

NCGIA Annual GIS Bibliography for 1992

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Chapter One

Introduction

The primary intent of this document and accompanying database is to provide electronic access to articles contained in GIS proceedings and book compendiums. At present, searching for such articles is typically done manually. If users find this document worthwhile, new editions are likely to be provided on a yearly basis.

1.1 Electronic Access to GIS Articles in Journals

Finding GIS articles in journals through electronic searches is now relatively straight-forward in most university libraries in the United States. Private database vendors such as *STN*, *Dialog*, *BRS* and *Wilsonline* offer online access and searching capabilities (for a fee) to hundreds of bibliographic databases incorporating thousands of journal titles. Similarly, consortiums of universities and research groups have pooled their resources to offer bibliographic searching capabilities to their members. Examples of such databases include *CARL uncover* (Colorado Alliance of Research Libraries) which any university may subscribe to and *MELVYL* (University of California System) which is available only to consortium members.

Chapter Two lists journal titles which may be of interest to GIS researchers. Databases through which the journals may be accessed and searched are indicated. If you need help in using the databases, consult your university reference librarian for a quick lesson.

1.2 Electronic Access to GIS Articles in Conference Proceedings

Proceedings articles are the "gray literature" of most academic disciplines. Although the quality of proceedings articles is seldom controlled, proceedings articles form an important literature base. Conferences provide opportunities to present and explore new ideas, unproven concepts, and practical experiences. This type of material is often unacceptable for inclusion in refereed journal articles. Conferences also allow investigators to report research progress and preliminary findings in order to receive feedback from peers as their work progresses.

Unfortunately, GIS conference proceeding articles are only sporadically covered by the current online database services. Similarly, GIS books which contain articles or chapters written by different authors are difficult to access by the titles and authors of those chapters. The primary purpose of this document and accompanying data base is to provide bibliographic citations for all articles contained in the major GIS conference proceedings and book compendiums for the previous year.

The accompanying database may be used with desktop bibliographic software such as *EndNote Plus*, *Pro-Cite* or *BibIX/Refer(Unix)* to carry out various types of searches and to aid automatic generation of subject bibliographies. From a practical perspective, only authors, dates, and words in titles may be searched because neither key words nor abstracts have been entered into the database. As an alternative, the database may be printed and used as a straight-forward table of contents for the proceedings volumes listed. In that instance, the word search capabilities provided by many word processing programs may be of some value in searching for items of interest.

Conference proceedings included in the database for 1992 include the following:

- AM/FM International Conference XV (San Antonio)
- AURISA '92 (Gold Coast, Australia)
- Canadian Conference on GIS '92 (Ottawa)
- EGIS '92 (Munich)
- GIS '92 Symposium (Vancouver, BC)
- GIS/LIS '92 (San Jose)
- GIS for Transportation (Portland, OR)
- Symposium on Spatial Data Handling (Charleston)
- URISA Annual Conference (Washington, DC)

Compendiums included in the database for 1992 include the following:

- Geographic Information Systems (GIS) and Mapping --
Standards and Practices
Johnson, Petterson, & Fulton, Editors
- Geographic Information Systems and Urban and Rural Planning
Rideout, Editor
- Networking Spatial Information Systems
Newton, Zwart, & Cavill, Editors
- Spatial Analysis and Spatial Policy Using Geographic
Information Systems
Worrall, Editor
- Theories and Models of Spatio-Temporal Reasoning in
Geographic Space
Frank, Campari, & Formentini, Editors
- Waste Location: Spatial Aspects of Waste Management,
Hazards and Disposal
Clark, Smith, & Blowers, Editors

Please let us know if there are 1992 proceedings and compendiums in addition to those listed that you would like to see included in any update of the database.

For those unable to acquire the database through anonymous ftp, a hardcopy titled "NCGIA Annual GIS Bibliography for 1992" may be obtained for a nominal price from NCGIA. A 3.5 inch disk containing the same files as available at the ftp site is supplied with each hardcopy.

1.3 Acquiring Copies of the Database through Anonymous FTP

The GIS Bibliography for 1992 can be accessed through anonymous ftp at [ncgia.ucsb.edu](ftp://ncgia.ucsb.edu) (128.111.254.105). For those unfamiliar with the use of ftp, a short set of instructions is provided at the end of this section which should work for most systems that support ftp.

The bibliography is contained in five different files for the convenience of different users.

- GIS92.HQX
- GIS92.PROCITE
- GIS92.REFER
- GIS92.PS
- GIS92.TXT

The first three files are contained in the subdirectory **pubs / biblio / 1992**. The GIS92.HQX file is an *Endnote Plus* document in compressed binary form. This file must be "Unstuffed" using "Stuffit" software before being used directly in *Endnote* software on a MacIntosh. The "GIS92.PROCITE" file uses the *Pro-Cite* import/export format. The "GIS92.REFER" file uses the *Refer/BibIX* import/export format. These two files may be used on any platform (i.e DOS, MacIntosh, or UNIX) with *EndNote*, *EndNote Plus*, or any other bibliographic software packages that accept these formats.

For those who don't have desk top bibliography software, citations can also be accessed through postscript or ASCII formats. "GIS92.PS" and "GIS92.TXT" were created using the MLA bibliographic style and export function in *EndNote Plus*. These files are contained, respectively, in the following subdirectories: **pubs / biblio / postscript** and **pubs / biblio / text**. Whereas the first three files listed above contain only citations, these two files contain the accompanying written text (what you are now reading) and are therefore more appropriate for use if you want a finished hardcopy printout of the entire GIS Bibliography for 1992.

Sample entries for all formats are given below.

Sample Procite citation entry (GIS92.PROCITE):

@K Acevedo, William First Assessment of U.S. Geological Survey 30-Minute DEM's: A Great Improvement Over Existing 1-Degree Data Technical Papers of the 1991 ACSM-ASPRS Annual Convention Baltimore ACSM-ASPRS 1992 2 1-12

Sample Refer/BibIX citation entry (GIS92.REFER):

%0 Conference Proceedings
 %A Acevedo, William
 %D 1991
 %T First Assessment of U.S. Geological Survey 30-Minute DEM's: A Great Improvement Over Existing 1-Degree Data
 %B Technical Papers of the 1992 ACSM-ASPRS Annual Convention
 %V 2
 %P 1-12
 %C Baltimore
 %I ACSM-ASPRS

Sample postscript and ASCII citation entries (GIS92.PS and GIS92.TXT):

Acevedo, William. First Assessment of U.S. Geological Survey 30-Minute DEM's: A Great Improvement Over Existing 1-Degree Data. Technical Papers of the 1992 ACSM-ASPRS Annual Convention. Baltimore: ACSM-ASPRS, 1991. 2: 1-12.

Detailed Instructions for Accessing Anonymous FTP ncgia.ucsb.edu (128.111.254.105)

Get out of mail and type: `ftp ncgia.ucsb.edu`
 (If you are on VMS, an FTP prompt will appear. Type: user)
 At the user name prompt, type: `anonymous` (must be lower case)
 (If you are on VMS, anonymous must be in quotes. You will then receive a USER ACCT prompt, just hit ENTER.)
 At the password prompt enter your login id to let us know who you are (example: `Smith@mecan1.maine.edu`) but the system will accept anything.
 At the FTP prompt, type: `cd pub`

(If on VMS, "pub" must be in quotes.)

To see current files in the on-line NCGIA publications directory, type: dir In this directory you will see a subdirectory titled biblio as well as several others.

At the FTP prompt, type: cd biblio

(If on VMS, the sub directory name must be in quotes.)

Type again: dir You will now see subdirectories listed such as: 1992, postscript, and text.

If you want files suitable for manipulation with your bibliographic software, choose the "1992" subdirectory. If you want a copy of the bibliography suitable for hardcopy printout, choose either the "postscript" or "text" subdirectory depending on the format you desire.

At the FTP prompt, (presuming you want a copy suitable for hardcopy printout), type: cd text (If on VMS, the sub directory name must be in quotes.)

Next, type: dir Note that GIS92.txt may be one of several files currently in the subdirectory.

Presuming you wish to acquire this particular file, type: get GIS92.txt XXX.XXX (i.e. Name the file whatever you want to call it on your local system. For example, replace the Xs with: GIS.BIB) (If on VMS, GIS92.txt must be in quotes.)

Type: quit

NOTE: If before typing quit you wish to return to a higher level directory, type: cd .. (If on VMS, it must be cd "..")

The file containing the bibliography is now on your local system.

You may note that the NCGIA GIS Bibliography for 1991 is also on the server. All NCGIA on-line publications and datasets are also automatically accessible through the WAIS system (Wide Area Information Servers).

1.4 Technical Issues, Disclaimers and Limitations

Citations were scanned from the original table of contents of proceedings and other volumes using a *MacIntosh* computer and scanner with *OMNI Page* software. They were then edited and spell checked using *MS Word 5*, formatted in the Refer/BibIX format, and imported to *EndNote Plus*. A final editing was done in *EndNote Plus* and files were exported as noted above. Since the citations were scanned, they are in the same configuration as the original documents. That is, if the original citation was all capitals, so is the final citation. Likewise, citations to non-English articles are in the language of the article. All name spelling checks were done manually against the original documents. All citations were made using the "proceedings" or "book section" formats in *EndNote Plus*.

This document and accompanying database were prepared for the internal use of NCGIA researchers and may or may not be suitable for some purpose you intend. Although we have tried to list titles accurately, we make no guarantees, implied or otherwise, that the titles are accurate or comprehensive. We claim no rights in the factual list of article titles and encourage its free dissemination in digital form for academic purposes.

Mention of commercial product names in this document should not in any way be construed as endorsements of those products by NCGIA or the University of Maine.

Chapter Two

Electronic Access to GIS Articles in Journals

The following is a list of some of the journals which GIS researchers have found useful. The list is only illustrative, not comprehensive. Designators by each title indicate some of the electronic databases through which the journals may be accessed.

The second table provides a legend for the designators in the first table and indicates some of the vendors through which the databases may be accessed. When digital abstracts are available for a journal, Dialog, BRS and STN provide them. Wilsonline databases do not. The databases listed may be accessed from most major university libraries and perhaps from your own office.

Table 1. Databases for Selected Journals of Interest to GIS Researchers

<u>Journal Title</u>	<u>Indexed in:</u>
ACM Computing Surveys	AST, EI, MAT, INS, SCI, SUP, COM, TRA, CU
ACM Transactions on Database Systems	AST, MAT, INS, SCI, SUP, COM
ACM Transactions on Graphics	INS, SUP, CU
AI Expert	SUP, COM, ASA (ASA inclds full text from 1989)
AI Magazine	EI, SUP, CUR, CU
Association of American Geographers. Annals.	BIO, HIS, SSC, SSI, AHL, ACA, CAB, GB, GR, CU
Canadian Geographer	BIO, CA, CUR, SSC, SSI, GB, GR, CAB, ENV, CU
Cartographic Journal	GB, GR
Cartographica	CUR, GB, GR, CU
Cartography & Geographic Information Systems	CUR, SSC, GB, GR, CU
CISM Journal/Journal ACSGC (formerly Canadian Surveyor)	EI, GB, GR
Communication	PSY, CU

Table 1. (continued)

<u>Journal Title</u>	<u>Indexed in:</u>
Communications of the ACM	CUR, MAT, INS, SUP, ASA, CU (ASA includes full text from 1/88)
Computer Graphics	CUR, INS,GR, PRO, CU
Computer Journal	AST, CA, CUR, EI, MAT, INS, SCI, CU
Computer-Law Journal	INS, LRI
Computers & Geosciences	CA, INS, SCI, GB, GR, PET, CAB, CUR, CU
CVGIP: Graphical Models & Image Processing	CUR, INS, SUP, COM, GB, CU
CVGIP: Image Understanding	CU
Environment & Planning A	CUR, SSC, EPB, GB, TR, CAB, WAT, CU
Environment & Planning B	SSC, ENE, EPB, TR, CU
Geografiska Annaler Series A Physical Geography	CAB, GB, GR, SOC, CU
Geografiska Annaler Series B Human Geography	BIO, SSC, GB, CAB, CU
Geographical Analysis	CUR, SSI, GB, GR, CAB, SOC, CU
Geographical Journal	CUR, HIS, AHL, PAI, SSC, SCI, SSI, ACA, CAB, GB, GR, CU
Geographical Review	BIO, CA, CUR, EI, HIS, AHL, PAI, SSC, SSI, ACA, GB, GR, CAB, CU
IEEE Computer	AST, CUR, INS, SCI, SUP, COM,
IEEE Computer Graphics & Applications	AST, INS, SCI, SUP, COM, CU
IEEE Expert	SUP, COM, CU
IEEE Software	INS, CU
IEEE Transactions of Geoscience & Remote Sensing	AST, CA, CUR, EI, MAT, POL, INS, SCI, CAB, SUP, GB, CU
IEEE Transactions on Knowledge & Data Engineering	CU

Table 1. (continued)

<u>Journal Title</u>	<u>Indexed in:</u>
IEEE Transactions on Pattern Analysis & Machine Intelligence	CUR, INS, SCI, SUP, COM, CU
Information & Management	AST,INS
Interfaces	BUS, CUR, PSY, SSC, INS, ABI, TRA, CU
International Journal of Geographical Information Systems	GB, CU
ITE Journal	AST, EI, CUR, PAI, SUP, ENE, EPB, GB, TR, PET, ENV, CU
Journal of Object Oriented Programming	CUR, CU
Journal of Surveying Engineering	AST, CUR, EI, FLU, TR, CU
Jurimetrics Journal	LEG, INS, CJP, LRI (Full text in Westlaw since 1987)
MIS Quarterly	BUS, ABI, COM
Photogrammetric Engineering & Remote Sensing	CA, CUR, EI, INS, AGR, RMR, EPB, CAB, PET, WAT, CU
Professional Geographer	CUR, SSC, SSI, ENE, CAB, GB, GR, CU
Rutgers Computer & Technology Journal	LEG, INS, LRI (Full text in Westlaw since 1987)
Sigart Bulletin	CU
SIGCHI Bulletin	INS, CU
SIGMOD Record	INS, CU
Software Law Journal	LEG, CU
Surveying & Land Information Systems	AST, GB, GR, TR,CU
Transactions on Computer Systems (TOCS)	INS, SUP, CU
Transactions on Information Systems	INS, SUP, COM, CU
URISA Journal	(no database containing this journal found)

Table 2. Titles and Vendors for the Databases Listed in Table 1

<u>Abbrev.</u>	<u>Database</u>	<u>Vendor(s)</u>
ABI	ABI/Inform*	Dialog
ACA	Academic Index*	Dialog, BRS
AGR	Agricola*	Dialog, BRS
AHL	America: History & Life	Dialog
AST	Applied Science & Technology Index*	BRS, Wilsonline
BIO	Biosis*	Dialog, BRS, STN
BRI	Book Review Index	Dialog
BUS	Business Periodicals Index*	Dialog, BRS, STN
CA	CA Search	Dialog, STN
CAB	CAB Abstracts	Dialog, BRS
EI	Compendex*	Dialog, BRS, STN
ASA	Computer ASAP*	Dialog
COM	Computer Database	Dialog, BRS
CUR	Current Contents	Dialog, BRS
CJP	Criminal Justice Periodical Ind.	Dialog
ENE	Energyline	Dialog
ENV	Enviroline	Dialog
EPB	Environmental Bibliography*	Dialog
FLU	Fuidex	Dialog
GB	GEOBASE	Dialog
GR	GEOREF	Dialog, STN

Table 2. (continued)

<u>Abbrev.</u>	<u>Database</u>	<u>Vendor(s)</u>
HIS	Historical Abstracts	Dialog
LEG	Index to Legal Periodicals*	Wilsonline
INS	INSPEC*	Dialog, BRS, STN
LRI	Legal Resource Index*	Dialog, BRS
MAT	MATHSCI*	Dialog
PAI	PAIS*	Dialog, BRS
PET	Petroleum Exploration & Production	Dialog
POL	Pollution Abstracts	Dialog
PRO	PROMT	Dialog, BRS
PSY	PsycINFO*	Dialog, BRS
SCI	SCISEARCH*	Dialog
SSC	Social SCISEARCH*	Dialog, BRS
SSI	Social Sciences Index*	BRS, Wilsonline
SOC	Sociological Abstracts	Dialog, BRS
TR	TRIS	Dialog
SUP	Supertech	Dialog
TRA	Trade & Industry Index	Dialog
WAT	Water Resources Abstracts*	Dialog

* - Database available also on CD ROM.

Additional Resources

The databases in the above two tables were drawn primarily from science and engineering collections. Additional databases exist and may contain many of the journal titles listed above (e.g. databases in history, psychology, medicine, law, etc.). Similarly, only four primary database vendors were listed. Several others exist (e.g. Westlaw, Mead-Lexis, etc.).

Some government agencies also provide on-line bibliographic services for publications relevant to those agencies missions. Telnet addresses for some of these services which may be of interest to the GIS community include the following:

epaibm.rtpnc.epa.gov

EPA National Library on-line database

nssdca.gsfc.nasa.gov

National Space Science Data Center (NSSDC) On-Line Data and Information Service
includes the NASA Master Directory (documents and images)

login: nodis

stis.nsf.gov [128.150.195.40]

National Science Foundation Science & Technology Information Service (STIS)

login: public

tycho.usno.navy.mil [192.5.41.239]

U.S. Naval Observatory Automated Data Service (GPS data)

login: ads

In addition to the on-line services, many libraries have CD-ROMS that provide citations to some of the journals and other materials listed above.

Chapter Three
Contents of
GIS Proceedings for 1992
in
Bibliographic Form

AM/FM CONFERENCE XV Article Citations 1992

(Listed in order of appearance in the proceedings)

Novak, Kurt, and Stephen L. Sperry. INTEGRATION OF DIGITAL PHOTOGRAMMETRY AND RASTER GIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 13-24.

Emery, Henry A. KNOWLEDGE-BASED SYSTEMS - THE NEXT GENERATION . Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 25-32.

Spradley, Harold, and Patricia D. Knudson. LANDBASE MAINTENANCE ALTERNATIVES. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 33-44.

Libshitz, Alison B. MULTIMEDIA, AN AM/FM/GIS ENHANCER. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 45-50.

Austin, Robert F. PRINCIPLES OF RUGGEDIZATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 51-60.

Bush, Eric F. EIC REQUIREMENTS FOR AM/FM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 61-72.

Atwood, David N. ELECTRICAL AM/FM IMPLEMENTATION AT PUBLIC SERVICE COMPANY OF NEW MEXICO . Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 73-84.

Hedges, Edward T. INNOVATIVE STRATEGIES FOR DATA CONVERSION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 85-94.

Hull, Stephanie R., and Robert L. Van Beber. MAPPING A STRATEGY FOR DATA CONVERSION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 95-102.

Meyers, Trent F. SELECTING A CONVERSION VENDOR: PREPARING A MEANINGFUL RFP. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 103-114.

Woods, Clint J., and Robert J. Garza. STREET CENTERLINE DATABASE DEVELOPMENT: CORNERSTONE FOR A MULTI-AGENCY GIS PROGRAM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 115-126.

Luhr, David R. DYNAMIC SEGMENTATION - WHAT IS IT? . Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 127-138.

Harrison, Frank, and Rudy Stricklan. INTEGRATING MULTIPLE LINEARLY - REFERENCED TRANSPORTATION DATABASES . Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 139-150.

Greenwald, Ted A., and James F. Knudson. PILOT IMPLEMENTATION OF A LARGE TRANSPORTATION-BASED GIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 151-162.

Hargis, James E. CONCEPTUAL DATABASE DESIGN USING AN OBJECT-ORIENTED MODEL. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 163-174.

Cowden, Rex W. CRITICAL ISSUES IN PLANNING GIS MAINTENANCE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 175-184.

- Koeppel, Ian J. METADATA FOR EFFECTIVE AM/FM/GIS UTILIZATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 185-196.
- Savage, Jeanne F. THE FUTURE OF RELATIONAL DATABASE TECHNOLOGY AND WHAT IT MEANS TO GIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 197-214.
- Garnes, David W. AM/FM AT IOWA -ILLINOIS: A MID-STREAM PERSPECTIVE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 215-224.
- Hosie, W. A., C. E. Schurek, and R. L. Williams. AM/FM AT TRANSALTA UTILITIES - A MATURE SYSTEM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 225-244.
- Meehan, William J. AUTOMATED DISTRIBUTION DISPATCHING USING AM/FM/GIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 245-254.
- Muench, William F., and Mark L. Epstein. HAWAIIAN ELECTRIC: TWO PERSPECTIVES ON AM/FM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 255-266.
- Flynn, Marlene. HINDSIGHT IS 20-20 VISION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 267-276.
- Merritt, Steven L. De. TRANSFORMER LOAD MANAGEMENT USING GIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 277-288.
- Kawana, Yasuo. VISUAL FACILITY MANAGEMENT SYSTEM FOR POWER DISTRIBUTION NETWORK IN THE METROPOLITAN AREA. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 289-298.
- Stefanini, Joseph J. AM/FM/GIS PIONEER PROJECT CHRONICLE: CAMRIS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 299-310.
- Cotting, Charles C, Michael J. Daniels, and Edgar B. Sweet. BOSTON GAS COMPANY - AMMS PROJECT. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 311-324.
- Ando, Nobuaki. DEVELOPMENT AND OPERATION OF "MAIN AND BRANCH GAS-PIPELINE DESIGN SYSTEM" BASED ON COMPUTER MAPPING TECHNOLOGY. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 325-336.
- Walker, J. Rodney, and Debra J. Mayson. FLAME - A CASE STUDY. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 337-348.
- Middlestead, John A. GIVING THE ONE MAN BAND THE HOOK. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 349-358.
- Dansby, H. Bishop. A SURVEY AND ANALYSIS OF STATE GIS LEGISLATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 359-366.
- Holland, William S., and J. Michael Rhodes. WISCONSIN LAND INFORMATION PROGRAM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 367-382.
- Sperry, Stephen L. RASTER IMAGERY FOR LANDBASE CONSTRUCTION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 383-388.
- Sklar, Nancy L. THE MAP OF THE FUTURE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 389-394.

Miller, Karen I. LANDBASE CONSOLIDATION AND MIGRATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 395-406.

Arthur, John E. PUBLIC/PRIVATE ISSUES IN MARKETING GIS DATA. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 407-412.

Piepgross, E. Bert. THE MOVE TO A BETTER LAND BASE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 413-422.

Lang, I. Ward. EVOLVING A PROJECT THROUGH A DECADE OF CHANGE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 423-428.

Yaryan, Terry L. THE AM/FM CHALLENGES OF APPLICATIONS AS DEMONSTRATED BY AN OUTAGE MANAGEMENT SYSTEM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 429-436.

Goubert, Didier, and Robert G. Newton. A COST BENEFIT STUDY OF A GEOGRAPHIC INFORMATION SYSTEM IN SMALL/MEDIUM SIZE WATER UTILITIES. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 437-446.

Brown, Ronald K, Robert F. Adams, and Joann P. Johnson. AM/FM: MANAGING SAN ANTONIO'S SEWERS. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 447-456.

Wisniowski, Antoni. METROPOLITAN TORONTO DISTRIBUTED MAPPING DATABASE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 457-468.

Sciulli, Alex G. PITTSBURGH APPLIES HYDRAULICS TO AM/FM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 469-478.

Dangermond, Jack. CLIENT/SERVER APPROACH TO GIS INTERFACES. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 479-486.

Wheatley, Carl F., III, and Rhonda L. Hilton. PROPRIETARY COMMUNICATION SYSTEMS MIGRATION TO OPEN ARCHITECTURES. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 487-502.

Collins, Clifford L. A PROPOSAL FOR AN EXCHANGE FILE STANDARD. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 503-516.

Sanders, Raymond L., Jr. DISTRIBUTED COMPUTING ENVIRONMENT IS IN YOUR FUTURE! Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 517-528.

Kindrachuk, Eugene P. SPATIAL DATA EXCHANGE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 529-538.

Kunze, Elizabeth A., E. L. Hawk, and Neil R. Blumenfield. STANDARDS AND OPEN SYSTEMS TECHNOLOGY: A LAYPERSON'S PERSPECTIVE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 539-548.

Hergert, Michael B. WRITING PORTABLE SOFTWARE. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 549-560.

Beck, Ken. WINDOW: PROVIDING THE FRAMEWORK FOR EFFECTIVE APPLICATION INTEGRATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 561-566.

- Perkins, Scheherazade. ARE THERE ANY IMPOSTORS IN YOUR GIS ENTERPRISE ORGANIZATION? Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 567-578.
- DiMarco, Anthony M. TECHNOLOGY AND THE COLLECTIVE BARGAINING UNIT. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 579-584 Anthony M. DiMarco.
- Allen, Dennis K. THE IMPACT OF TECHNOLOGY: WHAT HAPPENS TO EMPLOYEES WHEN WE AUTOMATE? Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 585-596.
- Kocina, Wayne W. WORKSTATION ERGONOMICS FOR STREAM OSP/FM. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 597-610.
- Zastava, Dean A. THE HUMAN SIDE OF AM/FM/GIS IMPLEMENTATION. Proceedings of AM/FM Conference XV. San Antonio: AM/FM International, 1992. 1: 611-618.
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