Legal Considerations in the Dissemination of Licensed Digital Spatial Data

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ABSTRACT

State and local governments increasingly license digital spatial data, the dissemination of which by academic libraries requires specific legal and operational considerations to reconcile license conditions with public access. We examined this in the context of the American Geographical Society Library (AGSL) at the University of Wisconsin–Milwaukee during 2000-05. Wisconsin open records law protects the right of access to public records, and geographic data is intended to be in the public domain. Despite this, Wisconsin counties have dramatically increased their use of licenses for geographic data, and the use of these licenses has never been challenged under Wisconsin open records law. The AGSL negotiates existing licenses, conveying to users the licensing conditions and reassuring the data producers. We developed user sublicenses including copyright statements, original licensor's names, and signed user agreements to the terms of the original licenses. Each user agreed that failure to comply with these terms would result in disciplinary action. For security reasons, all licensed data were delivered on CD-ROMs, which incorporated the licensing information, forced users to sign the sublicense, and insured discussion of the licensing issues. To insure consistency, we developed policies and procedures to be followed for each type of data request. We also provided to faculty members and students instruction sessions dealing with data availability and acquisition.

Introduction

Digital geographic information is among the most rapidly growing components of many academic libraries (Kinikin & Hench, 2005). One

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sector of this information—licensed digital spatial data—presents specific opportunities and problems for librarians. Although the situation in each individual library will reflect its size, the nature of its collections, and its mission, certain issues are universal, including legal considerations. Freedom of information laws at the federal level and open records laws at the state level influence access to digital spatial data. Here, we examine these issues in the context of the American Geographical Society Library (AGSL) at the University of Wisconsin–Milwaukee (UWM) during the period 2000-05, when we held positions there as digital spatial data librarians.

THE AGS LIBRARY

The AGSL is a unit within the UWM Libraries and is one of the largest geographical collections in the world. The library contains over one million items, including maps, charts, atlases, globes, photographs, monographs, periodicals, and digital spatial data (AGSL, 2006). The last of these, which includes both electronic statistical and geographic data, is of growing importance to and is increasingly used by UWM faculty and students. The number of electronic files distributed by the AGSL increased by 3,601 percent from 2000-01 (1,026) to 2004-05 (37,974). Over the same period, the number of data CD-ROMs and DVDs burned increased 364 percent, from 119 to 552 (AGSL, 2005).

UWM has a conspicuous Geographic Information Systems (GIS) community that supports the library in its role as a campus data center. A campus-wide interdisciplinary GIS council was formed in 1990 in the early stages of GIS development at UWM, and anyone interested in GIS is encouraged to participate. The council includes representatives of the UWM information technology (IT) department, librarians, research scientists, and faculty and students from academic units including architecture, urban planning, geography, civil engineering, anthropology, urban studies, business, and economics. The AGSL is the main campus unit that actively collects and archives digital spatial data files on behalf of the UWM GIS community.

Serving a wide range of disciplines and user groups requires that the AGSL collect a wide range of digital spatial data. These data are inherently diverse in terms of origin, format, and geographic and temporal coverage. Data formats are raster (for example, digital orthophotography, satellite imagery, and Digital Elevation Models [DEMs]), vector (such as Computer Aided Design [CAD] drawing files or GIS vectors) and tabular (statistics and attribute files). Geographic coverage ranges from global to county or city level, even as localized as a quarter-quarter-section. Time ranges may be continuous (for example, the Milwaukee real property master files since 1975), irregular series, or one-time snapshots. Data producers include federal, state, and local governments, educational institutions, nonprofit organizations, and commercial enterprises.

DATA TYPES

The AGSL's digital spatial data collection is dominated by three categories of information: research data, public registry and administrative data, and commercial data. These are the data types most frequently requested by patrons.

The research data is primarily information collected by federal government agencies for their own purposes. In general, primary users of research data are government agencies that use the data in policy making and administration. Secondary users include academics, the general public, and commercial interests, which may repackage and market the data (Eechoud, 2004). Research data is attractive to GIS users because it is widely available, in the public domain, and useful in a broad range of applications (Eechoud, 2004). U.S. Census Bureau and U.S. Geological Survey datasets typify this category and serve general or scientific research purposes. They contain no private information, and the data is presented at a relatively small scale.

The AGSL also holds state and local government research datasets and directs patrons to relevant Internet sources. For example, current Wisconsin Department of Natural Resources (WDNR) digital spatial data are available at the WDNR Web site (www.dnr.state.wi.us/maps/gis/geolibrary.html) and archived data files are available in the AGSL.

Public registry and administrative data constitutes the foremost category of data requested in the AGSL. Public registry and administrative data is that collected by governments for specific legal and regulatory purposes, such as monitoring or regulating public and private activities like collecting taxes or regulating discharge of hazardous substances (Eechoud, 2004). This information includes land registry or cadastral data, law enforcement data, zoning permissions, and derivative land information such as street center lines with complete addresses.

The advantages of public registry and administrative datasets are numerous. They are geographically accurate (that is, data are created at large scale with high precision) and are updated frequently. Moreover, longitudinal (time-series) data may be archived for the entire area of interest. However, public registry and administrative datasets are not always accessible, or access may be regulated by legislation such as privacy laws.

Commercial data are acquired for reference use, for specific purposes or projects, or as a last resort when other data are unavailable. Commercial products may be relatively expensive but may be convenient, accurate, and scale appropriate. Commercial data acquired by the AGSL include high-resolution aerial photographs, satellite imagery, CensusCD+Maps, business location data (as a part of the Environmental Research Systems Institute [ESRI] Business Analyst) and commercial street data. These were acquired mainly for faculty research when the information was not available from other sources.

LEGAL ISSUES

Legal issues affect access to geographic data in general (Onsrud, 1995a, 1995b, 2000). Issues of particular relevance to digital spatial data include public access, intellectual property rights, professional ethics, and licensing. The essential issue is that of reconciling data producers' restrictions with public access.

Public Access

The raison d'etre of public access to government information is to allow public evaluation of public officials' conduct, to make available information about public policy, to protect against secret laws and decisions, and to encourage informed participation in public affairs (Solove, 2004; Cate, Fields, & McBain, 1994; Friedley & Colbert, 1991; Braverman & Heppler, 1981). Prior to 1966 there were no federal laws concerning access to government information, but the prevailing opinion was that the U.S. Constitution implied such rights (Henrick, 1977; Board of Education, Island Trees Union Free School District No. 26 v. Pico 457 U.S. 853, 1982). During the Watergate crisis of 1974, Congress rewrote the federal "Government in the Sunshine" laws strengthening the right of access to government information (Solove, 2004; Henrick, 1977). Freedom of Information (FOI) laws had been enacted by 1983 in all fifty states and the District of Columbia (Solove, 2004).

Concerning geographic data in particular, the National Research Council states that "Government accountability and transparency require agencies to ensure that the ability to control scarce geographic data never becomes 'outcome determinative' for any political or judicial process . . . Transparency is important to agency adjudications and rulemaking, to petitions to Congress for new legislation, and to mount court challenges to illegal government acts" (2004, p. 161).

Copyright, Geographic Information, and Compositions

Copyright holders obtain exclusive rights to copy, display, distribute, adapt, and perform a protected work (Minow & Lipinski, 2003). These rights are extended as soon as an original idea, which shows a minimal level of creativity, becomes fixed in a tangible medium (Minow & Lipinski, 2003). With very few exceptions, federally produced government information is not placed under copyright protection (Dansby, 1994; Cho, 1998). Some states allow copyright of public information, but others do not (Fishman, 2004). In terms of geographic data or databases, it is important to remember that copyright protects originality, not hard work ("sweat of the brow").

Traditionally cartographers and producers of geographic data have relied upon copyright to protect the intellectual property of their works. The Supreme Court ruled in *Feist Publications Inc. v. Rural Telephone Service Co.* (499 U.S. 340, 1991) that facts per se are not copyrightable, but a slight

amount of originality, including the selection and arrangement of facts, is protected (Dando, 1991, 1993b). On these grounds, many cartographers and producers of geographic data believe that geographic data arranged within a database has copyright protection, even if the facts themselves do not. It is unclear, however, exactly what degree of originality in geographic databases is required to warrant protection. "Maps and photographic images, for example, often have been found to be copyrightable" (National Research Council, 2004, pp. 106–107). Others may extract, copy and use the factual information contained in the work as long as the creative expression is not copied These works, like factual databases, are said to have "thin" copyright (Karjala, 1995).

Section 107 of the Copyright Revision Act (1976) contains the statutory expression of "fair use" rights to use copyrighted materials. Under certain conditions, use is allowed for purposes such as criticism, comment, news reporting, teaching, scholarship, and research (Minow & Lipinski, 2003). Four factors are considered in determining if a use is "fair": (1) the purpose and character of the use (whether commercial, nonprofit, or educational), (2) the nature of the work (factual or otherwise), (3) the amount and substantiality of the portion used in relation to the whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work (Minow & Lipinski, 2003). These provisions are particularly relevant because many nonfederal public sector geographic data producers are concerned about liability, proper attribution, control of third-party redistribution, and inappropriate derivative reproduction of "their" data. The general consensus is that copyright protection is not sufficient. "Fair use and the misuse doctrine represent significant limits on the copyright owner's rights. The scope of their application is sufficiently uncertain, however, that, where possible, parties should contract [license] for anticipated uses rather than rely on fair use doctrine or other uncertain legal doctrines to sanction the licensee's activities" (National Research Council, 2004, p. 110).

It is obvious that some uses of geographic data constitute fair use, for example, using a factual geographic data database for teaching purposes. Here the data producer would most likely be concerned about redistribution of the data beyond the confines of the educational institution.

Geographic Data as Public Domain Information

Federal Office of Management and Budget (OMB) Circular A-16 (1994) deals more specifically with geographic data as public domain information and includes provisions for "improvements in coordination and use of spatial data" (OMB Circular, 1994). The OMB circular incorporates Executive Order 12906 (Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure, NSDI), which require agencies to "adopt a plan . . . establishing procedures to make geospatial data available to the public, to the extent permitted by law, current policies, and relevant

OMB circulars" (National Research Council, 2004, p. 125). Similar to many federal laws, A-16 strongly advocates public availability and dissemination of geographic data acquired by the government (National Research Council, 2004). The NSDI is a vision for a nationally shared catalog of geographic data from all levels of government. Federal agency participation is mandated, and programs have been instituted to encourage participation by state and local agencies. These programs include Geospatial OneStop (Phillips, 2005), the National Map, and earlier less successful ventures. Some state and local governments are reluctant to cooperate in these efforts for several reasons, including the federal requirement that their licensed geographic data be placed in the public domain.

State government approaches to geographic data distribution vary widely on the basis of different justifications (Cho, 2005). "Some provide access rights on the basis of an exception to open records law, others depend on the nature of the request that is made" (Cho, 2005, p. 73). Some agencies distinguish between "services" and "sales" (Wells & Tsui, 2005). Some make no distinction between geographic data and other types of digital databases (Cho, 2005), while others have enacted specific legislation concerning distribution of geographic data (National Research Council, 2004). "Federal law permits state and local governments to assert copyright in works containing geographic data (if they otherwise meet the requirements for copyright protection). When consistent with local law, state and local governments may also maintain geographic data as secret, or restrict their use and redistribution" (National Research Council, 2004, p. 134). As a result, each state or local government agency may create policies that either impose prohibitive use conditions or provide open access to geographic data. Prohibitive conditions are place specific and localized; the underlying assumption, based on democratic principles as demonstrated in federal law and policies, is that the public has the "right to know."

Licensing of Geographic Information

A license is a legal contract between two parties by means of which the licensor allows the licensee to use a data collection (Cho, 2005; Wells & Tsui, 2005). Licenses are typically governed by state contract laws. "Contract law is about relationship building rather than simply attempting to either drive a hard bargain or to get out of a dispute" (Cho, 2005, p. 292). The licensee accepts certain restrictions on the use of the data, such as agreeing that no copying or further dissemination will occur. Parties can usually negotiate terms to come to a mutually agreeable arrangement. Until the mid-1990s it was uncommon for government agencies to license geographic data, but, since then, nonfederal public agencies have become more inclined to do so in order to limit the use of their data, limit their liability, or raise revenue (National Research Council, 2004; Wells & Tsui, 2005). Typically, licenses contain a statement of ownership and copyright, a product description

and statement of quality, warranties, disclaimers and indemnification, any restrictions on use or resale, specification of the length of the agreement and terms of renewal, cancellation terms, fees or in-kind exchange, and responsibilities for updates and error notification (Wells & Tsui, 2005).

State and local governments, operating under different laws and policies, provide many reasons for electing to license geographic data. These typically include cost recovery, liability concerns, as a vehicle of proper attribution, and to prevent third-party redistribution and derivative production (Dando, 1992, 1993a; Dansby, 1992; Holland, 1997; Onsrud, 1999; National Research Council, 2004; GITA, 2005). The specific goal of cost recovery has rarely been realized (Humphrey, 1995; Sears, 2001; Joffe, 2003; National Research Council, 2004). In 2003 the U.S. Geological Survey funded the Open Data Consortium (ODC) to develop a model data distribution policy for local governments in the United States. According to Joffe (2003, 2005), most local agencies that sell or license public data operate at a loss, with very few earning even modest revenues.

OPEN RECORDS IN WISCONSIN

The Wisconsin legal system provides general guidance to both data producers and users within the state. In Wisconsin, as in most states, open records law protects the right of access to public records. Wisconsin Statutes 19.31 thru 39, subchapter II, Public Records and Property (State of Wisconsin, 2004), begins with a declaration of policy (19.31) that presents the overriding principles governing the subsequent laws that deal with public records within the state. It reads in part:

In recognition of the fact that a representative government is dependent upon an informed electorate, it is declared to be the public policy of this state that all persons are entitled to the greatest possible information regarding the affairs of government and the official acts of those officers and employees who represent them. Further, providing persons with such information is declared to be an essential function of a representative government and an integral part of the routine duties of officers and employees whose responsibility it is to provide such information. To that end, ss. 19.32 to 19.37 shall be construed in every instance with a presumption of complete public access, consistent with the conduct of governmental business. The denial of public access generally is contrary to the public interest, and only in an exceptional case may access be denied.

In every instance, complete public access to governmental business records, except in exceptional circumstances, is the policy of the state. This policy reflects federal FOI laws and policies.

Section 19.32 provides definitions of "authority," "local governmental unit," and "record." A record is "any material on which written, drawn, printed, spoken, visual or electromagnetic information is recorded or preserved,

regardless of physical form or characteristics, which has been created or is being kept by an authority. 'Record' includes, but is not limited to, handwritten, typed or printed pages, maps, charts, ... tapes (including computer tapes), computer printouts and optical disks" (State of Wisconsin, 2004).

Land Information in Wisconsin

Historically, Wisconsin has been at the forefront of efforts to modernize land records in the United States (Koch et al., 2001). Public agencies, cities, universities, and private-sector groups have worked individually and collectively to institute a progressive system that was formalized in 1989 through the creation of the Wisconsin Land Information Board (WLIB). Wisconsin Acts 31 and 339 (1989) assigned the board responsibility for implementing the Wisconsin Land Information Program (WLIP) (Holland, 1994). The intent of the WLIP was to develop a "decentralized confederation of systems where those with existing land records responsibilities would continue to collect, maintain and keep custody of land information. . . . Through integration, this confederation of systems will be tied by formal and/or informal data sharing agreements" (WLIB, 1994, p. 1). To emphasize the objective of providing open access to geographic data, language was added to Act 339 specifically empowering the WLIB to utilize program revenue for "Systems Integration" (WLIB, 1994, p. 2). Definition of this term was requested by the legislature, and Systems Integration was subsequently defined as "the coordination of land records modernization at all levels of government to ensure that the information can be shared, distributed and used by all participants, including state and local government, the private sector and taxpayers" (Sec. 20.505(4) Wis. Act 339, 1989). According to the WLIB, the interpretation is meant to be literal and contextual in light of legislative and gubernatorial intent, and the objective of developing systems with shared data is "clear and unambiguous" (1994, p. 3). The policy supports the assumption that geographic data is intended to be in the public domain by statutory authority.

Despite this clear intent, between 1999 and 2002 Wisconsin counties increased the use of licenses for geographic data by over 100 percent and increased the use of copyright by 108 percent (Day, 2004). Use of these licenses for geographic data has never been challenged under Wisconsin open records law, so there are no legal judgments upon which to decide whether or not these licenses are legally binding. This leaves interpretation of the law open and leaves local authorities free to impose licenses, notwithstanding the "clear and unambiguous" nature of Wisconsin Act 339 (WLIB, 1994; Shanley, 2005). Despite the ongoing ethical and legal debate, the AGSL and other Wisconsin libraries dealing with local government geographic data have only two choices: to negotiate the existing licenses or forgo access to the data.

Accessibility Issues

Accessing research data at an academic library such as the AGSL is relatively straightforward. Much federal, state, and some local government geographic information is available for download or purchase without cost or at the cost of reproduction. Libraries participating in the federal depository library program automatically receive selected geographic data produced by the federal government. By contrast, purchasing commercial data may or may not be relatively straightforward, depending on the company and their experience with libraries. Having generated the necessary funds to purchase the identified data, negotiating the license agreement terms can be challenging. A librarian who is experienced in such matters may be able to handle the negotiation independently, but consultation with university legal counsel may be necessary in certain instances.

In terms of accessibility, the most difficult data to obtain is locally produced public registry and administrative data. Data producers may hesitate to distribute the information because it may contain personal or private information about citizens. They may also fear loss of control over the information (that is, property ownership) once the data is removed from their supervision. Additionally, the organization may want (or need) to recover the cost of data production and maintenance by charging not only for reproduction but also for data creation. Agencies also may not want to supply data because the effort to extract and package data is time -consuming and is not their primary function (Cho, 2005; Wells & Tsui, 2005).

Another consideration is the value to the organization of the information itself. Locally produced large-scale geographic data is often regarded as a commodity and is considered too valuable to disseminate at no cost or at the cost of reproduction only. Therefore, individual agencies may decide to implement geographic data distribution policies that contradict the federal open records law. Federal law permits state and local governments to employ copyright protection over their geographic data if certain requirements are met.1 Also, state and local governments are allowed to restrict access, usage, and redistribution of geographic data when it is consistent with local law (National Research Council, 2004). The result is that there is no uniform policy governing access to geographic data produced by state and local governments. "Public policy that promotes the use of and access to automated geographic information differs widely among the states from the use of open records laws through to the public records and FOI laws. There seems no model that adequately addresses the power and commercial utility of GIS databases" (Cho, 1998, p. 141). There has been discussion of how local governments should provide access to geographic data since the early 1990s, but consensus among local data producers has not been reached yet.2

Other issues concerning access to geographic data include privacy and confidentiality (Cho, 1998, 2005; Dillehay, 1993), liability (Cho, 1998, 2005;

Onsrud, 1999), and national security (Baker et al., 2004; Tombs, 2005). Data producers may not have clear guidelines about what, how, and to what extent personal information can be distributed in their geographic data. For example, some land information contains personal details, such as landowners' names and contact information. Uncertainty about how open records laws apply to land information published on the Internet may delay decisions about data distribution to the public (WLIA, 2003).

Liability in the use of geographic information has long been a subject of interest in the geographic information community (Onsrud, 1999). The use of warranties and disclaimers is becoming the norm among data producers seeking to minimize liability exposure, although this does not protect them entirely (National Research Council, 2004).

Invoking national security as a reason to restrict access to local geographic data is relatively new and may impact future policy developments (Zellmer, 2004). For example, a township in New Jersey blocked a resident's open records request by submitting utility geographic data that was later incorporated into the Department of Homeland Security's Critical Infrastructure Information program, hence preventing any public access (Lozar, 2005; Tombs, 2005).

Managing Licensed Data at the AGSL

The logistics of handling licensed data at the AGSL during our tenure were complex and time-consuming. Each license required that data be used only by UWM students and faculty (occasionally staff), and each placed different restrictions on use and reproduction of the data. Conveying this information to users was a major concern of the data producers, and maintaining their trust in this regard was imperative in order to obtain updates or new data (Harvey, 2003).

To address the concerns of the data producers, we developed a system of sublicensing each dataset. Submitting a copy of the sublicense to data producers usually convinced them that we were committed to complying with their original licenses and that we were taking appropriate steps to prevent misappropriation of the data beyond the university.

The system of sublicensing each dataset was developed with the assistance of UWM legal counsel. After completing negotiations for any licensed data, a user sublicense was created with the restrictions of the original license presented in nonlegal terminology (see Appendix A). Each sublicense included a copyright statement, the original licensor's name, the date, the user's name (printed) and signature, and a statement that the user agreed to the terms of the original license. Each sublicense also included an agreement that failure to comply with these terms would result in academic or nonacademic disciplinary action. Users also agreed in writing to return or destroy the data at the end of the semester in which it was requested. Each user was also informed of the restrictions verbally, and a blank copy of the

sublicense, additional to the copy completed by the user, was burned onto each CD-ROM distributed to protect the AGSL legally from any claim that a user was unaware of the restrictions.

To minimize paperwork and to track what geographical data had been distributed to each individual user, the sublicense form also served as the internal processing form. Users were made aware that the form they were signing was a legal document that the AGSL was required by law to keep for seven years (the statute of limitations in Wisconsin). Initially, we had argued that these forms should be considered circulation forms and therefore could be destroyed after the information was processed or at least at the end of each semester. This argument was overruled by UWM legal counsel, hence the requirement that the sublicense forms be retained for seven years.

Although public domain data were delivered via FTP, e-mail, CD-ROM, or the Internet, all licensed data were delivered on CD-ROM. In part this was for security reasons, in that the data could possibly be hacked off the Internet, even from a "secure" site. Using CD-ROMs also allowed us to include the licensing information, and it forced potential users to contact us in person, facilitating signing of the sublicense and insuring discussion of the licensing issues. We regarded discussion of the license as a teaching tool, conveying to users that data is licensed, it costs money, and there are consequences for its misuse. We charged a minimal processing fee (\$2–3) to cover the cost of the CD and the staff time involved in repackaging each geographic area individually.

The majority of data requests were for Milwaukee County and surrounding counties in southeastern Wisconsin. The AGSL collected spatial data for as many Wisconsin counties as possible and other areas as requested. Upon receipt of the data, all available documentation (read me files, disclaimers, warrantees, metadata) was reviewed to determine the legal status of and restrictions upon each data file. Datasets were classified into four groups: public domain, copyrighted, licensed, and restricted to in-library use only. Data producers were contacted if the legal status of any data was unclear. Some datasets, such as ESRI Data and Maps and the USGS/AGI Global GIS database series, are complex, with different restrictions applying to individual data files.

Hard copy documentation relating to datasets was scanned and stored electronically with the digital files so that it was available for distribution to users. To streamline processing and minimize uncertainty, hardcopy binders were created with the original license and the sublicenses arranged alphabetically by county. The digital files were arranged on the network in the same order. Since the AGSL holds both nonlicensed and licensed data, color-coded stick-on dots were placed on the CD-ROM cases in the file cabinets to differentiate between them. Only the most frequently requested data were located on the server.

Student workers were repeatedly instructed always to check with the digital spatial data librarian if they were in any way uncertain about the conditions pertaining to data dissemination. An intern created flow charts (for an example, see Appendix B) for the most frequently requested datasets indicating the appropriate procedures to be followed for each request. These flow charts proved very valuable during student training and in day-to-day operations and were posted prominently for student workers to consult.

Instruction Sessions

One of the drawbacks in collecting and providing to university users a variety of digital spatial data is that such users become reliant upon the service and have little incentive to learn where and how to obtain the data themselves. Although users were encouraged to obtain licensed data via the AGSL, for pedagogic reasons and because of increasing demand they were urged to acquire public domain data themselves. Discussing data availability and acquisition in person proved useful in instructing users about procurement methods, but we could reach relatively few individuals in this way.

To address this issue, we encouraged faculty members to invite us to classes utilizing digital geographic data. This allowed us to discuss various issues related to geographic data information, including how to find and access information on the Web and in the library, the spectrum of public and private data producers, copyright and licensing restrictions, and appropriate acknowledgment and citation procedures. This instructional service was provided in both introductory and advanced courses in geography, urban planning, architecture, civil engineering, and other disciplines. The well-established GIS community on campus played a vital role in connecting us with faculty who use digital spatial data in their research and teaching.

Conclusion

The supply of and demand for licensed digital spatial data is increasing rapidly. Although users potentially can obtain such data themselves, academic libraries will increasingly be expected to obtain and disseminate these resources. Understanding the legal issues pertaining to such data is paramount, and the AGSL provides a model for reconciling data producers' restrictions with academic access.

The AGSL experience suggests that the greatest demand is for locally produced geographic data. In Wisconsin, such data is regulated by various and potentially conflicting statutes. Despite the "clear and unambiguous" assertion of Wisconsin Act 339 that geographic data is intended to be in the public domain (WLIB, 1994, p. 3), local government agencies remain at liberty to impose licenses on their geographic data because the use of such licenses has never been challenged under Wisconsin open records law. Between 1999 and 2002 Wisconsin counties increased the use of licenses for

geographic data by over 100 percent, and the AGSL and other Wisconsin libraries dealing with local government geographic data must either negotiate these existing licenses or forgo access to the data.

Managing licensed data is complex and time-consuming. Licenses restrict use and reproduction of the data, and maintaining the producers' trust in this regard is imperative. At the AGSL we accomplished this by developing a system of user sublicenses that were in compliance with the original licenses. For security reasons, all licensed data were delivered on CD-ROMs, which incorporated the licensing information, forced users to sign the sublicense, and insured discussion of the licensing issues. To insure consistency, we developed policies and procedures to be followed for each type of data request. We also provided to faculty members and students instruction sessions dealing with data availability and acquisition.

APPENDIX A: USER SUBLICENSE AGREEMENT



UWM Libraries

Request for Electronic MCAMLIS Data Sets

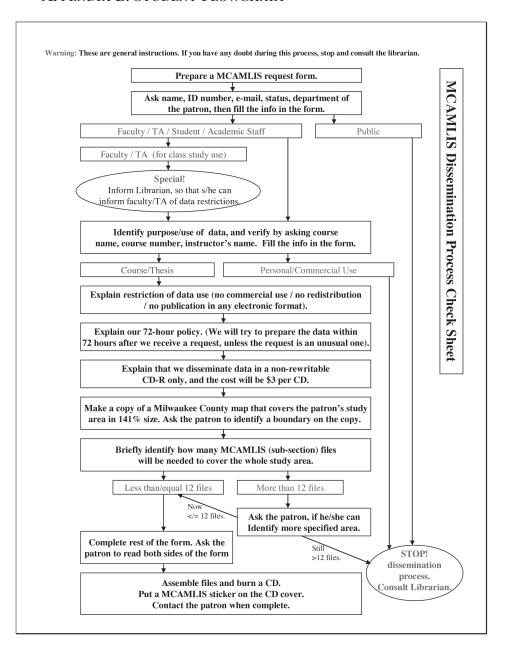
Electronic data sets from the Milwaukee County Automated Mapping and Land Information System are only available to students, faculty, and staff of the University of Wisconsin-Milwaukee for educational purposes.

These electronic files, and any electronic files derived from them cannot be used for commercial application, sold, redistributed, or published in any ELECTRONIC format (including on the World Wide Web). Paper copies of the original maps created with the data or published in reports may be produced. The library reserves the right to verify the educational purpose of each request. Violation of the foregoing provisions shall automatically terminate all access by you to the digital base maps and any material derived therefrom because such acts jeopardize the continued availability of the data sets to the University of Wisconsin-Milwaukee.

Requestors must enter into the agreement attached below prior to being granted access to the MCAMLIS Data Sets.

Request Date (M/D/Y):	/	/ 200	Time:	Pick-up:	Charge:
Name (Please Print):					
Email address (UWM email address required):					
UWM ID Number:			Department/Major:		
Purpose of Request (name of class/nature of assignment):					
Course Number: ()		
Instructor Name: ()		
Request (description of requested material/publisher/number of files) (completed by staff):					
MCAMLIS preferred format		Aerial	Photo preferred fo	rmat	
AutoCAD DXF		□ 2000	Black & White		
☐ MicroStation DGN		2002 Color AirPhotoUSA Request Form REQUIRED			
Other ()		☐ JPEG		
			☐ TIF		
			☐ MrSID		
			Other ()	
Description of format distribution CD-R (copyrighted data) or CDRW, Zip, FTP, etc. (ONLY for public domain data). (completed by staff) :					

APPENDIX B: STUDENT FLOWCHART



NOTES

- 1. See more arguments on geographic data copyright protection and licensing issues in Cho (1998, 2005), Dando (1992), Holland (1997), and Petersen (1994).
- 2. Discussion about geographical data access issues and licensing can be found in legal periodicals and local government related periodicals, such as GIS Law and various URISA publications. Examples of current attempts to set up data access and distribution policy are available from organizations that deal with geospatial data issues, such as the National Research Council, Committee on Licensing Geographic Data and Services (2004), Open Data Consortium (Joffe, 2003), and Geospatial Information and Technology Association (GITA, 2005).

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