Project Name: ***Regional Development Organizations:***
Bridges linking state and local government to improve metadata coordination

Clearinghouse
Hosting Metadata: http://geogateway.state.mn.us/
z3950s://lucy.lmic.state.mn.us:210/lmicdata (registered node address)

Agreement Number: **04HQAG0153**

Project Leader: Christopher Cialek
651.201.2481
chris.cialek@state.mn.us

Organization: Land Management Information Center
Minnesota Department of Administration
300 Centennial Office Building
658 Cedar Street
St. Paul, MN 55155
http://www.lmic.state.mn.us

Narrative

Project Description

This project was designed to accelerate the use of NSDI-initiated standards and clearinghouse applications by developing stronger ties between Minnesota's Land Management Information Center (LMIC) and the state's rural Regional Development Organizations (RDO).

LMIC, home to the Minnesota Geographic Data Clearinghouse, is the lead state office in NSDI implementation. The Arrowhead Regional Development Commission (ARDC) is a progressive RDO that provides local governments and community-based groups in Northeastern Minnesota with programs, services, and staffing assistance that address growth and development needs.

Leveraging the partnership between LMIC and the ARDC, this project took advantage of each organization's strengths to develop effective working relationships with dozens of rural local governments in an effort to facilitate more effective metadata creation. In close collaboration, the two principals prepared metadata training resources; then, taking advantage of ARDC's close working relationship with the state's other nine rural RDOs, delivered customized metadata instruction to local government GIS professionals within those regions. Additional resources were provided through a competitive granting process to selected RDOs for seed funding to accelerate metadata creation.

Goals and Achievements

This project set the following goals:

1. **Distributed Resources:** Providing a number of metadata seed grants to RDOs selected through a qualifying proposal program. Assistance will be provided to the most promising candidate organizations demonstrating: 1) dedication to the principles of data management through metadata development and maintenance, 2) need for resources to initiate the process, 3) evidence that a long-term metadata strategy will develop.

2. **Metadata Training:** Conducting metadata training sessions tailored to regional and local government needs, offering at a minimum, a session for each of the state's rural RDOs.

3. **Outreach:** Working directly with RDOs that do not receive seed funding to develop and implement metadata strategies with their constituents.

4. **New Metadata:** Producing 100 new metadata records, all of which shall be indexed on state Clearinghouse nodes and harvested for the GOS Portal.

The following completed activities composed the project plan:

0. **Preparation:**

   ▪ **Kick-off meeting**: Nancy Rader attended the FGDC CAP kick-off meeting in Denver, September 27 – 29, 2004. She updated the project team about future directions of the CAP program.

   ▪ **RDO GIS user group presentation:** Chris Cialek and Rader gave a presentation describing this project to the GIS Users Group of Regional Development Organizations in Minnesota. The meeting was held in St. Cloud on October 21, 2004; six RDOs and two state agencies were represented.

   ▪ **Contract to partner:** A Professional/Technical contract was negotiated between LMIC and the ARDC to provide assistance in planning and implementing this project. ARDC agreed to assist in 1) developing a metadata grant RFP, 2) evaluating proposals, 3) administering the grants, 4) providing training, 5) evaluating metadata, 6) presenting results. The contract was signed on December 9, 2004.

   ▪ **Build on legacy of metadata training focused on local government:** Historically LMIC has addressed training issues with a number of sessions held in Greater Minnesota. The following metadata workshops laid the foundation for the premise of this project's work:

      o **ARDC –** Duluth; December 2, 1999

      o **Regional 5 –** Staples; August 24, 2004

      o **Region 8 –** Marshall; September 4, 2004

      o **West Central Initiative (Region 4) –** Alexandria, April 16, 2001 (as part of the MN GIS/LIS Consortium Spring Workshop offering) and Moorhead, May 13, 2004

   ▪ **FGDC Metadata Working Group:** LMIC staff participated in the January 25, 2005 teleconference of this ad hoc group.

1. **Distributed Resources:**

   - **Announcement:** Announcement of LMIC's intent to offer metadata grants was distributed at the annual Minnesota GIS/LIS Consortium Conference in St. Cloud, October 4 – 6, 2004 (see Appendix A.)

   - **RFP preparation:** A Request for Proposals, targeting eight rural RDOs, was developed by the project team and issued on December 15, 2004. The deadline for submission was January 21, 2005. (See RFP at: http://www.lmic.state.mn.us/chouse/RDO_Grant_RFP.pdf)

   - **Proposal evaluations and awards:** Four proposals were received by the deadline. LMIC and ARDC staff performed a formal evaluation of each, worked with the authors to clarify and strengthen the submissions and awarded each of the four. Awards were announced during the week of January 31, 2005. RDOs receiving awards comprise about 25% of the state's counties. Together with their lead contacts, they include (see Figure 1.):

Region 1:	Northwest Regional Development Commission
	Troy Schroeder, tschroeder@nwrdc.org
Region 6E:	Mid-Minnesota Regional Development Commission
	Rick Moore, rick.moore@mmrdc.org
Region 6W:	Upper Minnesota Valley Regional Development Commission
	Scott Conn, gisrdc@umvrdc.org
Region 7E:	East Central Regional Development Commission
	Sarah Morton, sarah.morton@ecrdc.org

   - **Grant contracts:** Grant contracts were developed by the project team, reviewed by the Department of Administration and the Attorney General's Office and executed for all four grantees by February 15, 2005. An example grant contract is included in Appendix B. As stipulated in these contracts, an initial award payment of $1000 was made to each of the four RDOs on February 22, 2005.

   - **Newsletter article:** An announcement of the awards was provided in the Minnesota GIS/LIS Consortium Newsletter; Spring 2005 edition (http://www.mngislis.org/newsletter/issue40/LMIC_Announces_Grant_Recipients.htm).

   - **Relationship developed with each RDO:** Between February 2005 and November 2005, LMIC, ARDC and the selected RDOs worked together to identify data sets to be documented and review efforts to compile metadata records that comply with state standards.

   - **Metadata submitted:** At the end of the project, all RDOs submitted their work to be added to the Minnesota Geographic Data Clearinghouse.
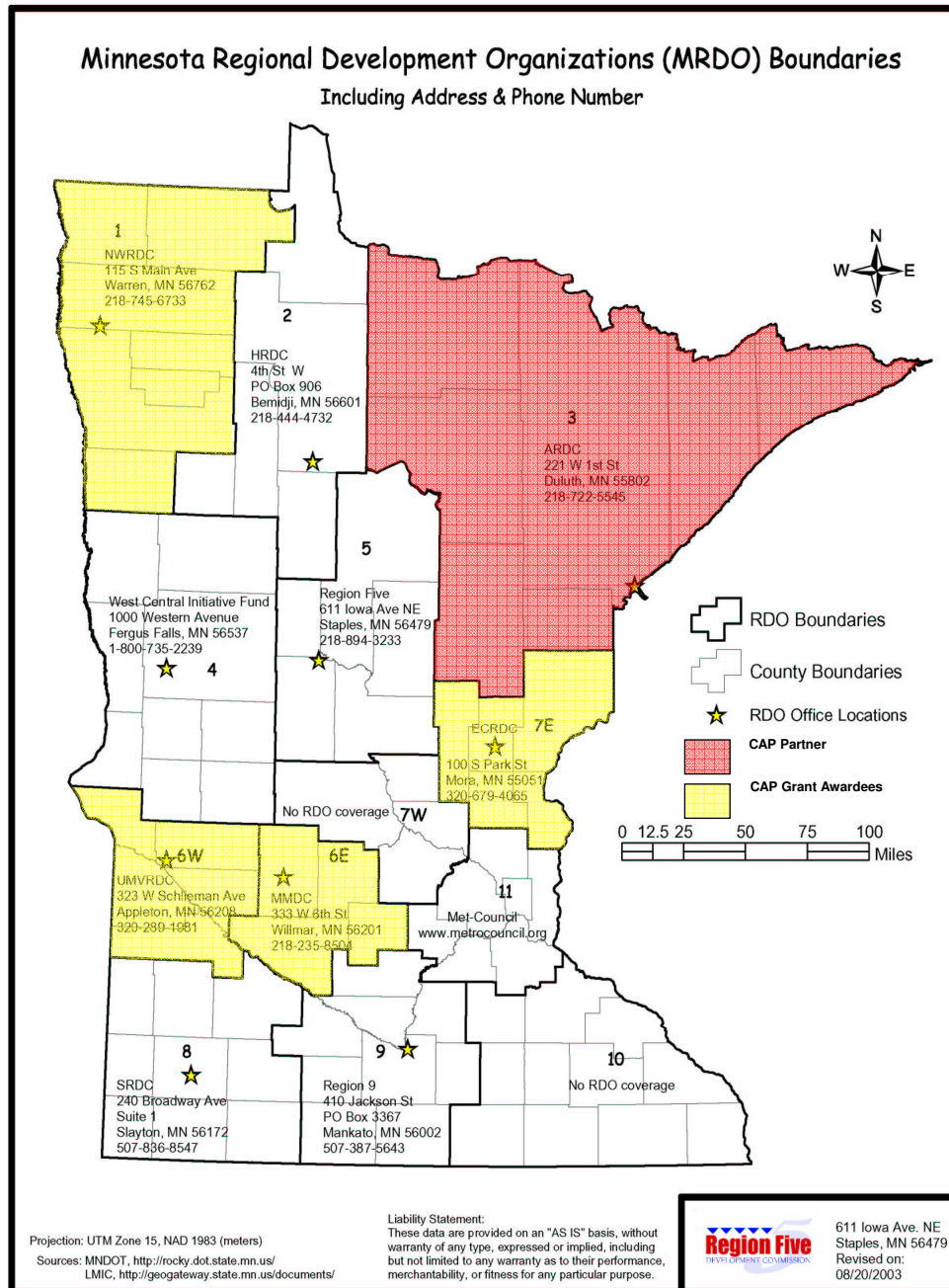
Figure 1. Four Regional Development Organizations (yellow) representing 25% of Minnesota counties were awarded Metadata grants in 2005. The ARDC (red) is partnering with LMIC to provide project training and support.

2. **Metadata Training:** (see workshop evaluation responses in Appendix C.)

- **Metadata workshop – RDO Region 1:** A day-long workshop was held at the University of Minnesota/Crookston on February 28, 2005 for project partners of the Northwest Regional Development Commission. Instructors included Susanne Maeder, Rader and Cialek from LMIC, and David Yapel from the ARDC. A total of 38 attended the general session, many of whom were students taking advantage of the opportunity; ten stayed for the hands-on exercise and four (potential project contributors) participated in an afternoon metadata writing session.

Maeder has provided considerable follow-up contact with workshop participants who are collecting and documenting water-quality monitoring and watershed data. In particular, some participants are involved in water quality monitoring partnerships with the Minnesota Pollution Control Agency. They are required to submit data to the MPCA for entry into the EPA's STORET water quality database, which has its own documentation requirements. Part of the issue that needs to be resolved for these participants is separating geographic metadata suitable for the Minnesota Geographic Data Clearinghouse from documentation about the water sampling and analysis procedures, which is required by the water monitoring agencies.

Figure 2. Nearly 40 students, faculty and regional GIS specialists attended the February Metadata Workshop in Crookston.

- **Metadata Workshop – RDO Region 6W:** A half-day workshop was held at the Appleton City Hall on April 15, 2005 for five potential project contributors in the Upper Minnesota Valley Regional Development Commission area.

- **Metadata Workshop – RDO Region 6E:** A half-day workshop was scheduled for May 6, 2005 for the Mid-Minnesota Development Commission, but was postponed due to low registration. Project team members held a telephone conference with the region's representative and developed a plan to engage specific GIS specialists in the region (i.e. McLeod County and City of Hutchinson). LMIC staff traveled to Hutchinson on June 7, 2005 to meet with the county GIS staff and RDO representatives to conduct a workshop and discuss city/county/regional metadata collaboration issues.

- **No RDO Region 7E Workshop:** No workshop for the East Central Region was ever conducted. The GIS specialist for that region was laid off shortly after the project's kick-off due to budgetary constraints. The Region engaged the ARDC under contract to fulfill the requirements of the project without bringing on new staff (or even assigning a staff member to handle GIS activities). Metadata for Region 7E therefore, was written by skilled documentation specialists from Duluth.

3. **Outreach:** Early emphasis had been focused on getting announcements, awards and contracts in place and not providing more general outreach. LMIC staff, however, did contact other 2004 CAP award recipients in the state. LMIC staff has provided assistance in helping to develop metadata gathering strategies for the Water Resources Center at the Minnesota State University at Mankato (Cecilia Berg). Staff also conferred early on with RDO Region 5 GIS coordinator, Mary Harris, about her project. The position held by Ms. Harris has since been eliminated due to budget constraints and we have not monitored the status of the Region 5 project further.

In addition to direct contact, LMIC provides access to all updated metadata training resource materials on its web site (http://www.lmic.state.mn.us/chouse/meta_help.html).

4. **New Metadata:** Under the terms of the seed grant contracts, metadata was to be written directly by RDO employees and their local government colleagues, submitted for evaluation and included in the Minnesota Geographic Data Clearinghouse after a LMIC-provided training session. The goal of this project was to generate 100 new metadata records in total.

The following metadata records were written, critiqued and indexed into Minnesota's Clearinghouse (and harvested into GOS) as a direct result of this project:

Arrowhead Regional Development Commission

1. Arrowhead Region JOBZ Sites
2. Duluth, Minnesota, Area Attractions
3. Duluth, Minnesota, Trails
4. Duluth, Minnesota, Pedestrian Generators
5. Duluth, Minnesota, Sidewalk Inventory
6. Superior, Wisconsin, Sidewalk Inventory
7. Aquatic Vegetation for Lake Vermilion
8. Shoreline Substrate for Lake Vermilion
9. Parcels, city of Proctor, Minnesota
10. Koochiching County Parcel Polygons
11. Koochiching County Zoning
12. Future Land Use (Land Use Plan) for Koochiching County
13. Grand Rapids Future Land Use
14. Hermantown, Minnesota, Land Use
15. 2002 North Shore Land Use - Lake Superior, Minnesota
16. North Shore Management Plan Boundary - Lake Superior, Minnesota
17. Ridge Line: North Shore of Lake Superior, Minnesota
18. Gunflint Trail Recreation Points
19. Mesabi Trail Alignment
20. Hermantown Snowmobile Trail Alternatives

East Central Regional Development Commission

21. Central Minnesota Aging Services Planning and Service Area (PSA) Boundaries
22. Senior Nutrition Services: Central Minnesota Aging Services Planning and Service Area (PSA)
23. Aging Statistics for Minority Population: Central Minnesota Aging Services Planning and Service Area
24. Senior Linkage Line Call Volume, Central Minnesota Aging Services Planning and Service Area (PSA)
25. Parcels, Isanti County, Minnesota
26. Parcels - City of Mora, Kanabec County, Minnesota
27. Parcels, City of Sandstone, Pine County, Minnesota
28. Zoning 2002, City of Sandstone, Pine County, Minnesota

Mid-Minnesota Development Commission

29. Original Ditch Maps Georeferenced - Kandiyohi County, Minnesota 2004
30. Original Ditch Maps Georeferenced - Meeker County, Minnesota 2004
31. Original Ditch Maps Georeferenced - Renville County, Minnesota 2005
32. Drainage Ditch Inventory - Kandiyohi County, Minnesota 2004
33. Drainage Ditch Inventory - Meeker County, Minnesota 2004
34. Drainage Ditch Inventory - Renville County, Minnesota 2004
35. Drainage Ditch Watersheds - Kandiyohi County, Minnesota 2005
36. Drainage Ditch Watersheds - Meeker County, Minnesota 2004
37. Drainage Ditch Watersheds - Renville County, Minnesota 2005
38. Road Classification - Kandiyohi County, Minnesota 2004
39. Highway Right of Way - Pipestone County, Minnesota 2005
40. Railroad Right of Way - Pipestone County, Minnesota 2005
41. Original Plat of Town - Ruthton, Pipestone County, Minnesota 2005
42. Section Corners - Meeker County, Minnesota 2005
43. Section Corners - Pipestone County, Minnesota 2005
44. McLeod County Addresses
45. McLeod County Driveways
46. 2003 NAIP Aerial Photos, by Township for McLeod County
47. McLeod County Parks
48. McLeod County Roads

Northwest Regional Development Commission

49. Greater Northwest Emergency Medical Services Primary Service Areas, Minnesota
50. Red River Basin MN Condition Water Quality Monitoring Sites
51. Red River Basin MN Flood Damage Reduction Water Quality Monitoring Sites
52. Red River Basin MN Turbidity TMDL Water Quality Monitoring Sites
53. Red River River Watch Water Quality Monitoring Sites

Upper Minnesota Valley Regional Development Commission

54. Parcels, Big Stone County, Minnesota, May 2005
55. Parcels, Chippewa County, Minnesota, May 2005
56. Parcels, Lac qui Parle County, Minnesota, September 2001
57. Parcels, Swift County, Minnesota, May 2005
58. Parcels, Yellow Medicine County, Minnesota, November 2002
59. Parcels, City of Appleton, Swift County, Minnesota
60. Parcels, City of Benson, Swift County, Minnesota
61. Parcels, City of Clinton, Big Stone County, Minnesota
62. Parcels, City of Dawson, Lac qui Parle County, Minnesota
63. Parcels, City of Graceville, Big Stone County, Minnesota
64. Parcels, City of Granite Falls, Chippewa County and Yellow Medicine County, Minnesota
65. Parcels, City of Madison, Lac qui Parle County, Minnesota
66. Parcels, City of Milan, Chippewa County, Minnesota
67. Parcels, City of Ortonville, Big Stone County, Minnesota
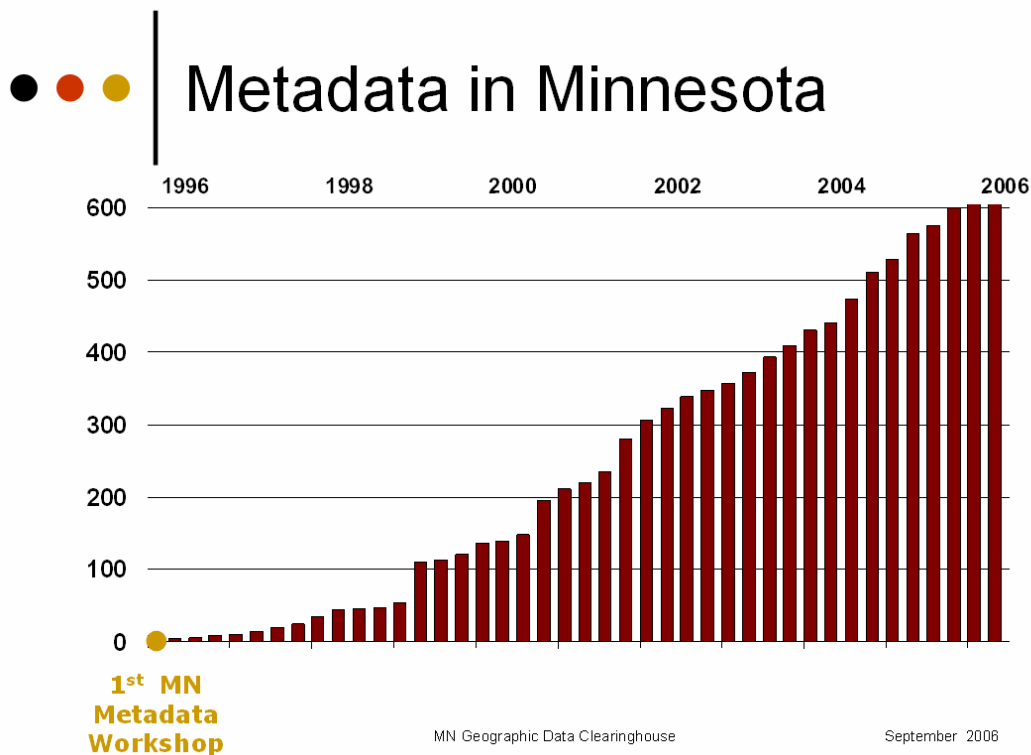
Figure 3. The number of metadata records developed in Minnesota eclipsed 600 as a result of this project.

While LMIC did not meet its stated goal of 100 new metadata records, it did achieve 67 while at the same time dealing with personnel issues at two of the four partner organizations and providing many more metadata record refinement iterations than originally anticipated.

Both the challenges and lessons learned from this effort will lead us to better metadata training and stewardship practices. Hopefully, this project yields a practical template for other organizations around the country to implement formal metadata writing relationships among government units.

Feedback

Challenges Encountered

Several challenges presented themselves during the project:

1. **Loss of Region 7E lead staff:** The proposal from the East Central Regional Development Commission was written by Sarah Morton, a strong supporter of this project as well as the RDO GIS Users Group. It was announced only two months after the project began that Ms. Morton's position at the ECRDC would be eliminated for budgetary reasons. The project team worked with the Commission's Executive Director to develop a way to sustain the project by giving the ARDC a lead role in picking up project responsibilities in the absence of a direct GIS coordinator in the Region.

2. **Other staff changes:** Mr. Scott Conn took another position outside the RDO just as the project was wrapping up. His departure had no negative impact on the results, but does point out the provisional nature of many staff positions in regional planning offices. To emphasize the point, the GIS Coordinator position for Region 5 (not awarded a grant under this effort, but a recipient

of a 2004 FGDC CAP award) changed hands twice during the duration of this project and was ultimately eliminated.

3. **LMIC's budget threatened:** In January, at the beginning of the 2005 legislative session, Governor Pawlenty released a proposed biennial budget that dramatically reduced LMIC's general fund allocation by 75%. According to the Governor's plan, LMIC would have given up all of its software development activities, but retained its Clearinghouse role, albeit at a markedly reduced level. During the session, the Senate and House each passed bills restoring LMIC's budget to considerably different levels.

   The Legislature resolved the discrepancy in Conference Committee and LMIC survived with a 35% budget reduction. The budget issue slowed some project activities, but only delayed the project's completion by two months.

4. **Tackling the contract process.** While essential to the successful outcome of this project, efforts to develop grant contracts with four non-state government entities provided a unique challenge. Developing the appropriate legal language and securing the necessary approvals involved a level of research and coordination beyond what was initially anticipated. To facilitate future efforts, a sample copy of an actual RDO Grant Contract is included in Appendix B.

Benefits

At the same time, engaging RDOs provided a number of significant benefits to the state and the local governments within those regions:

1. **Fostering new relationships:** Before the June 2005 metadata workshop in Hutchinson, Region 6E GIS Coordinator, Rick Moore, and McLeod County GIS Manager Christy Christiensen had never met. The event helped nurture a collaborative relationship between their two organizations.

2. **Nurturing County/State communication:** Early this year, Cialek was invited to speak at a special Commissioners meeting in McLeod County to present how GIS is helping counties and how collaboration with the state is helping both. Since then McLeod is working to fund ambitious data gathering projects with the DNR and FEMA.

3. **Enabling coordination:** Use of federal funds through this CAP award allowed LMIC to visit regions of the state not easily visited in a day's trip, providing the time needed to discuss the technological requirements for developing metadata, but also allowing us to meet regional officials and discuss their needs, concerns, and hopes for collaboration.

RDO Feedback

1. **Troy Schroeder, Region 1.** The NWRDC continues to discuss metadata with the few agencies here that are creating shapefiles and encouraging them to write metadata to support their files. The college has given good response to the workshop held with the GIS class at Crookston. We may continue a short workshop with them on an annual basis.

   The assistance from your office was critical to getting the data documented and I hope those services will continue into the future.

   Time and staffing are factors as to the number of shapefiles and metadata created in this office and by the other GIS affiliates in NW MN. I spoke with the Two Rivers Watershed and they are hoping to get their metadata done this winter. The River Watch program plans to continue documentation of their data, as well. When new data is developed within the NWRDC we'll be sure to provide metadata with those files. I had discussions with local ATV and snowmobile

clubs to GPS trails and provide that information to the public for download into a GPS unit. I'll keep you posted as those activities progress.

2. **Rick Moore, Region 6E.** A training workshop with McLeod County GIS and the City of Hutchinson's GIS staff yielded collaboration between MMDC and the county to submit metadata records together. This was beneficial since MMDC was submitting metadata records for the other three counties in their region. Since McLeod County has their own GIS department, it worked very well to collaborate and get a more comprehensive set of Metadata records for the four county region.

Regarding the Grant experience, I believe the grant went well in terms of getting trained on the techniques and information associated with Metadata records. The workshops and training sessions allowed GIS users in my region to learn about and start documenting their datasets.

Where the project fell short was in the submitting of the metadata records. I know that I submitted my records at a very late date, almost right before the due date. I would suggest in the future that LMIC require a preset number of due dates that would call for us to have a certain number of datasets in at a predefined time. This would help alleviate the onslaught of 80 metadata records at the final due date. It would push me to continually work on the metadata records. It would also help in terms of us getting the metadata records back and fine tuning the records as per your suggestions.

Overall, I am happy with the project and will continue to document my data through the resources and knowledge acquired through this process.

Lessons Learned

1. Staff turnover and brewing financial uncertainty dogged our project throughout. While detriments to its stated objectives, these travails highlight the critical nature of metadata as an organization's institutional memory that is especially vital in maintaining continuity in times of duress.

2. Building the NSDI requires not just the support of local government, but its active participation. At the same time, the value of investing the time and energy in working with federal and state colleagues is not always clear, and certainly not a high priority to local land managers stretched by an ever-increasing number of priorities. Being able to deliver the metadata message while providing resources in the form of small seed grants to local and regional government is crucial in getting their attention and commitment to this critical component of the NSDI strategy.

3. Metadata workshops provide useful information, but even the most interactive sessions tend to offer a somewhat generic and passive learning experience. To thoroughly transfer knowledge on this complex subject, students must learn through writing their own records. The process developed here – 1) provide training, 2) ask students to identify data sets in need of documentation, 3) require students to write metadata, 3) critique and redo, 4) publish, 5) compensate – offered a level of involvement that insisted that students commit to the effort and complete the process successfully.

Appendices

ANNOUNCING PARTNERSHIP GRANTS
For Regional Development Organizations
Partnering with Local Government
In Minnesota
TO CREATE GIS METADATA

Why? It is often said that local governments produce more and better GIS data than any other sector of the user community. Often, however, lack of well-prepared documentation makes that data difficult to manage, support and share. Expensive investments in data can be squandered when key employees leave the organization and take with them detailed knowledge stored only in their heads. Organizations may recognize that they need to document their data, but may not know where to begin.

What? The Land Management Information Center and the Arrowhead Regional Development Commission are working together to help local governments avoid the problems created by undocumented data. A series of competitive seed grants will be announced later this year targeting Regional Development Organizations in partnership with local governments in their regions. These grants will provide resources to learn about and develop standardized data descriptions (metadata) for their most important GIS databases.   The goal is to produce new metadata for at least 100 GIS data sets in 2005.

When? A request for applications will be announced in November. Check LMIC's web site at: *http://www.lmic.state.mn.us* for details.

Who? This grant opportunity is being offered through LMIC in cooperation with the ARDC. Funding is generously provided by the Federal Geographic Data Committee.

Questions? Contact Chris Cialek at *clearing.house@state.mn.us* 651.297.2488 or David Yapel at *dyapel@ardc.org* 218.529.7539.

A portion of a GIS metadata record and browse graphic that adhere to Minnesota standards.

STATE OF MINNESOTA
GRANT CONTRACT

This grant is between the State of Minnesota, acting through its commissioner of the Department of Administration ("State") and the Mid-Minnesota Regional Development Commission; 333 SW Sixth Street, Suite 2; Willmar, MN 56201 ("Grantee").

Recitals

1. Under Minn. Stat. § 4A.04 the State is empowered to enter into this grant.
2. The State is in need of developing expertise and disseminating information regarding state data documentation standards that constitute best practices for information sharing among all levels of government and the private sector in Minnesota.
3. The Grantee represents that it is duly qualified and agrees to perform all services described in this grant contract to the satisfaction of the State.

Grant Contract

1   Term of Grant Contract

1.1 *Effective date*: February 4, 2005 or the date the State obtains all required signatures under Minnesota Statutes Section 16C.05, subdivision 2, whichever is later.
The Grantee must not begin work under this grant contract until this contract is fully executed and the Grantee has been notified by the State's Authorized Representative to begin the work.

1.2 *Expiration date*: September 15, 2005 or until all obligations have been satisfactorily fulfilled, whichever occurs first.

1.3 *Survival of Terms*. The following clauses survive the expiration or cancellation of this grant contract: 8. Liability; 9. State Audits; 10. Government Data Practices and Intellectual Property; 13. Publicity and Endorsement; 14. Governing Law, Jurisdiction, and Venue; and 16 Data Disclosure.

2   Grantee's Duties

The Grantee, who is not a state employee, will perform the duties specified in Exhibit A, which is attached and incorporated into this grant contract.

3   Time

The Grantee must comply with all the time requirements described in this grant contract. In the performance of this grant contract, time is of the essence.

4   Consideration and Payment

4.1 *Consideration*. The State will pay for all services performed by the Grantee under this grant contract as follows:

(1) *Compensation.* The Grantee will be paid $1,000.00 at time of grant execution; $1,500.00 upon receipt of draft metadata records supplied by Grantee; and $1,250.00 upon successful evaluation and inclusion of Grantee supplied metadata into the Minnesota Geographic Data Clearinghouse.

(2) *Travel Expenses*. N/A

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Minnesota Land Management Information Center
Appendix B – *RDO Grant Contract*

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(3) **Total Obligation.** The total obligation of the State for all compensation and reimbursements to the Grantee under this grant contract will not exceed $3,750.00 .

4.2. *Payment*

(1) **Invoices.** The State will promptly pay the Grantee after the Grantee presents an itemized invoice for the services actually performed and the State's Authorized Representative accepts the invoiced services. Invoices must be submitted timely and according to the following schedule:
   - Initial invoice requesting $1,000.00 after receipt of a fully executed grant agreement.
   - Invoice describing expenses incurred for all appropriate work leading to the delivery of draft metadata records to State and not to exceed $1,500.00
   - Final invoice requesting $1,250.00 after all metadata records have been received and evaluated by the State, corrected as needed by the Grantee and included into the Minnesota Geographic Data Clearinghouse.

(2) **Federal funds.** Payments under this grant contract will be made from federal funds obtained by the State through the U.S. Department of the Interior Assistance Award number 04HQAG0153; CFDA number 15.809 of Executive Order 12906; 43 USC 31 et seq. The Grantee is responsible for compliance with all federal requirements imposed on these funds and accepts full financial responsibility for any requirements imposed by the Grantee's failure to comply with federal requirements.

5   Conditions of Payment

All services provided by the Grantee under this grant contract must be performed to the State's satisfaction, as determined at the sole discretion of the State's Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Grantee will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.

6   Authorized Representative

The State's Authorized Representative is Christopher Cialek; Geographic Information Supervisor; 300 Centennial Office Building; 658 Cedar Street; St. Paul, MN 55155; 651.297.2488, or his successor, and has the responsibility to monitor the Grantee's performance and the authority to accept the services provided under this grant contract. If the services are satisfactory, the State's Authorized Representative will certify acceptance on each invoice submitted for payment.

The Grantee's Authorized Representative is Rick Moore; GIS Planner; 333 SW Sixth Street, Suite 2; Willmar, MN 56201; 320.235.8504; extension 31. If the Grantee's Authorized Representative changes at any time during this grant contract, the Grantee must immediately notify the State.

7   Assignment, Amendments, Waiver, and Grant Contract Complete

7.1 *Assignment.* The Grantee may neither assign nor transfer any rights or obligations under this grant contract without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this grant contract, or their successors in office.

7.2 *Amendments.* Any amendment to this grant contract must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original grant contract, or their successors in office.

7.3 *Waiver.* If the State fails to enforce any provision of this grant contract, that failure does not waive the provision or its right to enforce it.

7.4 *Grant Contract Complete.* This grant contract contains all negotiations and agreements between the State and the Grantee. No other understanding regarding this grant contract, whether written or oral, may be used to bind either party.

8   **Liability**
The Grantee must indemnify, save, and hold the State, its agents, and employees harmless from any claims or causes of action, including attorney's fees incurred by the State, arising from the performance of this grant contract by the Grantee or the Grantee's agents or employees. This clause will not be construed to bar any legal remedies the Grantee may have for the State's failure to fulfill its obligations under this grant contract.

9   **State Audits**
Under Minn. Stat. § 16C.05, subd. 5, the Grantee's books, records, documents, and accounting procedures and practices relevant to this grant contract are subject to examination by the State and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this grant contract.

10   **Government Data Practices and Intellectual Property**
10.1. *Government Data Practices*. The Grantee and State must comply with the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13, as it applies to all data provided by the State under this grant contract, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Grantee under this grant contract. The civil remedies of Minn. Stat. § 13.08 apply to the release of the data referred to in this clause by either the Grantee or the State.

If the Grantee receives a request to release the data referred to in this Clause, the Grantee must immediately notify the State. The State will give the Grantee instructions concerning the release of the data to the requesting party before the data is released.

10.2. *Intellectual Property Rights*
Metadata supplied by the Grantee under the terms of this contract remain the property of the authoring organization. Although those metadata records will be made available through the Minnesota Geographic Data Clearinghouse, they may be modified by the Grantee or an organization authorized by the Grantee at any time in the future.

11   **Workers' Compensation**
The Grantee certifies that it is in compliance with Minn. Stat. § 176.181, subd. 2, pertaining to workers' compensation insurance coverage. The Grantee's employees and agents will not be considered State employees. Any claims that may arise under the Minnesota Workers' Compensation Act on behalf of these employees and any claims made by any third party as a consequence of any act or omission on the part of these employees are in no way the State's obligation or responsibility.

12   **Publicity and Endorsement**
12.1 *Publicity*. Any publicity regarding the subject matter of this grant contract must identify the State as the sponsoring agency and must not be released without prior written approval from the State's Authorized Representative. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Grantee individually or jointly with others, or

any subcontractors, with respect to the program, publications, or services provided resulting from this grant contract.

12.2 *Endorsement*. The Grantee must not claim that the State endorses its products or services.

13   Governing Law, Jurisdiction, and Venue

Minnesota law, without regard to its choice-of-law provisions, governs this grant contract. Venue for all legal proceedings out of this grant contract, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

14   Termination

The State may cancel this grant contract at any time, with or without cause, upon 30 days' written notice to the Grantee. Upon termination, the Grantee will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.

15   Data Disclosure

Under Minn. Stat. § 270.66, and other applicable law, the Grantee consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state tax agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state tax laws which could result in action requiring the Grantee to file state tax returns and pay delinquent state tax liabilities, if any.

1. STATE ENCUMBRANCE VERIFICATION

Individual certifies that funds have been encumbered as required by Minn. Stat. " 16A.15 and 16C.05.

Signed: _____

Date: _____

CFMS Grant contract No. A-_____

2. GRANTEE

The Grantee certifies that the appropriate person(s)
have executed the grant contract on behalf of the Grantee as
required by applicable articles, bylaws, resolutions, or ordinances.

By: _____

Title: _____

Date: _____

By: _____

Title: _____

Date: _____

3. STATE AGENCY

By:
_____
     (with delegated authority)
Title:
_____

Date:
_____

Applicant Organization:
Mid-Minnesota Development Commission
333 SW Sixth Street, Suite 2
Willmar, MN 56201
http://www.mmrdc.org

Probable Collaborating Organizations:
Meeker County
325 N Sibley Avenue
Litchfield, MN 55355

Kandiyohi County
400 SW Benson Avenue
Willmar, MN 56201

Renville County
500 E. DePue Avenue
Olivia, MN 56277

Pipestone County
416 S. Hiawatha
Pipestone, MN 56164

Key Project Contact:
Rick Moore
GIS Planner
(320) 235-8504 ext. 31
(320) 235-4329 Fax
rick.moore@mmrdc.org

Officer Authorized to Sign Contract:
Donn Winckler
(320) 235-8504
(320) 235-4329 Fax
donn.winckler@mmrdc.org

Other Contact Personnel:
Matt Johnson
(320) 235-8504 ext. 39
(320) 235-4329 Fax
communityplanning@tds.net

Goal Statement:
Mid-Minnesota Development Commission strongly supports the creation of metadata for Geospatial data created by this organization and the organizations that this commission supports. We strongly encourage our organizations to document their hard work and commitment to GIS by producing metadata so that future organizations can benefit from their knowledge, expertise, and resources. Our goals are to document our data that has been produced to this point and to train those organizations creating the data sets. By training these organizations, we hope to build a partnership that shares data through metadata search catalogs. This will help eliminate repetitive and redundant data creation in our four counties and beyond.

Plan of Action:

The plan of action for our grant money encompasses many different phases of the project. We would like to focus our timeline on those training sessions that we would be serving to our participating organizations. The following timeline shows how we would set out the goals of the project.

March 2005 – Kickoff Newsletter to all counties, cities, townships and organizations that create or use GIS data sets within their organization. This newsletter would contain information on what Metadata is, how it can be used, how important it is to their organization, and how they can go about getting free training and software to help in this endeavor.

April, May, & June 2005 – Offer a training sessions in each of our four counties at locations within their county. This will help alleviate travel times for those city and county employees who would like to attend. The training sessions would be conducted in computer labs in the county courthouse or within an organization that can accommodate a computer lab. A fifth training session would be conducted in Willmar and would encompass all those organizations that could neither attend the one in their county or organizations that don't fall within the county format, such as watershed districts or region wide organizations.

July & August 2005 – Offer a work session for those organizations that took the initiative and wanted to create metadata record for some of their data sets. This work session would allow them to bring all their information and questions together and as a group and work out some of the issues they had. It would help them complete the data sets before the August 15, 2005 completion date. These work sessions would also let each organization share what worked for them and this may help others in their creation of their data sets.

February – August 2005 – As an organization, Rick Moore would work on the data sets listed within this document and work towards a completion data of August 15, 2005. This would be an ongoing project due to the creation of the data at the same time.

In conducting the workshops, Rick Moore would follow a similar training program he saw at the Metadata workshops. The resources handed out at the workshop would be used with the permission of LMIC, Chris Cialek, and Nancy Rader. The free program Datalogr would be handed out at the workshop on a disk or CD.   A separate webpage would be added to our website to contain all the links necessary to help with the training and completion of the project. Links to LMIC and other organizations that offer Metadata information would be added so that the participating organizations have one location to look to find information and to ask questions.

Partner Organizations:

Meeker County
Ron Mortenson and Paul Virnig
325 N Sibley Avenue
Litchfield, MN 55355

Renville County
Gail Miller
500 E. DePue Avenue
Olivia, MN 56277

Kandiyohi County
Jeff Bredberg
Gary Danielson
400 SW Benson Avenue
Willmar, MN 56201

Pipestone County
Kyle Krier
416 S. Hiawatha
Pipestone, MN 56164

Data Sets:

Meeker County   Drainage Ditch Inventory
                 Georeferenced Ditch Paper Maps
                 Drainage Ditch Watershed Viewer Maps
                 Level II Feedlot Inventory Shapefile
                 County Wide Parcel Map
                 County Wide GPS Section and Half Section Corner Point Shapefile

Kandiyohi County   Drainage Ditch Inventory
                        Georeferenced Ditch Paper Maps
                        Drainage Ditch Watershed Viewer Maps
                        County Road Classification Maps with County Numbering System
                        Level II Feedlot Inventory

Pipestone County County Wide Parcel Map Shapefile
                 Ruthton Original Plat Map with lots Shapefile
                 Pipestone Railroad Right of Way Shapefile
                 Pipestone Highway Right of Way Shapefile
                 County Wide Section Corners Shapefile based on Surveys and PLS

Renville County Renville County Tillable Acres Shapefile
                 Other Data Sets that will be determined at later date.

Organizations Ability and Qualifications:

Mid-Minnesota Development Commission has been working with the four counties of Kandiyohi, Meeker, McLeod, and Renville since its inception. GIS has long been a part of the organization and the partnerships between these counties has been strong. The trust between these entities is shared and the need for continued partnering is there. Because of this, Rick Moore, the GIS Planner, has attended the "Don't Duck Metadata" Workshop presented by Chris Cialek and Nancy Rader in Staples, MN. Use of Datalogr and ESRI's ArcCatalog are available to him to produce the necessary metadata records. Another benefit from attending this workshop is that Rick Moore can train individuals on how to create a metadata record at their workstation. Rick Moore has been a teacher both at the High School and College level specifically in geography and GIS. His knowledge of GIS and his training in metadata creation will benefit in creating the metadata records. He can also teach small or large groups in how to document their data using the software Datalogr and ArcCatalog.

Grant Money Use and Matching Resources:

The grant money received for this project will be used equally between the training of the participating organizations and the creation of the metadata data sets. Many of the shapefile layers that are having metadata created for them have grant money or contract money that can be used to help pay for the time needed to complete them. A secondary use of the metadata grant money then will be applied to smaller data sets that were not included in the larger list of data sets. In terms of the training, I would like to hold four individual training sessions (either my time or contracted through LMIC) to help train GIS users and creators in each of the four counties. An invitation will also be sent to any other organizations within our four counties, such as cities or organizations that would like to attend a fifth training session for them. This will serve two purposes. One purpose will be to introduce those organizations to metadata training and the second purpose will be to introduce them to our office and services we have available.

Commitment to Metadata Program:

Rick Moore has attended the "Don't Duck Metadata" Workshop in the summer of 2004 and brought back to our organization all the tools necessary for continuing a metadata program. We, as an organization, know how important it is to document our data with the necessary information that future users of the data can piece together how it was created. We have learned from past experience that it is so important to document your work and explain to the possible users of your data what it means, where it came from and how it was created. Therefore, we as an organization, have placed into policy within the GIS department, a requirement that any new data sets created must contain a metadata record. This helps the GIS department document their work and also helps those organizations that we are doing work understand how their data came into being. It is an essential component to any data set creation. Our commitment to metadata shows through especially in requesting grant money to launch a metadata program within our four-county region. At the completion of the grant project, we will host on website a list of each metadata record created and a way to contact each organization that has ownership of that data set.

END OF EXHIBIT A

Minnesota Geographic Metadata Guidelines
Workshop Evaluation Responses
February 28, 2005

Please complete this survey and help us improve future workshops

Region 1: North West Regional Development Commission
University of Minnesota at Crookston

Attendance:
28 names are listed on the sign up sheet. Not all morning attendees signed in, however. Based on handout packets distributed, it is estimated that a total of 38 attended that session.
10 attended the late morning session, and 4 participated in the afternoon metadata writing exercise.

22 evaluations were returned.

1. I attended the following session(s) *(circle all that apply)*

8:00 – 10:00 am introduction	10:00 – noon exercise	afternoon metadata writing session
22	**10**	**4**

2. How useful was this workshop to you? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
8	**12**	**2**	**0**	**0**

3. Were the presentations clear and effective? *(circle one)*

very clear	clear	uncertain	not very clear	not at all clear
11	**8**	**3**	**0**	**0**

Hard at times to follow because of stories. However, some stories are good.

4. How would you rate the quality of the handouts and other presentation materials? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
14	**7**	**1**	**0**	**0**

5. What other information do you need to know about creating or using metadata?

Session 1 only:
- *Information provided in this first session was very informative. As a student currently in GIS, the session has provided information that can be applied in class. No other information comes to mind.*
- *I'm just using GIS for the first time so I need lots more info.*
- *I believe that it would have helped if I could have stayed for the exercise and actually have application practice. I think that would have been very useful to me.*

All morning:
- *None. At this point I just need to practice.*
- *How to apply the information.*
- *I don't know yet.*
- *None at this time.*
- *May have comments in the future.*
- *Not sure yet.*

Full workshop:
- *I'll know as metadata is being created. Additional help will be needed to correctly assemble the data sets.*
- *I probably won't know until I start writing metadata.*
- *How to get someone else to do it.*

6. Do you have any other comments about this workshop?

Session 1 only:
- *Very well put together! Thank you for all your information!*
- *Presenters were understood and very helpful.*
- *This workshop is very helpful for my future GIS work.*
- *I wish I had more training in GIS before the workshop. I felt lost, but I think it's because I don't have the background yet.*
- *It was interesting to know about this. This is my second GIS class and I have worked with the Forest Service with GIS and have never known about metadata. It makes a lot of sense to have metadata.*

All morning:
- *Good workshop to get me started.*
- *Good for professionals; maybe not the students at UMC.*
- *Much appreciated.*
- *The hands-on material really helped.*
- *Gained a decent handle on Metadata editing and creation. Clear introduction . . . Thanks.*
- *I am sure this will be useful when I start using GIS in my field.*

Full workshop:
- *Good informal discussion. Learned lots.*
- *Staff very helpful in clarifying the needed information in data sets*

Please complete this survey and help us improve future workshops

Region 6W: Upper Minnesota Valley Regional Development Commission
City of Appleton, Minnesota

1. How useful was this workshop to you? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
2	**3**			

2. Were the presentations clear and effective? *(circle one)*

very clear	clear	uncertain	not very clear	not at all clear
3	**2**			

3. How would you rate the quality of the handouts and other presentation materials? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
3	**2**			

4. What other information do you need to know about creating or using metadata?

None at this time.

5. Do you have any other comments about this workshop?

Very informative – complete and helpful.
Very informational – good to know this information is out there and easy to get.
Thank you for your time and effort. Very helpful and understandable.
Thank you for coming out to rural Minnesota!
Nice job on the workshop. I will do my best.

Session Evaluation

June 7, 2005
1:00 – 5:30 pm
Mid-Minnesota RDO
Hutchinson Event Center
Hutchinson, MN

1.   How useful was this session to you? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
3	**1**			

2.   Was the material presented clearly? *(circle one)*

very clear	clear	uncertain	not very clear	not at all clear
3	**1**			

3.   How would you rate the quality of the handouts and presentation materials? *(circle one)*

very useful	useful	uncertain	not very useful	not at all useful
4				

4.   What other information do you need to know about creating or using metadata?

- *Metadata is in process and* [we] *just need feedback to content*
- *Nodes: (I don't need to worry about that)*

5.   Do you have any other comments about this session?

- *The Minnesota guidelines will be very helpful as there is much less seemingly redundant data. I like the more simplified version.*
- *Great Discussion. We need this in outstate!*
- *Partnerships! Key to success. The Raster Project Utility* [on the fly coordinate conversion for esp. county coordinates] *would be a great partnership effort. After that partnership is developed, the LIDAR/DEM would be great (huge, but great).*

CAP 2004 Metadata Outreach Proposal: Minnesota Land Management Information Center; ORGN: 7377
Regional Development Organizations: Bridges linking state and local government to improve metadata coordination 9/13/2004 - 11/30/2005
FINAL ACCOUNTING   September, 2006

Object Class Category	Staff	Rate	BUDGETED % Time	Hours	Grant Sub Totals	Grant Class Total	ACTUAL GRANT Actual Hours 2005	Actual Charge 2005	Actual Class Total 2005	Actual Hours 2006	Actual Charge 2006	Actual Class Total 2006	ACTUAL CLASS TOTAL	ACTUAL IN-KIND InKind Hours	InKind Charges
Personnel	GI Supv		0.0%	0	$ -									165	$ 6,039
	RASS		4.0%	83.2	$ 2,461		55	$ 120		120	$ 4,375			151	$ 4,467
	RAS		5.0%	104	$ 2,273					162	$ 3,614			135	$ 2,951
	RA		0.0%	0	$ -										
	Director		0.0%	0	$ -										
	ARDC		0.0%	0	$ -	$ 4,734			$ 120			$ 7,989	$ 8,109		
Fringe	GI Supv		0.0%	0	$ -									165	$ 1,619
	RASS		4.0%	83.2	$ 759		55	$ 32		120	$ 1,135			151	$ 1,377
	RAS		5.0%	104	$ 495					162	$ 727			135	$ 644
	RA		0.0%	0	$ -										
	Director		0.0%	0	$ -										
	ARDC		0.0%	0	$ -	$ 1,254			$ 32			$ 1,862	$ 1,894		
Travel															
Kick-off (Denver, CO; 9/27-29/04, Rader)															
airfare								$ 265							
expenses								$ 335							
RDO GIS Users (St. Cloud; 10/21; Cialek)								$ 61							
Region 1 Workshop (Crookston; 02/28/05)															
Cialek								$ 402							
Rader								$ 213							
Maeder								$ 334							
Region 6W Workshop (Appleton; 04/15/05)															
Cialek								$ 82							
Rader								$ 215							
Region 6E Workshop (Hutchinson; 06/07/05)															
Cialek								$ 10							
Rader						$ 2,400		$ 68	$ 1,964			$ -	$ 1,964		
Supplies	Fedex					$ 1,000		$ 13	$ 13			$ -	$ 13		31
Contractual															
Grants		$ 3,750.00	4		$ 15,000										
Initial payment: $1000 ea. (02/22/2005)								$ 4,000							
Second payment $1500															
Third payment ($1250)															
ARDC Salaries		$ 37.08													
2.1 RFP Development					$ 500						$ 6,000				
2.2 Proposal Evaluation					$ 500						$ 5,000				
2.3 Awardee Administration					$ 500										
2.4 Non-Awardee Training					$ 500										
2.5 Metadata Evaluation					$ 500										
2.6 Final Report					$ 200										
					$ 300										
ARDC Travel				ARDC Total	$ 3,000			$ 4,000			$ 3,000				
						$ 18,000			$ 4,000			$ 14,000	$ 18,000		
Other	Printing				$ 712										
	Lab Rental				$ 1,000										
	Misc				$ -	$ 1,712									
Indirect						$ 900									
Total						$ 30,000		$ 6,149			$ 23,851		$ 30,000		$ 17,127