit, or any other party the Milwaukee County may name, when and as they demand, to audit, examine and make copies of, excerpts or transcripts from any records or other information directly relating to matters under this Agreement. Any subcontracting by the

Commission in performing the duties described under this contract shall subject the subcontractor and/or associates to the same audit terms and conditions as the Commission. The Commission (or any subcontractor) shall maintain and make available to the Milwaukee County aforementioned audit information for no less than three years after the conclusion of each contract term.

VIII. Independent Contractor

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

IX. Authorization

The Steering Committee approved the project that is the subject of this Agreement by action taken at a regular meeting held on July 20, 2004.

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

ATTESTING WITNESS

**SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION**

By _____
Philip C. Evenson
Deputy Secretary

By _____
Thomas H. Buestrin
Chairman

ATTESTING WITNESS

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

By _____
Thomas D. Patterson
MCAMLIS Project Manager

By _____
Kurt W. Bauer
Chairman

APPROVED AS TO FORM

William J. Domina (Date)
Milwaukee County Corporation Counsel

**REVIEWED AS TO
INDEMNIFICATION AND INSURANCE**

John R. Rath (Date)
Milwaukee County Department of Risk Management

**APPROVED AS TO CHAPTER 42
DBE PROVISIONS**

Freida F. Webb (Date)
Milwaukee County DBD Director

AGREEMENT

THIS AGREEMENT, entered into this ____ day of _____, 2004, by and between the Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as the "Commission"); and the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee (hereinafter referred to as the "Steering Committee").

WITNESSETH:

WHEREAS, the Commission is authorized by Section 66.0309 of the *Wisconsin Statutes* to make studies and prepare plans for, and to provide advisory services to local governments, and to act as a coordinating agency for planning activities within its jurisdictional area; and

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

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

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

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

WHEREAS, the Steering Committee on July 29, 1991, formally requested the Commission to accept the responsibilities of Project Manager for implementation of the recommended automated mapping and land information system; and

WHEREAS, the Executive Committee of the Commission on August 21, 1991, authorized Commission assistance in execution of the work required to implement the Milwaukee County automated mapping and land information system in the manner envisioned in the aforereferenced Commission report; and

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

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

I. Scope of Services

The Commission agrees to participate in, provide support for, and to otherwise act as agent for the Steering Committee in carrying out the comprehensive, digital flood hazard area mapping program in Milwaukee County as hereinafter set forth and as described in SEWRPC Staff Memorandum MCAMLIS2, "Milwaukee County Automated Mapping and Land Information System Program Implementation Project – Proposed Phase 2 Floodland Mapping for Milwaukee County," (Staff Memorandum) dated August 22, 2003, attached hereto and made a part hereof by reference to the same force and effect as if set forth at length herein. The services to be provided for the program by the Commission shall be performed by qualified engineering and planning staff employed by the Commission and experienced in hydrologic and hydraulic modeling and flood hazard area mapping, and by support staff as needed, all working under the direction of the Commission's Chief Environmental Engineer and the Commission's Executive Director.

The execution and completion of the study shall include, but not be limited to, the following services of the Commission: coordination with Milwaukee Metropolitan Sewerage District (MMSD) staff and consultants, the Wisconsin Department of Natural Resources (WDNR), and the Federal Emergency Management Agency (FEMA) as may be necessary to prepare maps that will be suitable for submittal to WDNR and FEMA for review, approval, and incorporation into local zoning ordinances and FEMA flood insurance rate maps; revision and update of existing hydrologic and hydraulic analyses as may be necessary to meet the current requirements of the WDNR and FEMA; preparation of digital and hardcopy maps at a scale of one inch equals 100 feet showing floodplain and floodway boundaries, coastal hazard areas, stream and overbank cross section alignments, and flood stage elevations, as described under Item II.A. of attached Staff Memorandum MCAMLIS2; preparation of composite digital flood hazard maps as described under Item II.B. of the Staff Memorandum; and preparation of digital flood hazard data files as also described under Item II.B. of the Staff Memorandum.

The Commission shall also prepare and administer the agreement needed to secure the fiscal and staff participation of the MMSD in carrying out this work effort in the manner set forth in the Staff Memorandum. Further, the Commission shall directly invoice the MMSD for its portion of the project budget as set forth in the attached Staff Memorandum and shall handle the fiscal management of the funds received in this manner.

The project covered under this agreement is the second and final phase of a larger project under which flood hazard areas will eventually be mapped throughout Milwaukee County. Phase 1 of the project will be completed in the first quarter of 2004. Under Phase 2 of the project, covered by this Agreement, the Commission shall perform the flood hazard area mapping services with respect to the streams in Milwaukee County that are listed under Item II.A of the Staff Memorandum.

The flood hazard maps will be prepared to represent constructed flood management projects, or completed portions of projects, where applicable.

II. Compensation

The Steering Committee shall pay to the Commission the sum of \$436,000 as full payment for the services described in Section I.

III. Method of Compensation

The Commission shall submit invoices to the Steering Committee during the progress of the work in accordance with the following schedule:

| | |
|-------------------------|----------|
| March 31, 2004 | \$72,650 |
| September 30, 2004 | 72,650 |
| March 31, 2005 | 72,650 |
| September 30, 2005 | 72,650 |
| March 31, 2006 | 72,700 |
| Upon project completion | 72,700 |

The Steering Committee shall pay to the Commission the amounts shown on the invoices upon receipt of said invoices.

IV. Timing

The work to be performed under this Agreement shall be completed no later than 36 months from the effective date of this Agreement.

V. Indemnity

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

VI. Insurance

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

VII. Records and Audits

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

VIII. Independent Contractor

Nothing contained in this Agreement shall constitute or be construed to create a partnership or joint venture between Milwaukee County or its successors or assigns; the Steering Committee or its successors or assigns; and the Commission or its successors or assigns. In

entering into this Agreement, and in acting in compliance herewith, the Commission is at all times acting and performing as an independent contractor, duly authorized to perform the acts required of it hereunder.

IX. Authorization

The Steering Committee approved the project that is the subject of this Agreement by action taken at a regular meeting held on November 18, 2003.

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

ATTESTING WITNESS

**SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION**

By _____
Philip C. Evenson
Executive Director

By _____
Thomas H. Buestrin
Chairman

ATTESTING WITNESS

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

By _____
Thomas D. Patterson
MCAMLIS Project Manager

By _____
Kurt W. Bauer
Chairman

APPROVED AS TO FORM

William J. Domina (Date)
Milwaukee County Corporation Counsel

**REVIEWED AS TO
INDEMNIFICATION AND INSURANCE**

John R. Rath (Date)
Milwaukee County Department of Risk Management

REVIEWED AS TO DBE REQUIREMENTS

Freida F. Webb, Milwaukee County DBD Director

SEWRPC Staff Memorandum MCAMLIS2

**MILWAUKEE COUNTY AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM PROGRAM IMPLEMENTATION
PROJECT—PROPOSED PHASE 2 FLOODLAND MAPPING FOR MILWAUKEE COUNTY**

I. EXECUTIVE SUMMARY

The overall objective of the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) program, as detailed in Southeastern Wisconsin Regional Planning Commission (SEWRPC) Community Assistance Planning Report No. 177, *Feasibility Study for a Milwaukee County Automated Mapping and Land Information System*, October 1989, is to complete a multi-purpose, multi-user, parcel-based automated mapping and land information system for the entirety of Milwaukee County. The project proposed in this Staff Memorandum is the second and final phase of a program that will contribute significantly and specifically toward meeting this objective by providing for the accurate mapping in digital and hard copy format of the 10-, 50-, 100-, and 500-year recurrence interval floodplain areas along approximately 54 miles of stream and 100-year Lake Michigan coastal flooding areas along about 30 miles of shoreline within the County. The total project area for project Phases 1 and 2 consists of 508 U.S. Public Land Survey one-quarter sections and encompasses riverine floodplain and Lake Michigan coastal flooding areas in all of the communities in the County, including the Cities of Cudahy, Franklin, Glendale, Greenfield, Milwaukee, Oak Creek, South Milwaukee, Wauwatosa, and West Allis and the Villages of Bayside, Brown Deer, Fox Point, Greendale, Hales Corners, River Hills, St. Francis, Shorewood, West Milwaukee, and Whitefish Bay. The Phase 2 project area, which covers the Cities of Franklin, Greenfield, Oak Creek, and West Allis and the Villages of Greendale and Hales Corners is shown on the map attached hereto as Exhibit A.

The proposed project constitutes an important step toward the ultimate realization of a fully automated, parcel based, land information system as described in the aforementioned planning report. Upon completion of this project, floodplain boundaries will have been accurately delineated and digitally added to all large-scale topographic maps prepared under the MCAMLIS project. The proposed mapping will consist of layers in the system which can readily be combined with the large-scale cadastral, as well as topographic maps which have been prepared under the MCAMLIS program. The layers will also be suitable for use with digital orthophotographic products and other map products correctly related to the MCAMLIS survey control network. Four layers will include the 10-, 50-, 100-, and 500-year recurrence interval floodplain boundaries; a fifth the 100-year recurrence interval floodway boundaries; and a sixth the flood stage elevations, cross-section locations, and river mile stations. The mapping will provide an improved basis for local floodplain zoning, which is currently required under Chapter NR 116 of the *Wisconsin Administrative Code* and is in place in all of the communities in Milwaukee County. It can also be used to develop an up-to-date Countywide digital Federal Emergency Management Agency (FEMA) flood insurance rate map.

The proposed project will include the delineation of the aforementioned floodplain data for all streams in the Root River watershed that were included under the Milwaukee Metropolitan Sewerage District (MMSD) 1990 stormwater drainage and flood control system plan as that plan was prepared by the Regional Planning Commission in December 1990, and as updated by the MMSD from 1998

through the present, and all other streams for which detailed studies or approximate delineations have been developed by the Regional Planning Commission or FEMA as the basis for floodland zoning purposes. All the hydrology and hydraulics will be updated to reflect planned year 2020 land use and existing channel conditions. In the case of the stream reaches which have been analyzed by the MMSD as part of its watercourse system planning program, the modeling has generally been updated to current conditions and to reflect 2020 land use conditions. These updated analyses, with appropriate refinements and expansions, will serve as the basis for the MCAMLIS mapping along those streams studied by the MMSD. Such refinement and expansion would potentially include consideration of extended rainfall periods of record, alternative rain gauge locations, calibration methodology, hydraulic model coverage, and possible bridge or culvert alterations since preparation of the MMSD models. The amount of refinement and expansion, if any, would be determined on a subwatershed basis, in concert with the agencies and local units of government involved in the ultimate uses of the mapping including the Wisconsin Department of Natural Resources (WDNR) and FEMA. In addition, 100-year stage data will be mapped for the Lake Michigan coastal flood hazard areas, as defined by the U.S. Army Corps of Engineers.

The project will also involve preparation of composite digital flood hazard maps on suitable base maps compiled at scales of one inch equals 2,000 feet and one inch equals 4,000 feet. Such maps would be useful to local government officials and staff, particularly County and local emergency government and emergency services departments.

The proposed project will benefit Milwaukee County; each municipality within the County; the property owners within the environs of the municipalities; the public and private utilities whose service areas are within the project area; and the engineers, planners, zoning administrators, building inspectors, and emergency government personnel who work on a day-to-day basis within the project area.

The project will be sponsored and funded by the MCAMLIS Steering Committee. In addition, there will be costs involved in the refining and detailing of the hydrologic and hydraulic analyses which serve as the basis of the mapping in order to meet current FEMA and WDNR guidelines and standards. The costs of updating the analyses for the stream reaches studied under the MMSD system plan would be borne by the District. The costs for updating the analyses of the other stream reaches will be borne by the MCAMLIS Steering Committee.

The projected total cost of this implementation project has been estimated at \$494,000. The MCAMLIS program would provide \$436,000, or 88 percent of the total cost and the MMSD would provide \$58,000, or 12 percent.

II. DETAILED PROJECT DESCRIPTION

This proposed Milwaukee County Automated Mapping and Land Information System project will consist of the following work elements:

A. Delineation and Digitization of 10- through 500-Year Recurrence

Interval Floodplain and 100-Year Floodway Boundaries on MCAMLIS Maps

Upon completion of Phase 2, the overall Phase 1 and 2 mapping program will have included the delineation and digitization of the 10-, 50-, 100-, and 500- year floodplain boundaries and the 100-year floodway boundaries along approximately 159 miles of streams (54 miles of that total under Phase 2) located in 508 U.S. Public Land Survey one-quarter sections within Milwaukee County. The maps will show stream and overbank cross section alignments and

will indicate flood stage elevations in feet above National Geodetic Vertical Datum, 1929 adjustment. Digital topographic base mapping at a scale of one inch equals 100 feet, with two-foot interval contour lines, meeting National Map Accuracy Standards has been completed for all of the one-quarter sections concerned under the MCAMLIS program. In addition, the MMSD, the Regional Planning Commission, and FEMA have, under previous work programs, determined the 10- through 100-year recurrence interval flood stages, and in some cases, the 500-year stages, at critical locations along all but 5.3 miles of the Phase 2 stream channels. Along those 5.3 miles of stream FEMA has published approximate floodplain mapping. The flood stage data were developed by hydrologic and hydraulic simulation studies using calibrated mathematical models. The hydrologic and hydraulic modeling is documented in published documents cited in the subsequent section of this narrative. As described under section II.C., the hydraulic modeling will be refined, updated, and expanded as needed to reflect current channel conditions and 2020 land use conditions and to meet all FEMA and WDNR requirements. Coastal flood hazard areas will be provided in digital form along the shoreline of Lake Michigan. Floodplain and floodway boundaries, stream and overbank cross-section locations, and flood elevations will be provided in digital form along all, or portions, of the following 23 streams:

Root River Watershed

104th Street Branch (tributary to the Root River)
Caledonia Branch
Crayfish Creek
Dale Creek
East Branch of the Root River
Hale Creek
North Branch of the Root River
North Branch of Whitnall Park Creek
Northwest Branch of Whitnall Park Creek
Root River
Root River Canal
Ryan Creek
Scout Lake Creek
Tess Corners Creek
Tributaries 2, 3, 4, and 5 to the North Branch of the Root River
Unnamed Tributary No. 1 to the East Branch of the Root River
Unnamed Tributary to Ryan Creek
Unnamed Tributary to the North Branch of the Root River (at Oakwood Road)
Unnamed Tributary to the Root River (at Oakwood Park)
West Branch of Crayfish Creek
West Branch of the Root River
Whitnall Park Creek
Woods Creek (Root)

B. Preparation of Composite Digital Flood Hazard Maps

The preparation of composite digital flood hazard maps on suitable base maps compiled at scales of one inch equals 2,000 feet and one inch equals 4,000 feet will enable local officials and staff to readily visualize the extent of potential flooding in their communities. Such maps would be useful to the Milwaukee County Division of Emergency Government and to local emergency services departments in planning for the provision of emergency services during

floods. The digital map files will be suitable for input to computer software which could be used for on-screen computer display of selected areas.

C. Hydrologic and Hydraulic Analyses, Updating, and Revision

The 10- through 500-year recurrence interval floodplain, the 100-year floodway, and coastal flood hazard area delineations will be prepared beginning with the best available hydrologic and hydraulic data and updating that data as described below. The available data includes that developed under:

- SEWRPC Community Assistance Planning Report No. 121, *A Stormwater Management Plan for the Village of Hales Corners, Milwaukee County, Wisconsin*, March 1986;
- SEWRPC Community Assistance Planning Report No. 152, *A Stormwater Drainage and Flood Control Plan for the Milwaukee Metropolitan Sewerage District*, December 1990;
- SEWRPC Memorandum Report No. 35, *A Stormwater Management Plan for the Crayfish Creek Subwatershed, City of Oak Creek, Milwaukee County, Wisconsin*, June 1988, as refined under SEWRPC WRSP No. 260, June 1994;
- SEWRPC WRSP No. 272, Ryan Creek, September 1995;
- U.S. Army Corps of Engineers, *Revised Report on Great Lakes Open-Coast Flood Levels, Phase I*, 1988;
- FEMA flood insurance studies (FIS) prepared for certain municipalities in the County; and
- MMSD watercourse system and advanced planning programs conducted from 1998 through the present.

The data sources for each stream reach are summarized in the table attached hereto as Exhibit B. It is proposed that those analyses be uniformly updated, revised, and extended as necessary to meet the current requirements of the WDNR and FEMA. In that way, the County mapping program will be useable for the preparation of Federal flood insurance studies and for all project analysis to evaluate floodplain impacts.

In order to update the analyses needed as a basis for the County floodplain mapping program, it will be necessary to conduct a series of meetings and exchanges of data with the Wisconsin Department of Natural Resources and FEMA. That data exchange has been initiated. It is expected that the hydrologic and hydraulic analyses updating will be conducted in various ways, depending upon the currency and detail of the available analyses.

III. COORDINATION WITH RELATED PROGRAMS

The Commission will explore cooperative uses of the completed flood hazard mapping which will benefit the Milwaukee County communities. Contacts have been initiated with the WDNR and FEMA to consider the development of a Countywide digital flood insurance rate mapping (DFIRM) program which would incorporate the updated information developed under this Agreement and

under Phase 1. Such a program would provide for a uniform, Countywide updated DFIRM for all communities in the County. Following initial discussions on this potential future program, a report will be made to the Steering Committee for guidance prior to soliciting community input.

IV. PROJECT SCHEDULE AND TIMELINES

All project tasks specified herein will be completed within 36 months of the effective date of the resulting grant agreement. The project schedule is attached hereto as Exhibit C.

V. ALL CONTRACTORS, VENDORS, OR EMPLOYEES WHO WILL BE ASSIGNED TO THE PROJECT

Policy guidance for the proposed project will be provided by the MCAMLIS Steering Committee, which is responsible for the direction of the MCAMLIS program. The MMSD is directly represented on this Committee, as is the Milwaukee County Register of Deeds as the County Land Information Officer. The Committee is staffed by the Southeastern Wisconsin Regional Planning Commission. The SEWRPC project manager will be responsible for the overall management of the project. The SEWRPC staff will perform the tasks required for completion of the project as described herein. Subcontractors may be hired by the Regional Planning Commission.

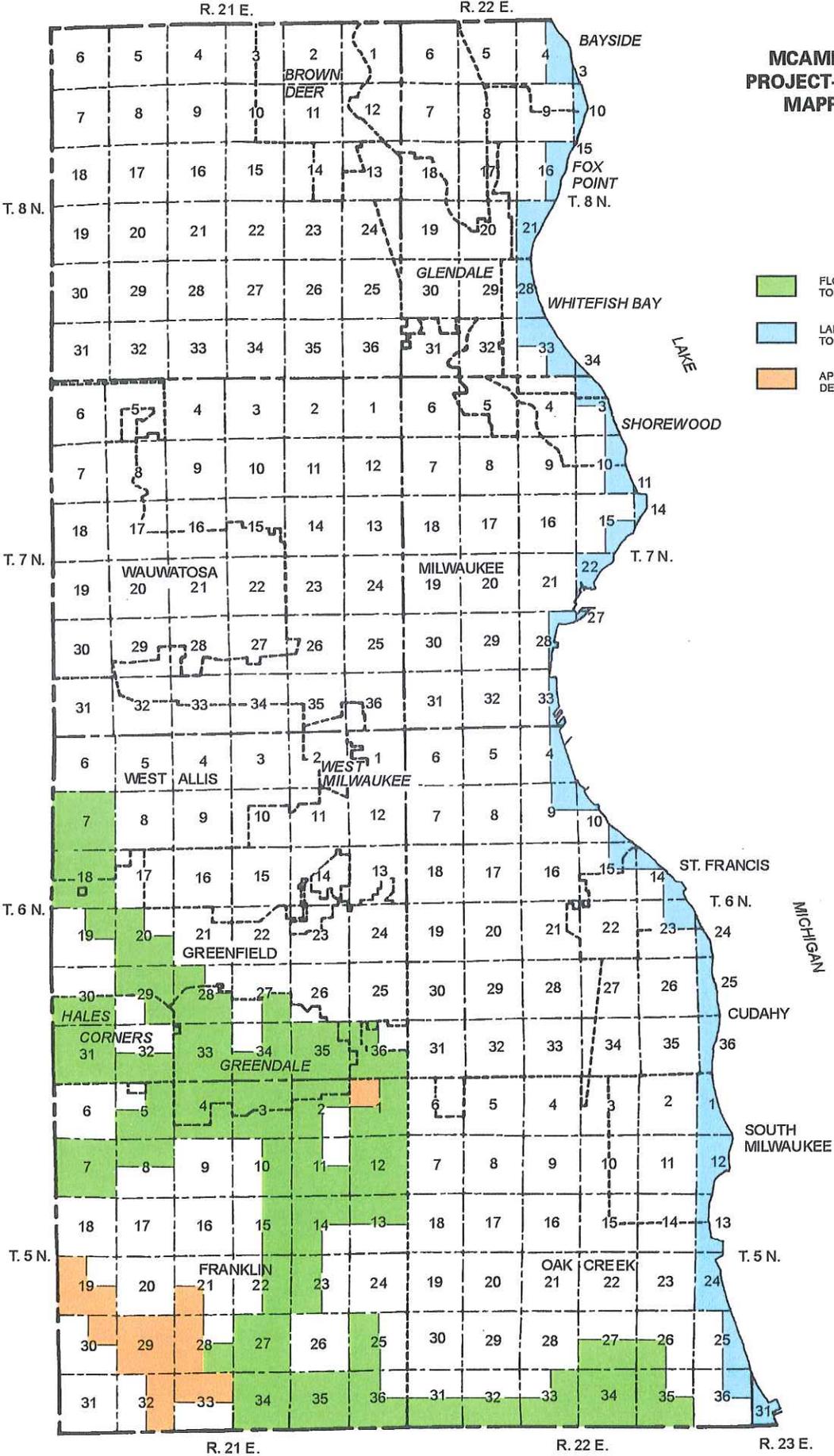
VI. PROJECT BUDGET

The project budget is summarized in Exhibit D.

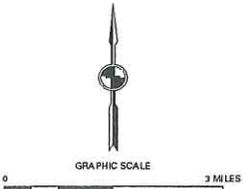
* * *

Exhibit A

**MCAMLIS PROGRAM IMPLEMENTATION
PROJECT—PROPOSED PHASE 2 FLOODLAND
MAPPING FOR MILWAUKEE COUNTY
AUGUST 2003**



- FLOODPLAIN AND FLOODWAY BOUNDARIES TO BE DELINEATED AND DIGITIZED
- LAKE MICHIGAN COASTAL FLOODPLAIN BOUNDARIES TO BE UPDATED AS NEEDED, DELINEATED AND DIGITIZED
- APPROXIMATE FLOODPLAIN DELINEATION FOR WHICH DETAILED STUDIES AND DELINEATIONS WILL BE PREPARED



Source: SEWRPC.

Exhibit B

STREAMS FOR WHICH FLOOD HAZARD DATA ARE TO BE MAPPED

| Stream | Source of Flood Hazard Data |
|--|--|
| Root River Watershed | |
| 104th Street Branch (tributary to the Root River) | MMSD ^a |
| Caledonia Branch | MMSD ^a — Available at WDNR |
| Crayfish Creek | WRSP No. 260, 1994 |
| Dale Creek | Village of Greendale FIS, 1982 |
| East Branch of the Root River | MMSD ^a |
| Hale Creek | MMSD ^a |
| North Branch of the Root River | MMSD ^a |
| North Branch of Whitnall Park Creek | MMSD ^a , Village of Hales Corners FIS, 1988 |
| Northwest Branch of Whitnall Park Creek | MMSD ^a , Village of Hales Corners FIS, 1988 |
| Root River | MMSD ^a |
| Root River Canal | MMSD ^a |
| Ryan Creek | WRSP No. 272 |
| Scout Lake Creek | Village of Greendale FIS, 1982 |
| Tess Corners Creek | MMSD ^a , City of Franklin FIS, 1982 |
| Tributaries 2, 3, 4, and 5 to the North Branch of the Root River | Village of Greendale FIS, 1982 |
| Unnamed Tributary No. 1 to the East Branch of the Root River | Village of Greendale FIS, 1982 |
| Unnamed Tributary to Ryan Creek | Approximate floodplain—no detailed data |
| Unnamed Tributary to the North Branch of the Root River (at Oakwood Road) | Approximate floodplain—no detailed data |
| Unnamed Tributary to Root River (at Oakwood Park) | WRSP No. 247, 1993 |
| West Branch of the Root River | City of West Allis FIS, 1981 |
| Whitnall Park Creek | MMSD ^a , Village of Hales Corners FIS, 1988 |
| Woods Creek (Root) | City of Franklin FIS, 1982 |

^aSEWRPC Community Assistance Planning Report No. 152, A Stormwater Drainage and Flood Control System Plan for the Milwaukee Metropolitan Sewerage District, December 1990, MMSD Root River Phase I Watercourse System Management Plan, August 2000, and subsequent MMSD advanced planning projects.

Exhibit D

COSTS AND REVENUES
MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM PROGRAM
IMPLEMENTATION PROJECT—PHASE 2 FLOODLAND MAPPING

| Work to Be Conducted | Source of Revenue | Amount |
|---|--|-----------|
| Phase 2—Analysis and Mapping | | |
| 1. Updated Hydrologic and Hydraulic Analyses, Delineation, and Digitizing for Stream Reaches Currently Assigned Detailed Delineations | MCAMLIS | \$369,000 |
| | Milwaukee Metropolitan Sewerage District | 58,000 |
| | Subtotal | \$427,000 |
| 2. Hydrologic and Hydraulic Analyses, Delineation, and Digitizing for Stream Reaches Currently Assigned Approximate Floodplains | MCAMLIS | \$ 44,000 |
| 3. Delineation and Digitizing of Lake Michigan Coastal Flooding Area | MCAMLIS | \$ 18,000 |
| 4. Composite Digital Flood Hazard Maps | MCAMLIS | \$ 5,000 |
| Phase 2 Total by Revenue Source | MCAMLIS | \$436,000 |
| | Milwaukee Metropolitan Sewerage District | \$ 58,000 |
| Phase 2 Total | -- | \$494,000 |

Source: SEWRPC.

VB.

AGREEMENT

THIS AGREEMENT, entered into this ____ day of _____, 2004, by and between the Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as the "Commission"); and the Milwaukee County Automated Mapping and Land Information System Steering Committee (hereinafter referred to as the "Steering Committee").

WITNESSETH:

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

WHEREAS, under the requirements of this legislation, the Commission is responsible for receiving, indexing, and filing as a public record, a copy of each land survey plat prepared by a land surveyor; and

WHEREAS, under the further requirements of this legislation, the Commission is also made responsible for the perpetuation of the corners of the U.S. Public Land Survey which may be subject to destruction, removal, or burial through construction or other activities and for maintaining a record of the surveys for such perpetuation; and

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

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

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

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

I. Scope of Work

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

- A. Record and maintain a file of all land survey plats prepared by land surveyors for parcels in Milwaukee County. An estimated 2,000 such land surveys are prepared and filed annually. Such surveys are essential to the maintenance effort required to keep the MCAMLIS cadastral maps up-to-date.

- B. Perpetuate the corners of the U.S. Public Land Survey system throughout Milwaukee County. Such corners frequently are subject to destruction, removal, and burial through construction or other activities. The perpetuation work includes periodic inspection of the system of approximately 2,200 monuments and attendant reference benchmarks, the removal and/or replacement of such monuments and reference benchmarks either directly or through the supervision of others conducting such activities, and undertaking both horizontal and vertical control surveys to ensure the integrity of the reference framework that is critical to the automated mapping base established for Milwaukee County. An estimated 100 monuments and benchmarks are serviced annually.
- C. Provide guidance and counsel to the Milwaukee County Automated Mapping and Land Information System Steering Committee through service on that committee.
- D. Provide technical support and guidance to the staff assigned to develop and maintain the Milwaukee County automated mapping and land information system program.

II. Commission to Organize and Store Information Acquired by County Surveyor

In order to facilitate convenient use of the land survey records concerned by land surveyors, abstractors, assessors, appraisers, attorneys, engineers and other interested parties, the Commission agrees to maintain an orderly filing and retrieval capability for the land surveys and to cross reference all files of surveys under five headings. The five reference headings are:

- A. Numerically by U.S. Public Land survey township, range, section, quarter section, and record of survey.
- B. Alphabetically by minor civil division (city or village).
- C. Alphabetically by the property owner or client for whom the survey was completed.
- D. Alphabetically by the name of the land surveyor employed by the property owner or client.
- E. Chronologically by the date of the survey.

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

III. Commission to Act as Custodian for all Milwaukee County Surveyor Records

The Commission agrees to maintain for inspection and copying as public documents, all records associated with its functions as the Milwaukee County Surveyor. The Commission further agrees on a quarterly basis to transmit updated copies of the five lists

identified in paragraph 2 above. These updated lists shall be provided to the Milwaukee County Director of Public Works, the Milwaukee County Register of Deeds, selected city and village engineers within the County, and all land surveyors who have submitted records of surveys to the Commission for indexing and filing.

IV. Steering Committee to Receive Copies of Records

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

V. Compensation

The Steering Committee through Milwaukee County shall pay to the Commission the sum of \$60,000.00 as full payment for the services described herein.

VI. Method of Compensation

The Commission shall submit a single invoice in the amount of \$60,000.00 to Milwaukee County. The County, on behalf of the Steering Committee, shall pay to the Commission the amount shown on the invoice upon receipt of said invoice.

VII. Timing

The work to be performed under this Agreement shall be carried out over the period from January 1, 2004, through December 31, 2004.

VIII. Indemnity

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

IX. Insurance

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

X. Records and Audits

The Commission shall allow Milwaukee County, the Milwaukee County Department of Audit, or any other party that Milwaukee County may name, when and as they demand, to audit, examine, and make copies of, excerpts or transcripts from, any records or other information directly relating to matters under this agreement. Any subcontracting by the Commission in performing the duties described under this contract shall subject the subcontractor and/or associates to the same audit terms and conditions as the

Commission. The Commission (or any subcontractor) shall maintain and make available to Milwaukee County the aforementioned audit information for no less than three years after the conclusion of each contract term.

XI. Independent Contractor

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

XII. Authorization

The Steering Committee approved the execution of this Agreement by action taken on November 18, 2003.

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

ATTESTING WITNESS

**SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION**

By _____
Philip C. Evenson
Deputy Secretary

By _____
Thomas H. Buestrin
Chairman

ATTESTING WITNESS

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

By _____
Thomas D. Patterson
Project Manager

By _____
Kurt W. Bauer
Chairman

APPROVED AS TO FORM

By _____
William J. Domina (Date)
Milwaukee County Corporation Counsel

**REVIEWED AS TO
INDEMNIFICATION AND INSURANCE**

By _____
John R. Rath (Date)
Milwaukee County Department of Risk Management

**APPROVED AS TO CHAPTER 42
DBE PROVISIONS**

Frieda F. Webb (Date)
Milwaukee County DBD Acting Director



MILWAUKEE
COUNTY
PARK
SYSTEM

SCOTT WALKER
County Executive

SUE BLACK
Parks Director

Yours to discover!

IV E

Memorandum

To: MCAMLIS Steering Committee
From: Milwaukee County Department of Parks and Public Infrastructure
Date: July 19, 2004
Subject: Status Report on the GIS Needs Assessment and Database Specification for Cadastral and Streets/Street Address Databases Project

This memorandum is a project status report for the Milwaukee County Database Needs Assessment project since the November, 2003 MCAMLIS meeting. Since that meeting, the project has made progress in the following areas:

Phase 1: Situation Assessment and Conceptual System Design

A detailed situational assessment of county departments was completed to determine the internal county requirements for the database design. A conceptual database design was then created and revised based on feed back from county staff.

Status: 99% completion

Phase 2: Logical Database Design

A series of meetings were held with SEWRPC technical staff and municipalities to review the database design. Feedback received from those meetings was used to enhance the conceptual design model. A workflow analysis of the cadastral maintenance process was undertaken to determine cadastral map update requirements. Map output standards were reviewed for Register of Deeds Tax Listing Section to ensure final map products would be compatible for incorporation within there operations.

Status: 90% completion

Phase 3: Physical Database Design and Implementation Plan

A prototype database structure was created and modified to reflect the changes in the database design from Phase1 to Phase 2. MCAMLIS data was loaded into the prototype to determine requirements for conversion to new geodatabase design.

Status: 70% completion

Project Completion

The project is schedule for completion by July 30th. At that time final copies of all work products will be provided to the MCAMLIS Steering Committee.

GGH/krw

Cc: Greg High, DPPI
Sue Black, DPPI

Memorandum

To: MCAMLIS Steering Committee

From: Milwaukee County Department of Parks and Public Infrastructure

Date: July 7, 2004

Subject: Status Report on the GIS Needs Assessment and Database Specification for Cadastral and Streets/Street Address Databases Project

This memorandum is a project status report for the Milwaukee County Database Needs Assessment project since the November, 2003 MCAMLIS meeting. Since that meeting, the project has made progress in the following areas:

Phase 1: Situation Assessment and Conceptual System Design

A detailed situational assessment of county departments was completed to determine the internal county requirements for the database design. A conceptual database design was then created and revised based on feed back from county staff.

Status: 99% completion

Phase 2: Logical Database Design

A series of meetings were held with SEWRPC technical staff and municipalities to review the database design. Feedback received from those meetings was used to enhance the conceptual design model. A workflow analysis of the cadastral maintenance process was undertaken to determine cadastral map update requirements. Map output standards were reviewed for Register of Deeds Tax Listing Section to ensure final map products would be compatible for incorporation within there operations.

Status: 90% completion

Phase 3: Physical Database Design and Implementation Plan

A prototype database structure was created and modified to reflect the changes in the database design from Phase1 to Phase 2. MCAMLIS data was loaded into the prototype to determine requirements for conversion to new geodatabase design.

Status: 70% completion

Project Completion

The project is schedule for completion by July 30th. At that time final copies of all work products will be provided to the MCAMLIS Steering Committee.

GGH:KRW:

Cc: Greg High, DPPI
Sue Black, DPPI

Calendar Entry:

Meeting

| | | | |
|----------|------------------------------|-------------|----------------------|
| Subject: | MCAMLIS Steering Comm Update | Location: | city campus room 219 |
| Begins: | Fri 07/09/2004 09:00 AM | Entry type: | Meeting |
| Ends: | Fri 07/09/2004 10:00 AM | | |

Invitations already sent

To: Greg High/DPW/Milwaukee County@milwco, Kevin White/DPW/Milwaukee County@milwco
cc:
bcc:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Pencil In | Time will appear free to others. |
| <input type="checkbox"/> Mark Private | Others cannot see any details about this event. |
| <input type="checkbox"/> Notify me | Have Notes notify you before the event. |
- Categorize:

Description:

Review documents for submission to MCAMLIS Steering comm and discuss future meeting with DAS, ROD

Greg High

07/06/2004 05:56 PM

To: Gary Drent/DPW/Milwaukee County@milwco, Kevin
White/DPW/Milwaukee County@milwco

cc:

Subject: MCAMLIS Steering Committee meeting ["Watchdog": checked]

How are we going to handle this?

----- Forwarded by Greg High/DPW/Milwaukee County on 07/06/2004 05:55 PM -----



"Thomas D. Patterson"
<TPATTERSON@SEW
RPC.org>

07/06/2004 11:35 AM

To: <GHigh@milwcnty.com>, <KWhite@milwcnty.com>

cc:

Subject: MCAMLIS Steering Committee meeting ["Watchdog": checked]

A MCAMLIS Steering Committee meeting has been scheduled for 9:00 a.m., July 20, 2004, at the City of Franklin. One item of business on the Agenda will be a status report from a Milwaukee County representative (I'm assuming at this point that that person will be one of you two) on the County GIS Needs Assessment/GIS Implementation Study. If there will be any material that you want mailed out before the meeting, I will need that material in my hands by noon this Friday, July 9. If instead you will distribute something at the meeting, please let me know by the same time so that the meeting agenda can adequately reflect what will be happening for that particular agenda item.

Thank you.

Tom Patterson
MCAMLIS Project Manager
SEWRPC

- do we need to know status of \$ remaining ? in report

Memorandum

To: MCAMLIS Steering Committee

From: Milwaukee County Department of Public Works

Date: November 3, 2003

Subject: **Status Report on the GIS Needs Assessment and Database Specification for Cadastral and Streets/Street Address Databases Project**

This memorandum is a project status report for the Milwaukee County Database Needs Assessment project that was approved at the July 15th, 2003 meeting. Since that meeting, the Department of Public Works has made progress in the following areas:

Request for Proposals

In July-August 2003, a project scope of work was defined and the request of proposals was prepared (attachment 1). After a review by County and MCAMLIS project Staff, the RFP was issued on August 15th. By the September 5th proposal due date 5 firms had responded:

Dakota Intertek
GeoAnalytics Inc.
Patrick Engineering
PlanGraphics Inc.
RA Smith and Associates

Consultant Selection

Milwaukee County Public Works used a quality based selection (QBS) process to evaluate potential consultants. The consultants were evaluated on firm experience and project approach (attachment 2). The selection panel was made up of County staff and MCAMLIS Committee members. Based on rankings of the selection committee (attachment 3), GeoAnalytics Inc. was selected as the most qualified firm.

Project Issues and Considerations

After selecting GeoAnalytics, the County DPW staff started negotiations over the proposed budget. Based on those initial discussions we have refined the scope of work

and have received an updated schedule and budget (attachment 4). A review of the refined scope will indicate that the scope in the RFP is being met. However, as the review panel based their decision on the quality of the RFP, the fee proposal was submitted separately and not reviewed in the selection process. During the initial negotiations, the County staff found that the level of resources proposed by the consultant appeared to be more than what, in the County's opinion, is required. The cost proposed was also significantly beyond what MCAMLIS Committee established for funding. While the County staff has subsequently negotiated a reduction in resource level and associated cost, the cost still exceeds the level approved by the MCAMLIS steering committee.

Recommendation

After further review, the consultant selection review panel believes that GeoAnalytics is the best qualified to perform the study of the scope and resource level now established through the negotiations with the consultant. Therefore, it is recommended that the MCAMLIS Steering Committee authorize additional funds in the amount of \$70,000 for this work. This increase when added to the original approved funds of \$40,000 will total \$110,000 and will be sufficient to accomplish the assessment project as defined.

GGH:GED:

Attachments: 1 thru 4

Cc: Consultant selection panel
Greg High, DPW
Tom Kenney, DPW

Kevin White

07/07/2004 08:52 AM

To: Greg High/DPW/Milwaukee County@milwco
cc: Gary Drent/DPW/Milwaukee County@milwco
Subject: Re: MCAMLIS Steering Committee meeting ["Watchdog": checked]
[Virus checked]

Greg,

I will prepare a memo similar to the one we provided in November (see attached). I will highlight what phase we are currently working on and when we anticipate the project to be completed. I do not think we should attach any draft documents at this time.

If you are looking for something more substantial please let me know.

Kevin



Needs Status update nov2003.p
Greg High

Greg High

07/06/2004 05:56 PM

To: Gary Drent/DPW/Milwaukee County@milwco, Kevin
White/DPW/Milwaukee County@milwco
cc:
Subject: MCAMLIS Steering Committee meeting ["Watchdog": checked]

How are we going to handle this?

----- Forwarded by Greg High/DPW/Milwaukee County on 07/06/2004 05:55 PM -----



"Thomas D. Patterson"
<TPATTERSON@SEW
RPC.org>

07/06/2004 11:35 AM

To: <GHigh@milwcnty.com>, <KWhite@milwcnty.com>
cc:
Subject: MCAMLIS Steering Committee meeting ["Watchdog": checked]

A MCAMLIS Steering Committee meeting has been scheduled for 9:00 a.m., July 20, 2004, at the City of Franklin. One item of business on the Agenda will be a status report from a Milwaukee County representative (I'm assuming at this point that that person will be one of you two) on the County GIS Needs Assessment/GIS Implementation Study. If there will be any material that you want mailed out before the meeting, I will need that material in my hands by noon this Friday, July 9. If instead you will distribute something at the meeting, please let me know by the same time so that the meeting agenda can adequately reflect what will be happening for that particular agenda item.

Thank you.

Tom Patterson
MCAMLIS Project Manager
SEWRPC



MILWAUKEE
COUNTY
PARK
SYSTEM

SCOTT WALKER
County Executive

SUE BLACK
Parks Director

Memorandum

To: MCAMLIS Steering Committee
From: Milwaukee County Department of Parks and Public Infrastructure
Date: July 19, 2004
Subject: MCAMLIS Program Management and Governance Structure

Background

The initial implementation plan of the MCAMLIS program was for the program to be implemented in two phases, conversion phase and maintenance phase. The recommendations from the original report prepared by UGS Consulting called for SEWRPC to act as the lead agency during the conversion phase and that Milwaukee County take the lead during the maintenance phase. Upon the completion of the Cadastral map conversion project, currently being undertaken by City of Milwaukee staff, the data conversion phase will be substantially over. Currently, the County maintains the cadastral and street address data for the MCAMLIS program.

On several occasions in the past and as recently as January 2004, the Commission staff has asked the Milwaukee County whether or not it was prepared to undertake MCAMLIS project management. The County in September of 2002, asked that the MCAMLIS Steering Committee to take up this issue. Additionally recommendations included in the needs assessment currently being prepared for Milwaukee County, calls for the County to take custodianship of Land Information Program and further recommends that the County formalize a County directed Land Information Program Structure.

Recommendation

It is recommended that the MCAMLIS Steering Committee appoint a sub-committee to review and make recommendations on:

1. The transfer of project management of MCAMLIS program to the County beginning January 1, 2005
2. The proposed Land Information structure changes proposed under the County's needs assessment.

GGH/krw

Cc: Greg High, DPPI
Sue Black, DPPI

IV E ①

Yours to discover!

Greg High

07/16/2004 12:19 PM

To: "Thomas D. Patterson" <TPATTERSON@SEWRPC.org>
cc: Linda Seemeyer/DOA/Milwaukee County@milwco, Tom
Lewandowski/DOA/Milwaukee County@milwco, Clare
O'Brien/DOA/Milwaukee County@milwco, John La
Fave/RegDeeds/Milwaukee County@milwco, Sue
Black/Parks/Milwaukee County@milwco, Gary Drent/DPW/Milwaukee
County@milwco, Kevin White/DPW/Milwaukee County@milwco
Subject: 7/20/04 MCAMLIS Steering Committee ['Watchdog': checked]

Tom:

Per your direction in our phone conversation:

The Milwaukee County members of the MCAMLIS steering committee request addition of the following items to the agenda for the next MCAMLIS steering committee meeting to held on Tuesday, July 20, 2004 at 9:00 am:

Under old business:

- In regard to the recommendation discussed in the Milwaukee County GIS Needs Assessment Study that Milwaukee County DPPI assume MCAMLIS project management duties and responsibilities, Milwaukee County would like to discuss the issue with the steering committee and determine the process and schedule for the decision making process on whether or not to implement this recommendation.

Under new business:

- In regard to the recommendation discussed in the Milwaukee County GIS Needs Assessment Study that the MCAMLIS Steering Committee revise or reorganize its structure, Milwaukee County would like to discuss and determine the process and schedule for the decision making process on whether or not to implement this recommendation

We will provide sufficient copies of excerpts of the study as material for discussion by the committee.

Please let me know the decision of Chairman Bauer.

Thanks

Greg High, P.E.
Director, AE&ES Section of the Parks Division
Milwaukee County Department of Parks and Public Infrastructure
Milwaukee County City Campus
2711 W. Wells St., 2nd floor

DRENT



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

RECEIVED
MILWAUKEE COUNTY

AUG 02 2004

MEMORANDUM

DEPT. PUBLIC WORKS
AE AND ES DIVISION

TO: All Members of the MCAMLIS Steering Committee
FROM: Chairman, Kurt W. Bauer
DATE: July 30, 2004
SUBJECT: Subcommittee Appointments

Please be advised that in accordance with the action of the MCAMLIS Steering Committee taken at its meeting held on July 20, 2004, I have appointed the following persons to a Subcommittee. The Subcommittee is to advise the Steering Committee on the need and specifications for the proposed topographic mapping program considered at the meeting of July 20, 2004.

Mr. Timothy R. Bate, P.E. – Chairman
Engineering Planning Manager
Milwaukee Metropolitan Sewerage District and
President, Wisconsin Section, American Society of Civil Engineers
P. O. Box 3049
Milwaukee, WI 53201-3049

Mr. Rick Norris, P.E., President
Norris and Associates, Inc.
Consulting Engineers
7100 W. Center Street
Milwaukee, WI 53210

Mr. Gregory G. High, Director
Architectural and Engineering Services
Department of Parks and Public Infrastructure
2711 W. Wells Street
Second Floor
Milwaukee, WI 53208

Mr. William C. Shaw
GIS Manager
WE Energies
333 W. Everett Street, A259
Milwaukee, WI 53290-0001

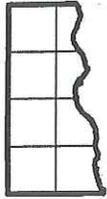
Mr. Timothy J. Thur, P.E.
Civil Engineer II
City of Milwaukee
Environmental Engineering Division
Zeidler Municipal Building
841 N. Broadway, Room 820
Milwaukee, WI 53202

Mr. Thomas D. Patterson will provide staff services to the Subcommittee.

Should you have any comments or questions concerning this matter, please do not hesitate to call Mr. Patterson.

* * *

KWB/TDP/lgh
#97944 V1 - SUBCOMMITTEE APPOINTMENTS



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

VI a

MEMORANDUM

TO: MCAMLIS Steering Committee

FROM: Thomas D. Patterson
MCAMLIS Project Manager

DATE: July 9, 2004

SUBJECT: USE OF MCAMLIS COPYRIGHTED DIGITAL MAPPING MATERIALS ON MUNICIPAL WEBSITES

Introduction

At the November 18, 2003 MCAMLIS Steering Committee Meeting, Mr. John Bennett, City Engineer, City of Franklin and also the Intergovernmental Cooperation Council of Milwaukee County representative to the MCAMLIS Steering Committee, requested that the agenda for the following MCAMLIS Steering Committee meeting include a discussion item that would serve to identify and clarify any restrictions or conditions established by MCAMLIS Steering policies on the use of copyrighted MCAMLIS digital mapping materials on municipal websites. He noted in this regard that the City of Franklin had recently established a municipal website and that he wanted to be sure that the manner in which the City was using the MCAMLIS digital mapping materials on that website did not violate any of the policies established by the MCAMLIS Steering Committee for such use. This memorandum has been prepared by project staff in response to Mr. Bennett's request.

Background

During the early part of the MCAMLIS Program, the Steering Committee took action to copyright the MCAMLIS digital mapping materials. Ownership of the copyright was vested in a sub-committee created for the purpose of handling the copyright. Initial action taken by the Steering Committee designated the digital topographic maps and the digital real property boundary line maps as copyrighted material. Later, the Steering Committee acted to also include the MCAMLIS digital street and building address data bases as copyrighted materials.

Conditions and guidelines for the use of these copyrighted digital mapping materials were originally formulated in consultation with Mr. Carl R. Schwartz, an intellectual property attorney with the firm of Quarles and Brady, here in Milwaukee. A copy of guidelines, as adopted by the Steering Committee on October 17, 1995 and amended on March 12, 1996, July 9, 1996, and January 28, 1997, is attached hereto. Any municipal or other user of the MCAMLIS digital mapping materials must first execute a License Agreement -- Exhibit C in the Guidelines -- with the MCAMLIS Steering Committee in order to hold and use these materials. The specific conditions under which these materials may be held and used are set forth in Exhibit C.

The language of the License Agreement -- Exhibit C -- essentially states that the Licensee understands that copyrighted materials are being provided to the Licensee and that the Licensee agrees to treat the provided material in accordance with the general principles of intellectual property law as protected by the copyright. More specifically, this means that the Licensee may not redistribute the provided digital mapping materials or any extracted subset of these materials to any third party. The Licensee is also required to take specific action to insure that the digital media upon which the MCAMLIS digital mapping materials are kept are protected from access in their digital form by unauthorized users.

In the succeeding years since these guidelines were originally adopted by the Steering Committee, several informal policies have also been established, sometimes in consultation with Mr. Schwartz concerning additional permitted uses with the MCAMLIS digital mapping materials. Perhaps most prominent among these additional authorized uses is the implicit permission that has since been given to licensed users to provide access to these materials to consultants working under contract to the Licensee for work being done on behalf of the Licensee provided that the Licensee informs the consultant of the restrictions upon the use of the copyrighted MCAMLIS digital mapping materials and that the use of these materials is restricted to the Licensee's work. It is important to note perhaps in this regard, that this policy was established by consensus of the Steering Committee members over the advice of Mr. Schwartz. Additional informal policy that has become convention through practice has been to permit Licensees to exchange copyrighted MCAMLIS digital mapping materials between and among themselves.

General Guidelines for Use of Copyrighted MCAMLIS Digital Mapping Materials on Municipal Websites

In order to adhere to the intent of intellectual property law and to the specifics of the MCAMLIS License Agreement, the posting of MCAMLIS digital mapping materials on municipal websites should be carried out in such a manner that these materials are "pictures" only. The digital files that produce these pictures should not be accessible by any viewer of the picture over the Internet or over some other form of electronic communication. This stricture applies not only to the digital vector graphic files, but also to any rasterized image files created from the vector files. The manner in which this protection is provided is the responsibility of the municipality, but may be provided by such means as fire walls or password protected files. The use of the MCAMLIS digital mapping materials to create hard copy images over electronic communication lines is however, a permitted use of the MCAMLIS digital mapping materials.

TDP/lgh
#97181 v1 - MCAMLIS-Digital Mapping Materials on Website

Enclosure

MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM

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, AMERITECH, 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 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. 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.

In December 1993, 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 and digital mapped materials. Under the License Agreement, the Steering Committee has taken copyright title to all hard copy maps proposed under implementation of the adopted County plan. A Subcommittee of the Steering Committee, comprised of representatives of AMERITECH, the Wisconsin Electric Power Company, and the Wisconsin Gas Company, holds copyright title to the digital mapped materials derived from the MCAMLIS work program.

As refined in an implementation study completed in 1991, 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 hard copy and digital form at a scale of one inch equals 100 feet with two-foot contour intervals.

- The completion of companion cadastral maps to the topographic maps in hard copy and 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 nongeographic 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. The automated base maps for the entire County are expected to be completed in December 1997.¹

DATA SHARING POLICY GUIDELINES AND PROCEDURES

As noted above, the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) program was created in response to the need for the development of an automated mapping base for use by Milwaukee County, the local units of government in Milwaukee County, and the private utilities comprising the Subcommittee of the MCAMLIS Steering Committee. 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, the Wisconsin Gas Company, the Wisconsin Electric Power Company, and AMERITECH (formerly Wisconsin Bell) invested significant private capital in the MCAMLIS program.

In order to protect their investments, the private utility members of MCAMLIS have been granted the MCAMLIS copyright to the mapping base in its digital form. Nevertheless, the overall goal of the MCAMLIS program has been, and will continue 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. Consistent with this cooperative spirit, the utilities holding the copyright to MCAMLIS digital data have agreed that 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 data base.

¹Excepted from this schedule is the completion to MCAMLIS digital mapping standards and format of cadastral maps for 355 U. S. Public Land Survey quarter sections lying wholly within the City of Milwaukee. The City of Milwaukee is expected to take steps to ensure that its digital cadastral maps fully meet MCAMLIS technical standards, including a topological structure. These maps, however, will have a different hardcopy format than the MCAMLIS maps and a different electronic data structure as well. Also excepted from this schedule are street address files.

The MCAMLIS Steering Committee and its Subcommittee have 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 data shall be made through the MCAMLIS Project Manager. By contract, the MCAMLIS Project Manager is an employee of the Southeastern Wisconsin Regional Planning Commission assigned by the Commission to perform this function. The MCAMLIS Project Manager may be contacted as follows:

MCAMLIS Project Manager
c/o Southeastern Wisconsin Regional Planning Commission
916 N. East Avenue
P. O. Box 1607
Waukesha, Wisconsin 53187-1607
Telephone: (414) 547-6721
Facsimile: (414) 547-1103

Distribution and Use of Hard Copy Materials

It is the policy of the MCAMLIS Steering Committee to make available all MCAMLIS products in hard copy form at the cost of reproduction and distribution. This includes records of control survey stations and control survey summary diagrams, as well as the copyrighted topographic and cadastral maps. Hard copies of any of these materials may be ordered directly from the MCAMLIS Project Manager. A cost schedule for hard copy products, intended to cover the costs of reproduction, handling, and distribution, is attached as Exhibit A. All monies received by the MCAMLIS Project Manager under this section shall be retained by the SEWRPC as reimbursement for expenses incurred.

Any party obtaining hard copies of MCAMLIS copyrighted mapped data should be aware that unauthorized reproduction of the maps for use by others and/or conversion of the maps to electronic form is expressly prohibited and would constitute a copyright violation. Any party obtaining hard copy MCAMLIS copyrighted maps may use those maps to perform any of that party's functions and may incorporate those maps in reports and other published works prepared by or for that party.

Distribution and Use of Digital Materials

The Steering Committee and the Subcommittee have 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 and the Subcommittee to make available duplicate copies of the copyrighted digital MCAMLIS maps only by full U. S. Public Land Survey quarter section 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 topographic and cadastral map files. Such requests should be directed to the MCAMLIS Project Manager.²

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 SEWRPC 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.

The MCAMLIS Project Manager is to forward to the MCAMLIS Steering Committee Chairman for action in a timely manner all requests for a license to obtain and use the digital MCAMLIS mapping files. The Chairman will review the request for consistencies with the policies set forth herein. The Chairman 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 Chairman will make findings and act to approve or disapprove the request. The MCAMLIS Project Manager will then carry out the Chairman's direction with respect to each request. The Chairman shall report all requests for licenses and his 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 and Subcommittee to make available duplicate copies of the digital copyrighted MCAMLIS mapping files only in their entirety. The Steering Committee and the Subcommittee 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 Subcommittee for their consideration and determination. The Subcommittee will make findings and act to approve or disapprove the request. If the Subcommittee approves the request, the MCAMLIS Steering Committee will then also consider the matter and approve or disapprove the request. If either the Subcommittee or Steering Committee disapprove the request, it shall be denied. All actions to approve a request shall include the terms of a license

²Any requests for MCAMLIS derived digital map files for student use must be made by appropriate school officials on behalf of the students. The school officials must first enter into a license agreement with the Steering Committee. These school officials include deans, department chairmen, or equivalent administrative officers. The requester may then receive up to four U. S. Public Land Survey quarter-section map files free of charge. Requests for more than four quarter sections shall be handled in the same manner as provided above.

agreement. The MCAMLIS Project Manager will then carry out the Subcommittee and Steering Committee's direction with respect to each request.

As a matter of general policy, it is the intent of the MCAMLIS Steering Committee and the Subcommittee to usually require any commercial entity requesting a duplicate copyrighted digital file of the MCAMLIS mapping data base to acquire that data base at a cost of \$520,000--representing the amount invested by each of the Utilities in the MCAMLIS program. Of that total, an appropriate amount based upon the reproduction cost schedule set forth in Exhibit B will be paid directly to the SEWRPC as reimbursement for expenses incurred. The remainder 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 data base for commercial purposes as defined above will be required to enter into a license agreement for the use of that data base. 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 Subcommittee and 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.

Special Arrangements with the Cities of Milwaukee and West Allis

The Steering Committee and the Subcommittee anticipate entering into special arrangements with the Cities of Milwaukee and West Allis relative to the development, sharing, and use of the digital mapping data base. It is recognized that both cities have developed digital cadastral mapping files that, in part, meet the MCAMLIS mapping standards. Recognizing the desirability of enhancing those digital data bases to fully meet MCAMLIS mapping standards, the Steering Committee intends to negotiate special agreements with the Cities of Milwaukee and West Allis whereby the digital cadastral mapping files developed by those cities are enhanced under the MCAMLIS program to fully meet the MCAMLIS mapping standards. In the case of West Allis, it is proposed that enhancement efforts will extend to the standard MCAMLIS map format and digital data file structure. It is the intention of the MCAMLIS Steering Committee to seek State grants-in-aid in support of the enhancement effort. As a part of the projects that are to be formulated to carry out the enhancement efforts, it is expected that resources will be secured so as to permit the MCAMLIS program to provide duplicate digital topographic and cadastral mapping files to the Cities of Milwaukee and West Allis at no cost to those cities in recognition of the value to the MCAMLIS program of the digital cadastral maps prepared by the cities.

MCAMLIS DATA AVAILABILITY

The following represents the availability of MCAMLIS hard copy and digital data as of January 1, 1997:

- 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.

- Hard copies of large-scale topographic base maps are available from MCAMLIS for all of the 996 quarter sections in Milwaukee County. Digital files of such topographic maps are also available for the 996 quarter sections in the County. This availability is summarized on the map attached as Exhibit D.
- Hard copies and digital files of cadastral maps are available from MCAMLIS for 367 of the 641 quarter sections in Milwaukee County scheduled to be completed under the MCAMLIS program. The remaining 355 quarter sections lie wholly within the City of Milwaukee and are to be available from the City. This availability is summarized on the map attached as Exhibit E.
- Street address data are not yet available for any part of the County.

The status of availability of hard copy and 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 as time goes on.

* * *

Exhibit A

MCAMLIS HARDCOPY MATERIALS
DISTRIBUTION COST SCHEDULE FOR ALL USERS

| Item | Geographic Unit of Coverage | Scale | Sheet Size | 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 |
| Control Survey Summary Diagram | Six Square-Miles | Not Applicable | 17" x 22" | \$ 5.00 |
| Topographic Base Map | One U.S. Public Land Survey Quarter-Section | 1" = 100' (2' Contour Interval) | 36" x 36" | \$15.00 |
| Cadastral Map | One U.S. Public Land Survey Quarter-Section | 1" = 100' | 36" x 36" | \$15.00 |

*Plus shipping costs and sales taxes where applicable.

Source: MCAMLIS Project Manager; October 17, 1995, revised July 9, 1996.

Exhibit B

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

| Digital Format ^a | Topographic Base Map for One U. S. Public Land Survey Quarter-Section | | Cadastral Map for One U. S. Public Land Survey Quarter-Section | |
|-----------------------------|---|--|--|--|
| | One Quarter-Section | Each Additional Quarter-Section ^b | One Quarter-Section | Each Additional Quarter-Section ^b |
| GenaMap | \$65 | \$30 | \$65 | \$30 |
| Intergraph DGN ^c | \$65 | \$30 | Not Available | Not Available |
| AutoCAD DXF | \$65 | \$30 | \$65 | \$30 |

^aThe three digital formats included in this table are the most frequently used in Southeastern Wisconsin. 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.

^bOrdered simultaneously with the first quarter-section.

^cTopographic map data are available in native Intergraph design file (DGN) format only for 894 of the 996 U. S. Public Land Survey quarter-sections in the MCAMLIS project area

NOTE: Digital map files can be delivered in one of the following media formats:

1. Either 4-millimeter digital audio tape (DAT) or 8-millimeter magnetic tape, files placed on tape in sequential format with Unix tape archive command;
2. Compact Disk-Read Only Memory (CD-ROM) disk, written to ISO 9660 Level II specifications, files placed on disk in sequential format; or
3. Disk Operating System (DOS) formatted 3.5" diskette, files placed on diskette in sequential format, files compressed if necessary.

Source: MCAMLIS Project Manager; January 28, 1997.

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, Ameritech, the Wisconsin Electric Power Company, and the Wisconsin Gas Company (hereinafter referred to as the "Utilities"), are the joint copyright owners 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 Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as "SEWRPC"), 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 copyrighted base mapping materials (hereinafter referred to as the "digital base maps"); and

WHEREAS, the Utilities are willing to permit the Requestor to obtain the digital base maps subject to the following conditions and understandings:

1. Subject to the limitations set forth below, the Utilities agree not to object to the Requestor using, reproducing, modifying, and/or displaying the digital base maps; preparing or distributing in nondigital form reports incorporating the base maps derived from the digital files; and distributing the base maps and reports in nondigital form to all parties concerned.
2. The Utilities agree 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 therefrom except as otherwise authorized by the Steering Committee and Sub-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 therefrom.
6. The Requestor agrees to reimburse the SEWRPC 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 UTILITIES AND THE MCAMLIS STEERING COMMITTEE 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 Utilities, the MCAMLIS Steering Committee, the SEWRPC, and any other party to the MCAMLIS program and their subcontractors from any claims arising out of the Requestor's use of the digital base maps or any information or materials derived therefrom.
8. The Requestor understands that neither the Utilities nor the SEWRPC has any obligation to supplement or update any of the digital base maps provided. Should, however, the Utilities or the SEWRPC 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 the MCAMLIS base maps, nor to state or imply that modifications made by Requestor were authorized by MCAMLIS.

AGREED TO:

Requestor: _____

By: _____

Date: _____

Utilities

By: _____

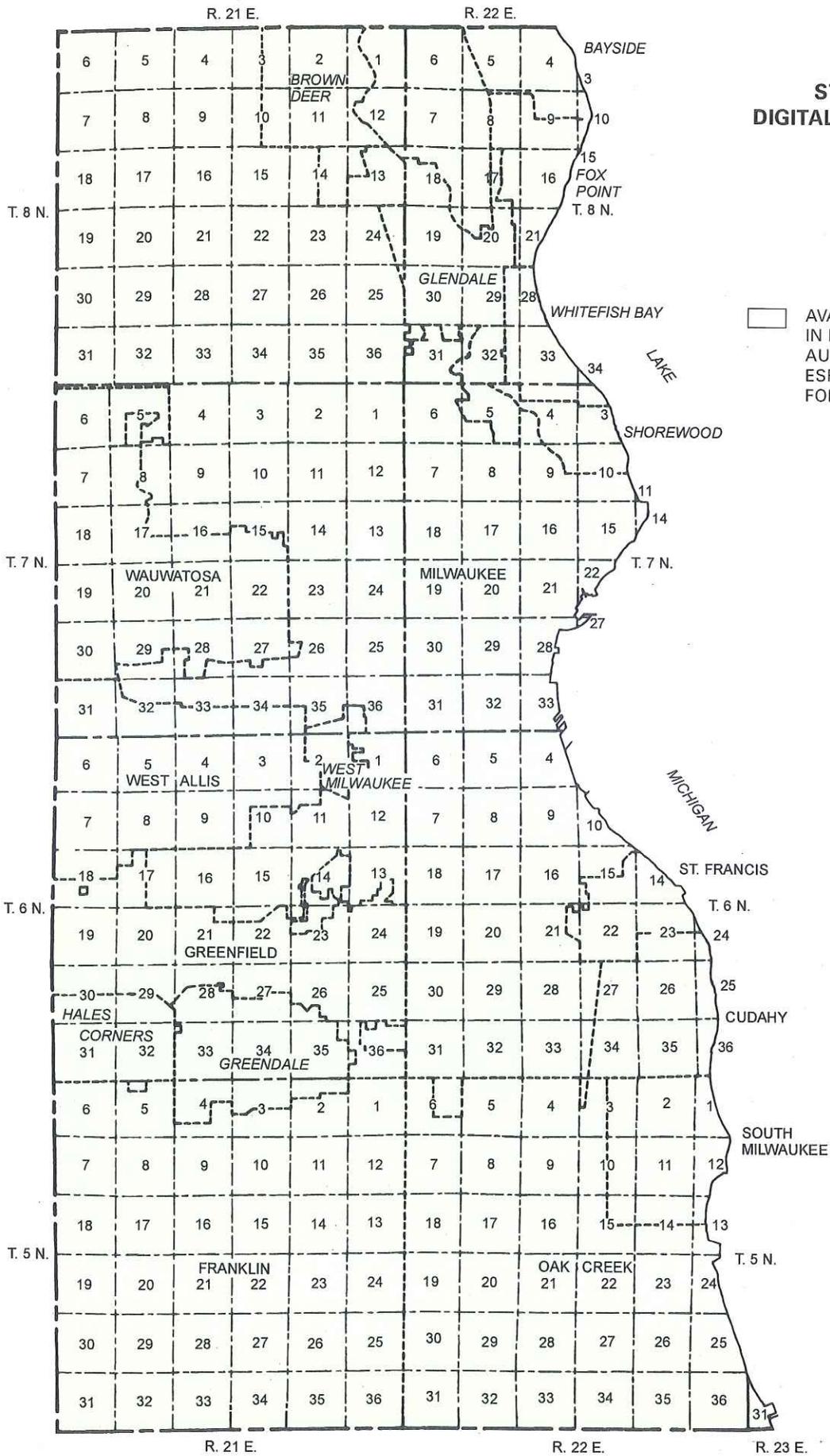
Date: _____

* * *

PCE/TDP/rj
LIS\MCAMLIS.gdl
1/30/97

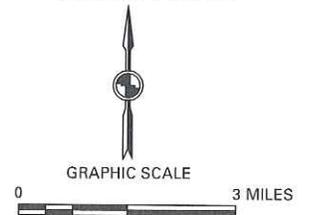
Exhibit D

STATUS OF MCAMLIS
DIGITAL TOPOGRAPHIC MAPPING



AVAILABLE FOR DISTRIBUTION
 IN MICROSTATION DGN,
 AUTOCAD 2000 DWG AND
 ESRI ARCINFO COVERAGE
 FORMATS

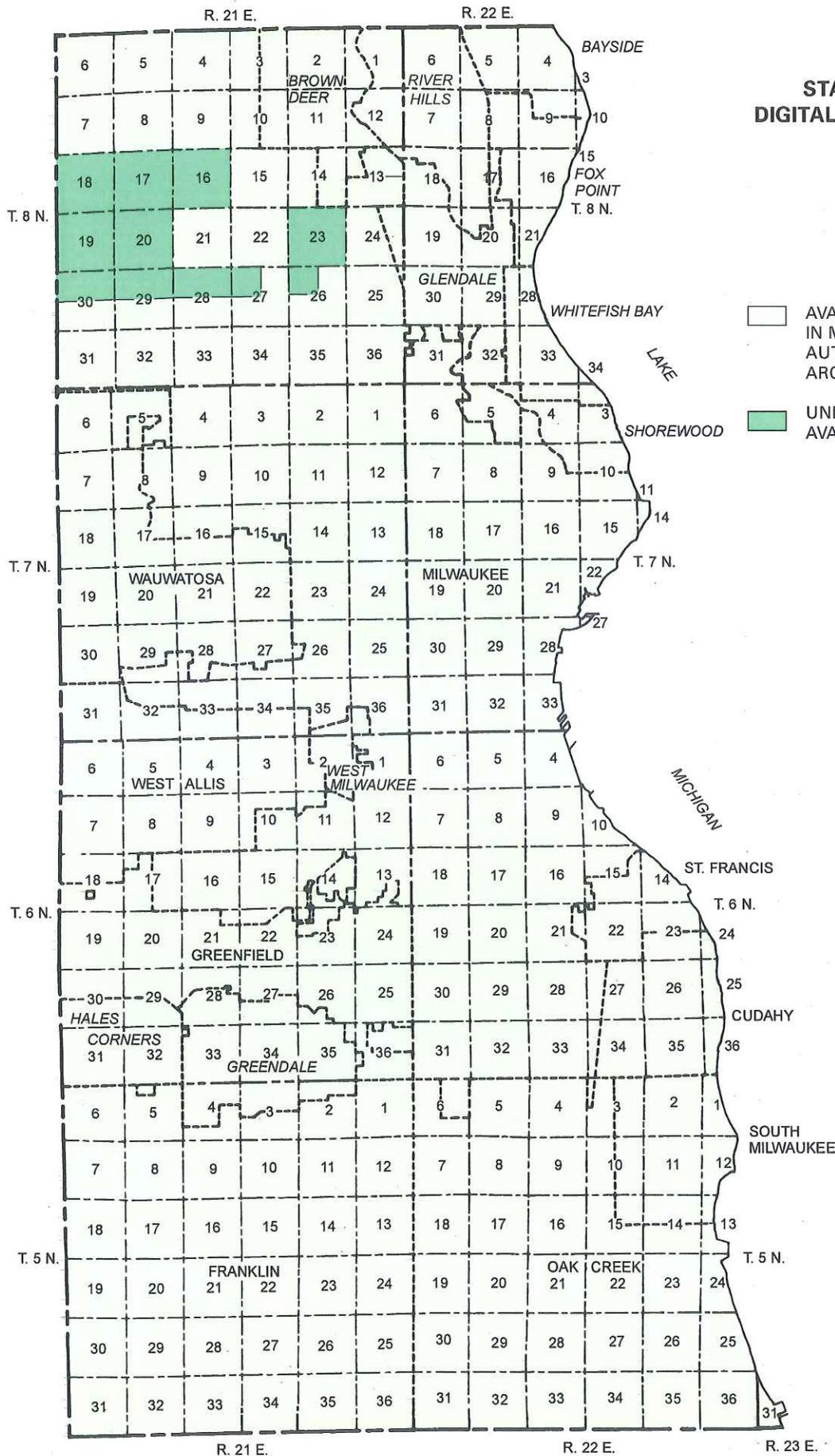
DECEMBER 31, 2002



Source: MCAMLIS Project Manager.

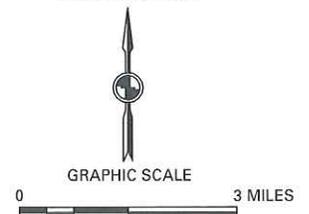
Exhibit E

**STATUS OF MCAMLIS
DIGITAL CADASTRAL MAPPING**



- AVAILABLE FOR DISTRIBUTION IN MICROSTATION DGN, AUTOCAD 2000 DWG AND ESRI ARCINFO COVERAGE FORMATS
- UNDER PREPARATION — NOT AVAILABLE FOR DISTRIBUTION

JUNE 30, 2004



Source: MCAMLIS Project Manager.

VI A.



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

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

MEMORANDUM

TO: MCAMLIS Steering Committee
FROM: Thomas D. Patterson
MCAMLIS Project Manager
DATE: July 9, 2004
SUBJECT: USE OF MCAMLIS COPYRIGHTED DIGITAL MAPPING MATERIALS ON MUNICIPAL WEBSITES

Introduction

At the November 18, 2003 MCAMLIS Steering Committee Meeting, Mr. John Bennett, City Engineer, City of Franklin and also the Intergovernmental Cooperation Council of Milwaukee County representative to the MCAMLIS Steering Committee, requested that the agenda for the following MCAMLIS Steering Committee meeting include a discussion item that would serve to identify and clarify any restrictions or conditions established by MCAMLIS Steering policies on the use of copyrighted MCAMLIS digital mapping materials on municipal websites. He noted in this regard that the City of Franklin had recently established a municipal website and that he wanted to be sure that the manner in which the City was using the MCAMLIS digital mapping materials on that website did not violate any of the policies established by the MCAMLIS Steering Committee for such use. This memorandum has been prepared by project staff in response to Mr. Bennett's request.

Background

During the early part of the MCAMLIS Program, the Steering Committee took action to copyright the MCAMLIS digital mapping materials. Ownership of the copyright was vested in a sub-committee created for the purpose of handling the copyright. Initial action taken by the Steering Committee designated the digital topographic maps and the digital real property boundary line maps as copyrighted material. Later, the Steering Committee acted to also include the MCAMLIS digital street and building address data bases as copyrighted materials.

Conditions and guidelines for the use of these copyrighted digital mapping materials were originally formulated in consultation with Mr. Carl R. Schwartz, an intellectual property attorney with the firm of Quarles and Brady, here in Milwaukee. A copy of guidelines, as adopted by the Steering Committee on October 17, 1995 and amended on March 12, 1996, July 9, 1996, and January 28, 1997, is attached hereto. Any municipal or other user of the MCAMLIS digital mapping materials must first execute a License Agreement -- Exhibit C in the Guidelines -- with the MCAMLIS Steering Committee in order to hold and use these materials. The specific conditions under which these materials may be held and used are set forth in Exhibit C.

The language of the License Agreement -- Exhibit C -- essentially states that the Licensee understands that copyrighted materials are being provided to the Licensee and that the Licensee agrees to treat the provided material in accordance with the general principles of intellectual property law as protected by the copyright. More specifically, this means that the Licensee may not redistribute the provided digital mapping materials or any extracted subset of these materials to any third party. The Licensee is also required to take specific action to insure that the digital media upon which the MCAMLIS digital mapping materials are kept are protected from access in their digital form by unauthorized users.

In the succeeding years since these guidelines were originally adopted by the Steering Committee, several informal policies have also been established, sometimes in consultation with Mr. Schwartz concerning additional permitted uses with the MCAMLIS digital mapping materials. Perhaps most prominent among these additional authorized uses is the implicit permission that has since been given to licensed users to provide access to these materials to consultants working under contract to the Licensee for work being done on behalf of the Licensee provided that the Licensee informs the consultant of the restrictions upon the use of the copyrighted MCAMLIS digital mapping materials and that the use of these materials is restricted to the Licensee's work. It is important to note perhaps in this regard, that this policy was established by consensus of the Steering Committee members over the advice of Mr. Schwartz. Additional informal policy that has become convention through practice has been to permit Licensees to exchange copyrighted MCAMLIS digital mapping materials between and among themselves.

General Guidelines for Use of Copyrighted MCAMLIS Digital Mapping Materials on Municipal Websites

In order to adhere to the intent of intellectual property law and to the specifics of the MCAMLIS License Agreement, the posting of MCAMLIS digital mapping materials on municipal websites should be carried out in such a manner that these materials are "pictures" only. The digital files that produce these pictures should not be accessible by any viewer of the picture over the Internet or over some other form of electronic communication. This stricture applies not only to the digital vector graphic files, but also to any rasterized image files created from the vector files. The manner in which this protection is provided is the responsibility of the municipality, but may be provided by such means as fire walls or password protected files. The use of the MCAMLIS digital mapping materials to create hard copy images over electronic communication lines is however, a permitted use of the MCAMLIS digital mapping materials.

TDP/lgh
#97181 v1 - MCAMLIS-Digital Mapping Materials on Website

Enclosure

MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM

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, AMERITECH, 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 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. 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.

In December 1993, 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 and digital mapped materials. Under the License Agreement, the Steering Committee has taken copyright title to all hard copy maps proposed under implementation of the adopted County plan. A Subcommittee of the Steering Committee, comprised of representatives of AMERITECH, the Wisconsin Electric Power Company, and the Wisconsin Gas Company, holds copyright title to the digital mapped materials derived from the MCAMLIS work program.

As refined in an implementation study completed in 1991, 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 hard copy and digital form at a scale of one inch equals 100 feet with two-foot contour intervals.

- The completion of companion cadastral maps to the topographic maps in hard copy and 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 nongeographic 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. The automated base maps for the entire County are expected to be completed in December 1997.¹

DATA SHARING POLICY GUIDELINES AND PROCEDURES

As noted above, the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) program was created in response to the need for the development of an automated mapping base for use by Milwaukee County, the local units of government in Milwaukee County, and the private utilities comprising the Subcommittee of the MCAMLIS Steering Committee. 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, the Wisconsin Gas Company, the Wisconsin Electric Power Company, and AMERITECH (formerly Wisconsin Bell) invested significant private capital in the MCAMLIS program.

In order to protect their investments, the private utility members of MCAMLIS have been granted the MCAMLIS copyright to the mapping base in its digital form. Nevertheless, the overall goal of the MCAMLIS program has been, and will continue 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. Consistent with this cooperative spirit, the utilities holding the copyright to MCAMLIS digital data have agreed that 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 data base.

¹Excepted from this schedule is the completion to MCAMLIS digital mapping standards and format of cadastral maps for 355 U. S. Public Land Survey quarter sections lying wholly within the City of Milwaukee. The City of Milwaukee is expected to take steps to ensure that its digital cadastral maps fully meet MCAMLIS technical standards, including a topological structure. These maps, however, will have a different hardcopy format than the MCAMLIS maps and a different electronic data structure as well. Also excepted from this schedule are street address files.

The MCAMLIS Steering Committee and its Subcommittee have 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 data shall be made through the MCAMLIS Project Manager. By contract, the MCAMLIS Project Manager is an employee of the Southeastern Wisconsin Regional Planning Commission assigned by the Commission to perform this function. The MCAMLIS Project Manager may be contacted as follows:

MCAMLIS Project Manager
c/o Southeastern Wisconsin Regional Planning Commission
916 N. East Avenue
P. O. Box 1607
Waukesha, Wisconsin 53187-1607
Telephone: (414) 547-6721
Facsimile: (414) 547-1103

Distribution and Use of Hard Copy Materials

It is the policy of the MCAMLIS Steering Committee to make available all MCAMLIS products in hard copy form at the cost of reproduction and distribution. This includes records of control survey stations and control survey summary diagrams, as well as the copyrighted topographic and cadastral maps. Hard copies of any of these materials may be ordered directly from the MCAMLIS Project Manager. A cost schedule for hard copy products, intended to cover the costs of reproduction, handling, and distribution, is attached as Exhibit A. All monies received by the MCAMLIS Project Manager under this section shall be retained by the SEWRPC as reimbursement for expenses incurred.

Any party obtaining hard copies of MCAMLIS copyrighted mapped data should be aware that unauthorized reproduction of the maps for use by others and/or conversion of the maps to electronic form is expressly prohibited and would constitute a copyright violation. Any party obtaining hard copy MCAMLIS copyrighted maps may use those maps to perform any of that party's functions and may incorporate those maps in reports and other published works prepared by or for that party.

Distribution and Use of Digital Materials

The Steering Committee and the Subcommittee have 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 and the Subcommittee to make available duplicate copies of the copyrighted digital MCAMLIS maps only by full U. S. Public Land Survey quarter section 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 topographic and cadastral map files. Such requests should be directed to the MCAMLIS Project Manager.²

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 SEWRPC 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.

The MCAMLIS Project Manager is to forward to the MCAMLIS Steering Committee Chairman for action in a timely manner all requests for a license to obtain and use the digital MCAMLIS mapping files. The Chairman will review the request for consistencies with the policies set forth herein. The Chairman 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 Chairman will make findings and act to approve or disapprove the request. The MCAMLIS Project Manager will then carry out the Chairman's direction with respect to each request. The Chairman shall report all requests for licenses and his 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 and Subcommittee to make available duplicate copies of the digital copyrighted MCAMLIS mapping files only in their entirety. The Steering Committee and the Subcommittee 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 Subcommittee for their consideration and determination. The Subcommittee will make findings and act to approve or disapprove the request. If the Subcommittee approves the request, the MCAMLIS Steering Committee will then also consider the matter and approve or disapprove the request. If either the Subcommittee or Steering Committee disapprove the request, it shall be denied. All actions to approve a request shall include the terms of a license

²Any requests for MCAMLIS derived digital map files for student use must be made by appropriate school officials on behalf of the students. The school officials must first enter into a license agreement with the Steering Committee. These school officials include deans, department chairmen, or equivalent administrative officers. The requester may then receive up to four U. S. Public Land Survey quarter-section map files free of charge. Requests for more than four quarter sections shall be handled in the same manner as provided above.

agreement. The MCAMLIS Project Manager will then carry out the Subcommittee and Steering Committee's direction with respect to each request.

As a matter of general policy, it is the intent of the MCAMLIS Steering Committee and the Subcommittee to usually require any commercial entity requesting a duplicate copyrighted digital file of the MCAMLIS mapping data base to acquire that data base at a cost of \$520,000--representing the amount invested by each of the Utilities in the MCAMLIS program. Of that total, an appropriate amount based upon the reproduction cost schedule set forth in Exhibit B will be paid directly to the SEWRPC as reimbursement for expenses incurred. The remainder 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 data base for commercial purposes as defined above will be required to enter into a license agreement for the use of that data base. 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 Subcommittee and 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.

Special Arrangements with the Cities of Milwaukee and West Allis

The Steering Committee and the Subcommittee anticipate entering into special arrangements with the Cities of Milwaukee and West Allis relative to the development, sharing, and use of the digital mapping data base. It is recognized that both cities have developed digital cadastral mapping files that, in part, meet the MCAMLIS mapping standards. Recognizing the desirability of enhancing those digital data bases to fully meet MCAMLIS mapping standards, the Steering Committee intends to negotiate special agreements with the Cities of Milwaukee and West Allis whereby the digital cadastral mapping files developed by those cities are enhanced under the MCAMLIS program to fully meet the MCAMLIS mapping standards. In the case of West Allis, it is proposed that enhancement efforts will extend to the standard MCAMLIS map format and digital data file structure. It is the intention of the MCAMLIS Steering Committee to seek State grants-in-aid in support of the enhancement effort. As a part of the projects that are to be formulated to carry out the enhancement efforts, it is expected that resources will be secured so as to permit the MCAMLIS program to provide duplicate digital topographic and cadastral mapping files to the Cities of Milwaukee and West Allis at no cost to those cities in recognition of the value to the MCAMLIS program of the digital cadastral maps prepared by the cities.

MCAMLIS DATA AVAILABILITY

The following represents the availability of MCAMLIS hard copy and digital data as of January 1, 1997:

- 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.

- Hard copies of large-scale topographic base maps are available from MCAMLIS for all of the 996 quarter sections in Milwaukee County. Digital files of such topographic maps are also available for the 996 quarter sections in the County. This availability is summarized on the map attached as Exhibit D.
- Hard copies and digital files of cadastral maps are available from MCAMLIS for 367 of the 641 quarter sections in Milwaukee County scheduled to be completed under the MCAMLIS program. The remaining 355 quarter sections lie wholly within the City of Milwaukee and are to be available from the City. This availability is summarized on the map attached as Exhibit E.
- Street address data are not yet available for any part of the County.

The status of availability of hard copy and 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 as time goes on.

* * *

Exhibit A

MCAMLIS HARDCOPY MATERIALS
DISTRIBUTION COST SCHEDULE FOR ALL USERS

| Item | Geographic Unit of Coverage | Scale | Sheet Size | 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 |
| Control Survey Summary Diagram | Six Square-Miles | Not Applicable | 17" x 22" | \$ 5.00 |
| Topographic Base Map | One U.S. Public Land Survey Quarter-Section | 1" = 100' (2' Contour Interval) | 36" x 36" | \$15.00 |
| Cadastral Map | One U.S. Public Land Survey Quarter-Section | 1" = 100' | 36" x 36" | \$15.00 |

*Plus shipping costs and sales taxes where applicable.

Source: MCAMLIS Project Manager; October 17, 1995, revised July 9, 1996.

Exhibit B

MCAMLIS DIGITAL MATERIALS DISTRIBUTION
COST SCHEDULE FOR NON-COMMERCIAL USERS

| Digital Format ^a | Topographic Base Map for One U. S. Public Land Survey Quarter-Section | | Cadastral Map for One U. S. Public Land Survey Quarter-Section | |
|-----------------------------|---|--|--|--|
| | One Quarter-Section | Each Additional Quarter-Section ^b | One Quarter-Section | Each Additional Quarter-Section ^b |
| GenaMap | \$65 | \$30 | \$65 | \$30 |
| Intergraph DGN ^c | \$65 | \$30 | Not Available | Not Available |
| AutoCAD DXF | \$65 | \$30 | \$65 | \$30 |

^aThe three digital formats included in this table are the most frequently used in Southeastern Wisconsin. 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.

^bOrdered simultaneously with the first quarter-section.

^cTopographic map data are available in native Intergraph design file (DGN) format only for 894 of the 996 U. S. Public Land Survey quarter-sections in the MCAMLIS project area

NOTE: Digital map files can be delivered in one of the following media formats:

1. Either 4-millimeter digital audio tape (DAT) or 8-millimeter magnetic tape, files placed on tape in sequential format with Unix tape archive command;
2. Compact Disk-Read Only Memory (CD-ROM) disk, written to ISO 9660 Level II specifications, files placed on disk in sequential format; or
3. Disk Operating System (DOS) formatted 3.5" diskette, files placed on diskette in sequential format, files compressed if necessary.

Source: MCAMLIS Project Manager; January 28, 1997.

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, Ameritech, the Wisconsin Electric Power Company, and the Wisconsin Gas Company (hereinafter referred to as the "Utilities"), are the joint copyright owners 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 Southeastern Wisconsin Regional Planning Commission (hereinafter referred to as "SEWRPC"), 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 copyrighted base mapping materials (hereinafter referred to as the "digital base maps"); and

WHEREAS, the Utilities are willing to permit the Requestor to obtain the digital base maps subject to the following conditions and understandings:

1. Subject to the limitations set forth below, the Utilities agree not to object to the Requestor using, reproducing, modifying, and/or displaying the digital base maps; preparing or distributing in nondigital form reports incorporating the base maps derived from the digital files; and distributing the base maps and reports in nondigital form to all parties concerned.
2. The Utilities agree 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 therefrom except as otherwise authorized by the Steering Committee and Sub-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 therefrom.
6. The Requestor agrees to reimburse the SEWRPC 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 UTILITIES AND THE MCAMLIS STEERING COMMITTEE 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 Utilities, the MCAMLIS Steering Committee, the SEWRPC, and any other party to the MCAMLIS program and their subcontractors from any claims arising out of the Requestor's use of the digital base maps or any information or materials derived therefrom.
8. The Requestor understands that neither the Utilities nor the SEWRPC has any obligation to supplement or update any of the digital base maps provided. Should, however, the Utilities or the SEWRPC 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 the MCAMLIS base maps, nor to state or imply that modifications made by Requestor were authorized by MCAMLIS.

AGREED TO:

Requestor: _____

By: _____

Date: _____

Utilities

By: _____

Date: _____

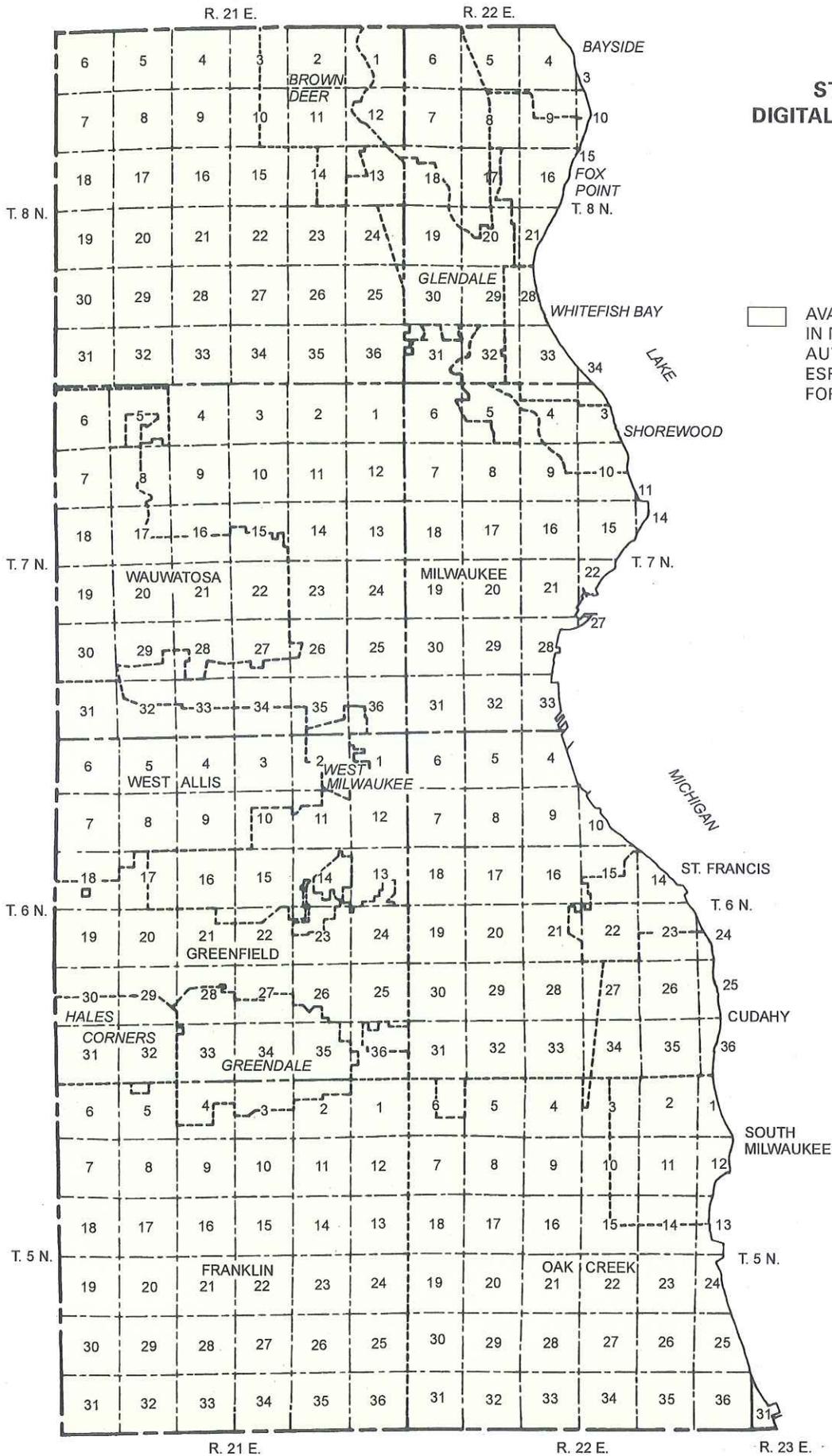
* * *

PGE/TDP/rj
LIS\MCAMLIS.gdl
1/30/97

Exhibit D

STATUS OF MCAMLIS
DIGITAL TOPOGRAPHIC MAPPING

 AVAILABLE FOR DISTRIBUTION
IN MICROSTATION DGN,
AUTOCAD 2000 DWG AND
ESRI ARCINFO COVERAGE
FORMATS



Source: MCAMLIS Project Manager.

DECEMBER 31, 2002

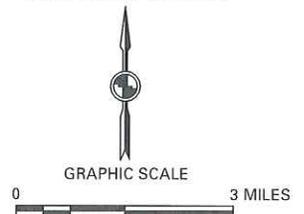
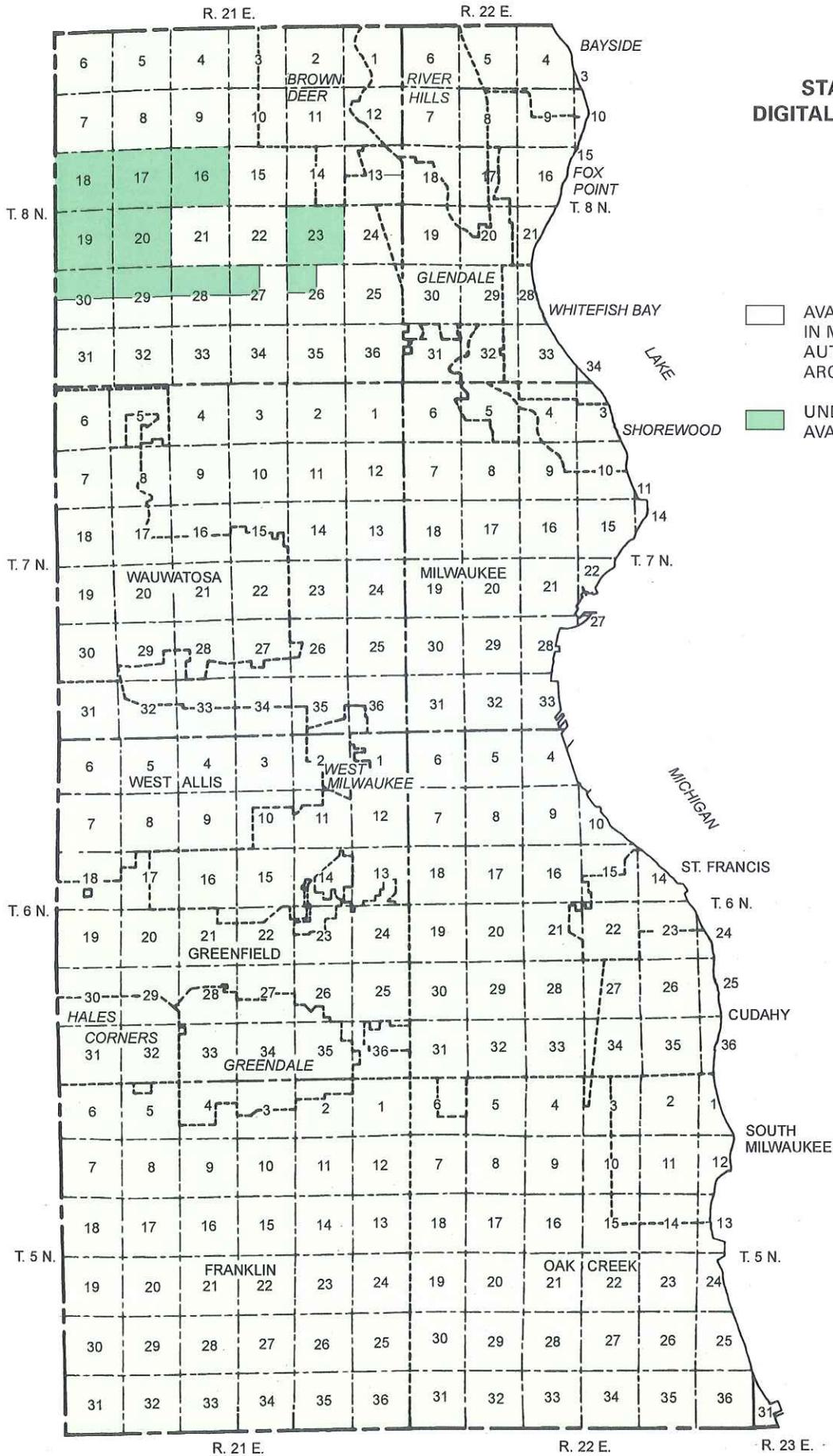


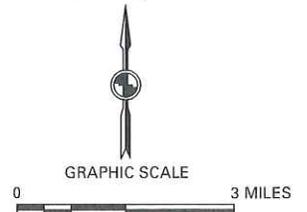
Exhibit E

**STATUS OF MCAMLIS
DIGITAL CADASTRAL MAPPING**



- AVAILABLE FOR DISTRIBUTION IN MICROSTATION DGN, AUTOCAD 2000 DWG AND ESRI ARCINFO COVERAGE FORMATS
- UNDER PREPARATION — NOT AVAILABLE FOR DISTRIBUTION

JUNE 30, 2004



Source: MCAMLIS Project Manager.

VI
B.

**COUNTY OF MILWAUKEE
Inter-Office Communication**

Date: February 24, 2004

To: John La Fave, Milwaukee County Register of Deeds

From: Jerome J. Heer, Director of Audits

Subject: Register of Deeds, Tax Listing Services Division

At your request, we have performed a limited review of the Tax Listing Services Division within your office.

Background

As specified in ss. 59.43, Wisconsin State Statutes, the Register of Deeds (RoD) is responsible for the recording, indexing and maintenance of public records related to real estate, individuals, and a number of miscellaneous items within Milwaukee County. The public records fall into one of the three main categories of real estate, vital statistics, and other. Fees for these activities are also enumerated within the Wisconsin Statutes. In most cases, the county and state share in the fees collected.

The Tax Listing Services Division (Tax Listing) reviews real estate property descriptions, assigns new tax key numbers due to real estate boundary changes, maintains plat books and property records, assists in the preparation of petitions for foreclosure action and provides copies of real estate document recordings to local assessors at \$1.20 per document. Additionally, because of its broad understanding of real estate document processing, Tax Listing staff may be called upon to assist with backlogs that develop in other areas within the RoD Office.

The 2004 Adopted Budget for the division is \$503,972 with a property tax levy requirement estimated at \$356,721. The division is staffed with five positions, one of which is currently vacant, and another position, which is funded by, and dedicated to, the Milwaukee County Automated Mapping Land and Information System (MCAMLIS).

Observations and Analysis

During our review we noted a number of opportunities for increased efficiency and savings in Tax Listing, as well as other areas within the Register of Deeds Office. These include the incorporation of updated technology, elimination of redundant tasks and pursuing other steps to streamline operations. However, we also noted instances in which the RoD faces significant, deeply entrenched obstacles to achievement of greater overall efficiency. These concepts are addressed throughout the remainder of this memo.

Dependency on Multiple Information Systems

The primary factor contributing to a general lack of efficiency in Tax Listing operations is the RoD Office's dependence on three separate, but in many respects redundant, information systems. Each of the three systems, identified as the A-Card, TL01 and DocuTrak systems, are used for the same general purpose: to obtain certain parcel characteristics, either through

referencing the location of an electronic or manual record, or by directly accessing the electronic record needed.

Although the three systems are used for the same general purpose, each system either covers a particular timeframe or contains an informational element not found in the other systems. For instance, the A-Card system, which consists entirely of manually prepared records, has been in place since the origin of Milwaukee County real estate recording and is used for documents recorded up to 1993. On the other hand, the TL01 system, implemented in 1993, contains information about documents recorded from 1993 through approximately 1999 and has property street addresses, but not digital copies of recorded documents. The DocuTrak system, implemented in 2000, contains information from 1988 to the present and has digital copies of recorded documents, but no street addresses.

(JLF – Docutrak does have *some* street addresses which are obtained from transfer return forms which accompany documents that convey a property.)

This patchwork of three separate information systems is an obvious source of inefficiency for the Tax Listing function, as well as for other users of RoD data, such as the general public and title companies that perform property research. However, fully integrating the large volume of information into a single database may be cost prohibitive.

According to RoD staff, the strategy used when implementing the TL01 system in 1993 was to continue use of the A-Card system for prior recordings to avoid manual input of the massive volume of historical data contained on the A-Cards. The A-Card system continues to be used regularly by title companies, the Tax Listing Services Division and by other RoD staff.

The obvious drawback of the antiquated A-Card system is the inefficiency of workers having to leave their workstations to physically locate and review A-Cards. Beyond these inefficiencies, maintaining the approximately 115,000 A-Cards in hardcopy format makes them susceptible to loss or destruction.

Based on discussion with the Register of Deeds, the office is at a crossroads due to the pending retirement of a key staff member and the potential obsolescence of the current version of its real estate indexing and document image software system (DocuTrak). RoD has plans to upgrade DocuTrak in coming months. Given the poor linkage between the three information systems currently maintained by the RoD, and the offer of a free upgrade to the DocuTrak system that will provide opportunities for enhanced capabilities and efficiencies with little or no capital investment, we believe the Register of Deeds should proceed with its planned upgrade of that system, but focus on better integration of the data contained in its three separate information systems as the upgrade proceeds.

(JLF – RoD will be upgrading from Fidler Software's Docutrak to Fidler Software's iDocumentXF within the next few months. This is not a free upgrade. A final commitment and payment schedule by the Register of Deeds to Fidler will be made in December, 2004.)

One alternative the RoD could consider is the manual input of A-Card data into a computerized format. This would require a significant manual data entry effort with the estimated number of A-Card entries approaching 500,000 (assuming four entries per card). One rough estimate from a

local data entry vendor places the cost of this effort at about \$300,000. Because title companies are heavy users of the A-Card system, they may represent a potential source of funding for any conversion that would increase the efficiency of data access. Management would also have to determine the best method of accessibility. For instance, would the data be merged into the DocuTrak system and accessed using standard system features?

(JLF – It is very wishful thinking to think that title companies would help fund conversion of A-cards.)

(JLF - If the data was entered into the system it would become part of the new iDocument database.)

Another alternative for addressing the A-Card system problem is to scan these records into either microfilm or digital images. This would allow for viewing of these records at multiple workstations and provide sufficient backup against loss or destruction. However, since the information would be stored as document images, the benefits that result from computerization of the data would not be realized.

(JLF – RoD will explore the idea of scanning the A-cards.)

To provide a more efficient means to research historical documents and avoid the risk of loss of hardcopy documents, we recommend that RoD management:

1. *Consider alternatives described above for converting A-Card data into an electronic digital image or microfilm format, including the possibility of obtaining partial funding for the conversion from title companies that use the A-Cards.*

The RoD Office's underlying strategy for implementation of the DocuTrak system in 2000 differed from the 'add-on' philosophy used in the TL01 system implementation seven years earlier. It was intended that the DocuTrak installation, with complete data conversion, would result in the elimination of the TL01 system. However, due to formatting and other data conversion problems, property addresses were not brought into DocuTrak and a portion of certain data elements were corrupted in the transfer. As a result, in many instances, users of recorded real estate documents must access both computer systems, and in some instances the A-Cards as well. Consequently, the TL01 system, while not updated with information since the conversion, continues to be utilized primarily for its address cross-referencing capabilities and as a source of information used to correct corrupted data when it is encountered in DocuTrak.

There is universal recognition of the inefficiencies and redundancy associated with the information systems maintained by the RoD. Following are alternatives to begin addressing this structural problem:

- Import or link the property addresses from the TL01 system, or from other sources, into DocuTrak. The DocuTrak software upgrade may facilitate this effort.
- Employ utility data comparison software to identify and correct instances of data corruption in DocuTrak. Again, improvements brought about by the DocuTrak software upgrade may facilitate this undertaking.

(JLF – the County’s tech department recommends that the best solution is to manually enter the data from the outdated TLO1 into our Docutrak system. They believe pursuing a software conversion solution would be impractical, difficult and costly.)

To achieve greater operating efficiency, provide better service to the public, and enable the RoD Office to utilize enhanced technology related to recorded property information through the elimination of the TL01 system, we recommend that RoD management:

1. *Explore the options provided above as a means to transfer property address information into DocuTrak and proactively correct the corrupted data contained in that system.*

Computer System Upgrade

Boxes of original real estate documents are passed amongst work units within RoD for processing, involving various reviews, proofreading and recording functions. At the completion of processing, most documents are returned to the appropriate parties. In addition to the inefficiency of this process, the risk of document loss or damage is increased with multiple handling of the original papers. It currently takes about two months to complete document processing.

One responsibility of Tax Listing staff is to verify the accuracy of certain information contained on real estate documents. This includes the property’s legal description, the grantor name, and parcel number. The information is reviewed to ensure consistency with existing information maintained by the RoD Office. This procedure is a time consuming, tedious task that requires the pulling of documents from a daily batch and their subsequent reinsertion into the batch in proper order. Similarly, other RoD staff verify the accuracy of document data by comparing a data entry report to the original document.

Similarly, other RoD staff verify the accuracy of document data by comparing a data entry report to the original document.

A primary benefit of the planned DocuTrak system upgrade is the ability to display a split-screen on a computer terminal to view a digitized copy of a scanned document, as well as a system screen, simultaneously. This new capability should enable the streamlining of Tax Listing document reviews, document data entry verification, and document processing performed in other areas within the Register of Deeds Office.

Other opportunities for efficiency may become apparent as the DocuTrak upgrade is fully implemented. For example, office productivity could be enhanced if individuals performing data entry verification were allowed to input corrections directly into DocuTrak. This would eliminate delays associated with sending corrections back to the original data entry clerk for re-entry.

To achieve greater operating efficiency, reduce the risk of document loss, and provide better service to the public through faster document turnaround, we recommend that RoD management:

2. *Follow-through on its plans to upgrade the DocuTrak system and evaluate additional opportunities for efficiencies that may result from the resulting system enhancements.*

3. *Identify other tasks that can be performed more efficiently with electronic images.*
4. *Modify procedures that will support the elimination of the physical movement of documents in the RoD Office, including allowing individuals that perform data entry verification to input corrections directly into DocuTrak.*

Redundant Mapping Activities

Presently, two separate mapping functions are performed within the Tax Listing Services Division. The first is a manual function by which hardcopy maps are hand-drawn and maintained. The second involves electronic mapping with use of the County's Geographical Information System

(GIS), maintained by the Department of Parks and Public Infrastructure. The two mapping operations are independent of one another and each is staffed with one position. Milwaukee County has recently hired a consultant to advance Countywide utilization of the GIS. The RoD mapping functions are identified as a primary objective of this consulting engagement.

The manual mapping function includes all real estate parcels within the County except for those in the City of Milwaukee. As the official County maps of record, the County would incur a significant loss if these manual maps were destroyed or severely damaged. Furthermore, the drafting technician who has performed this function over the past several years has recently announced his plans to retire in mid-2004. However, because manual mapping has been widely replaced with the use of computer software, there are relatively few individuals with the skills necessary to do manual mapping. In addition to mapping, the drafting technician does limited technical review of preliminary maps for real estate combinations, subdivisions, certified survey maps and condominium plats.

Electronic mapping is a widely accepted technology for maintaining land records. The electronic mapping function performed within the RoD Office utilizes a multipurpose database system operated in conjunction with the Milwaukee County Automated Mapping and Land Information System (MCAMLIS). The system contains considerably more information and has far more utility than the manual mapping function. Although the County's electronic mapping function maintains digital maps of substantially all parcels within Milwaukee County, and uses RoD data to update the maps, the system is used solely for purposes outside of the Register of Deeds functions.

While the manual and electronic mapping functions operate independently, there is significant redundancy between them. Both functions utilize the same RoD source information to update its maps and the electronically maintained maps contain the same informational elements as the manual maps. Consequently, this redundancy, and possibly one funded position, could be eliminated if manual mapping was discontinued in favor of electronic mapping. In addition, discontinuance of manual mapping would eliminate the need to find an individual with the outdated manual skills needed as a replacement for the impending retirement of the drafting technician. In addition to these benefits, electronic mapping offers maps with greater capabilities and flexibility in many areas. For instance, changes to scale, reproduction, and internet accessibility are all made easier. Furthermore, electronic maps possess a higher degree of accuracy due to controls built into the software. Electronic mapping would also require

significantly less storage space and provide effective protection from loss. In moving to electronic mapping, however, several issues must first be addressed. These include:

- The County's right to charge a fee for the digital information must be established. The digital information appears to have been copyrighted by utilities that provided initial funding for the MCAMLIS project. Currently, fees for hard copies of digitized maps are paid to MCAMLIS. However, the electronic mapping information has in many cases been updated with the support of public funds. A determination should be made as to whether the data comes under open records laws, whether the County could charge a fee for provision of, or access to, the mapping information, the appropriate fees to charge, etc.

(JLF – The auditors may not have a full understanding of the situation with MCAMLIS.)

- Standards/specifications of electronic maps used for Register of Deeds purposes would need to be determined. The consultant engaged by DPPI may be of great assistance in this area.
- Reviews of preliminary plat changes currently performed by the RoD drafting technician may duplicate work performed by others, such as municipal zoning officials and certified architects. The Register of Deeds should explore the possibility of eliminating these reviews. A final review for delinquent taxes might need to be assigned to another individual in the RoD Office.

(JLF – Tax Listing states that municipal officials and others rely on David Howard for the plat reviews. Tax Listing does not review delinquent taxes. Tax Listing answers ownership and boundary questions from the County Treasurer.)

To achieve savings through the elimination of redundant activities and realize the benefits associated with existing County mapping technology, we recommend that RoD Management:

5. *Work with Corporation Counsel and the Department of Parks and Public Infrastructure to address the issues noted above and advance towards a transition to the sole use of electronic parcel mapping.*

(JLF – Tax Listing's draftsman David Howard will be retiring in a few months. RoD would welcome MCAMLIS's assistance to have Tax Listing's mapping move from paper to digital mapping. One idea would be for RoD to fill David Howard's position with a digital mapping technician who would serve as an assistant to Kathleen Bach. Kathleen along with help from the assistant would then accomplish the assigned MCAMLIS projects plus perform duties that David Howard currently performs. Food for thought...)

If the RoD Office successfully transitions to an electronic mapping environment, additional procedural changes will be desirable. For instance, further efficiencies could be gained by requiring that requests for recording large-scale transactions involving the altering of parcel boundaries be submitted to the RoD Office in electronic format.

(JLF – RoD cannot require documents be submitted in electronic format. State law would have to be changed for this to happen.)

One of the other tasks performed within the Tax Listing function is the provision of reduced size photocopies of certain documents to the non-city of Milwaukee municipalities within Milwaukee County. Because the municipalities have different photocopying needs, RoD staff must sort the various documents according to those specific needs. Some documents are multi-paged with the municipality requesting only certain pages. A fee of \$1.20 per document (set in 1988) is charged for each document photocopied. This activity generates about \$15,000 of revenue for the RoD annually. If it is assumed that it takes just five minutes per document to sort, obtain, copy and re-file the documents in question, we estimate the RoD's cost of providing this service totals about \$33,000, or more than twice the amount of revenue at the current fee of \$1.20 per document. To improve the process related to the provision of reduced size copies of documents to municipalities, we recommend that RoD management:

6. *Determine if the required documents can be extracted from the digital data sold to commercial entities and inform the municipalities that digital copies will be provided at a fee to cover the cost of preparing the copies. If this information cannot be extracted from digital data, the copying fee to municipalities should be adjusted to more accurately reflect the cost of providing the service.*

Transfer of City of Milwaukee Functions

As described earlier, the Milwaukee County RoD Office performs Tax Listing functions, as well as other services, for all municipalities within the County, with the sole exception of the City of Milwaukee. The City performs similar functions for all real estate parcels within its boundaries.

A City of Milwaukee official has indicated possible interest in transferring these similar functions to the Milwaukee County Register of Deeds. In theory, a consolidation of like services would result in savings that could be shared between the City and County.

However, as noted throughout this memo, the County Register of Deeds Office needs to make significant strides, particularly in its Tax Listing area, to increase operational efficiency, upgrade and rectify issues associated with its information systems, and ultimately improve its service to the public. Further, assumption of like duties from the City of Milwaukee would require integration of data from yet another separate information system. With the limited resources available at this time, and until the issues identified in this memo are addressed, we believe it would be premature for the County Register of Deeds Office to consider the transfer of any City of Milwaukee functions.

We wish to thank you and your staff for the cooperation provided during this review.

Jerome J. Heer
Director of Audits

JJH/cah

cc: Milwaukee County Board of Supervisors
Scott Walker, County Executive
Terrance Cooley, Chief of Staff, County Board Staff
Steven Cady, Fiscal and Budget Analyst, County Board Staff
Lauri Henning, Chief Committee Clerk, County Board Staff

VI c.

AMENDMENT NO. 2

MILWAUKEE COUNTY

UPDATE TO LAND RECORDS MODERNIZATION PLAN: 1999

DRAFT

**Adopted by the Milwaukee County Automated Mapping and
Land Information System (MCAMLIS) Steering Committee
July 20, 2004**

I. UPDATED LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

A. Goals and Objectives

Goal No. 13 is currently set forth in the July 15, 2003, Amendment to the Milwaukee County 1999 Update to its Land Records Modernization Plan, as follows:

- “13. Identify, initiate, and complete projects that will utilize the \$1.00 of each \$5.00 of the fees retained locally to develop and maintain a computerized indexing of the County land information records related to housing in a manner that would allow for greater public access.”

Goal No. 13 is hereby expanded to read as follows:

13. Identify, initiate, and complete projects that will utilize the \$1.00 of each \$5.00 of the fees retained locally to develop and maintain a computerized indexing of the County land information records related to housing in a manner that would allow for greater public access.

More specifically the \$1 fee will be segregated and designated as a “technology fund” for ongoing modernization efforts and technology improvements to the Milwaukee County Register of Deeds Office. The chosen projects will be expected to provide faster access to, and improved delivery of, data, images, and services both within the Office and to the public over electronic communication media such as the Internet.

II. UPDATED LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

C. New Initiatives

New initiative No. 13 is currently set forth in the July 15, 2003, Amendment to the Milwaukee County 1999 Update to its Land Records Modernization Plan, as follows:

- “13. Identify, initiate, and complete projects that will utilize the \$1.00 of each \$5.00 of the fees retained locally to develop and maintain a computerized indexing of the County land information records related to housing in a manner that would allow for greater public access.

The Milwaukee County Land Information Officer, who is also the Milwaukee County Register of Deeds, will be asked to develop a list of projects in keeping with the spirit and requirements of s.66.1001(2)(b) of the *Wisconsin Statutes* for the development and maintenance of a computerized indexing of the County’s land information records relating to housing in a manner that would allow for greater public access. Such projects may include the acquisition of specialized computer hardware to accomplish the digital conversion of oversized maps and records and the modernization of both the hardware and software currently utilized by the Register of Deeds Office to carry out the optical imaging of land records related documents. Additional projects, such as the automation of tax lien records and the recording of mortgage satisfactions and similar types of documents that would serve to automate existing hardcopy County records related to housing identified under the “Guidelines

for the Use of the Additional \$1.00 Retained by the County” as promulgated by the Office of Land Information Services, Wisconsin Department of Administration, may also be undertaken as determined to be appropriate and useful.”

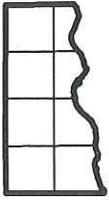
New Initiatives No. 13 is hereby modified and expanded to read as follows:

13. Identify, initiate, and complete projects that will utilize the \$1.00 of each \$5.00 of the fees retained locally to develop and maintain a computerized indexing of the County land information records related to housing in a manner that would allow for greater public access.

The Milwaukee County Land Information Officer, who is also the Milwaukee County Register of Deeds, has developed, and will continue to update and expand a list of projects in keeping with the spirit and requirements of s.66.1001(2)(b) of the *Wisconsin Statutes* for the development and maintenance of a computerized indexing of the County's land information records relating to housing in a manner that would allow for greater public access. Such projects may include the acquisition of specialized computer hardware to accomplish the digital conversion of oversized maps and records and the modernization of both the hardware and software currently utilized by the Register of Deeds Office to carry out the optical imaging of land records related documents. Additional projects, such as the automation of tax lien records and the recording of mortgage satisfactions and similar types of documents that would serve to automate existing hardcopy County records related to housing identified under the "Guidelines for the Use of the Additional \$1.00 Retained by the County" as promulgated by the Office of Land Information Services, Wisconsin Department of Administration, may also be undertaken as determined to be appropriate and useful.

Additional efforts will be undertaken to streamline the flow of materials through the Register of Deeds Office including both efforts to achieve faster throughput of material and through "redesign" of processes to provide for better integration of material handling and information handling tasks. Efforts will also be directed toward investigating intergovernmental cooperation initiatives as a factor in providing better overall service to the taxpayers and citizens and to the private companies that depend upon access to the records under the responsible jurisdiction of the Register of Deeds.

* * * * *



MILWAUKEE COUNTY
AUTOMATED MAPPING AND
LAND INFORMATION SYSTEM

c/o Southeastern Wisconsin
Regional Planning Commission
W239 N1812 Rockwood Drive
PO Box 1607
Waukesha, Wisconsin 53187-1607

*Goyle,
Here is the
memo that came
to Tom Isom
3/22*

MEMORANDUM

TO: MCAMLIS Steering Committee Members and Interested Parties

FROM: Thomas D. Patterson, MCAMLIS Project Manager

DATE: March 19, 2004

SUBJECT: **RESCHEDULING OF MCAMLIS STEERING COMMITTEE MEETING**

The MCAMLIS Steering Committee meeting originally scheduled for March 30, 2004, is being postponed until a date in the latter part of April 2004. As soon as a new date has been established, you will be notified. Approximately two weeks prior to the rescheduled meeting date, you will receive an agenda and materials for the meeting.

Should you have any questions on this matter, please do not hesitate to contact me at 262-547-6721.

* * *

TDP/lw
#92687 v1 - MCAMLIS MTG CHANGE

RECEIVED
MAR 22 2004
Milwaukee County
Dept. of Public Works