

JUL 06 1999

1997 Project Abstract

For the Period Ending June 30, 1999

Funding for this project approved by the Minnesota Legislature ML 1997, Ch. 216, Sec. 15, Subd. 11(b) as recommended by the Legislative Commission on Minnesota Resources from the Minnesota Future Resources Fund.

TITLE: Public Access to Archaeological Knowledge

PROJECT MANAGER: Beth Nodland

ORGANIZATION: Institute for Minnesota Archaeology

ADDRESS: 287 E. Sixth St., Suite 260, St. Paul, MN 55101

WEB SITE ADDRESS: www.fromsitetostory.org

LEGAL CITATION: ML 1997, Ch. 216, Sec. 15, Subd. 11(b)

APPROPRIATION AMOUNT: \$200,000.00

Statement of Objectives

The new "*From Site to Story*" web site presents a body regional archaeological and environmental information that has been assembled over the last hundred years in Minnesota. Within the web site a visitor explores three archaeological areas along the Mississippi River: the Northern Headwaters Region, the Twin Cities Metro Area, and the Red Wing Locality, traveling "from site to story" using state-of-the-art Internet technology to access photos, maps, illustrations, and scientific data, while at the same time enjoying archaeologists' interpretations of the people and times of long ago. The site also provides the public with searchable bibliographies of archaeological and environmental publications, information on the geography and topography of Minnesota, facts about doing archaeology in Minnesota today, and links to important archaeology web sites.

Overall Project Results

This project launched a unique public resource that presents data for the first time to audiences world-wide. Feedback from users and reviewers nationwide has been enthusiastic. The web site is used by those seeking knowledge of Minnesota's cultural history; agency staff and site managers who need reliable information about the relevance of archaeological areas under their care; and local museums and heritage organizations wanting to develop accurate and compelling exhibits and public programs. This project makes accessible much-needed information to students wanting to use real data in research projects, including artifact tables, archives of photographs and illustrations, and site analyses. Until now, this data has lied buried in technical reports, academic papers, and historic accounts. This site has become a venue for professional organizations and individuals, who are committed to sharing up-to-the-minute information with the public, but who lack an appropriate vehicle. It has energized the archaeological community to participate in the sharing of information in a new and accessible way.

Project Results Use and Dissemination

The web site is accessible to all via the Internet. The site offers in-depth materials for downloading for further study. In addition to posting on the major search engines, related list-serves, and targeted electronic marketing, a full-color brochure was mailed to over 2,000 individuals and organizations throughout Minnesota and across the United States. The site has already been linked by many institutions, including national parks, governmental agencies, universities, and historical organizations. The web site address is: www.fromsitetostory.org.

JULY 1, 1999

LCMR FINAL WORK PROGRAM UPDATE REPORT

from the
INSTITUTE FOR MINNESOTA ARCHAEOLOGY

DATE OF REPORT: July 1, 1999

DATE OF NEXT STATUS REPORT:

DATE OF WORK PROGRAM APPROVAL: June 24 and 25, 1997

PROJECT COMPLETION DATE: June 30, 1999

LCMR WORK PROGRAM 1997

I. PROJECT TITLE: Public Access to Archaeological Knowledge

Project Manager: Beth Nodland & Rhoda Gilman
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TOTAL BIENNIAL PROJECT BUDGET: \$200,000

A. LEGAL CITATION: ML 97, Ch. 216, Sec. 15, Subd. 11(b)

PUBLIC ACCESS TO ARCHAEOLOGICAL KNOWLEDGE:	\$200,000.00
Amount invoiced as of July 1, 1999:	<u>\$200,000.00</u>
Balance Remaining:	\$ 0.00

This appropriation is from the Future Resources Fund to the Minnesota Historical Society for an agreement with the Institute for Minnesota Archaeology to enhance and provide public electronic access to regional archaeological data that have been acquired or maintained with public money.

B: STATUS OF MATCH REQUIREMENT: N/A

II. PROJECT SUMMARY AND RESULTS:

This project will enhance and distribute a body of unpublished and unavailable regional archaeological information that has been assembled over the last twenty years in Minnesota, largely by the Minnesota Department of Transportation (MnDOT). This pilot project will use state-of-the-art electronic and Internet technology for distribution of project results.

"Enhancing Public Access to Archaeological Knowledge" will focus on three areas of Minnesota along the Mississippi River: the Headwaters region, the Twin Cities metro area, and the Red Wing Locality. Products of the project will include archaeological and environmental information, including primary data on artifacts, archives of photographs and illustrations, and site analyses. The products will benefit educators seeking current knowledge of Minnesota's cultural history; agency staff, and site managers who need concise, readable, and reliable information about the history, nature, context, and relevance of archaeological areas under their care; and local museums and heritage organizations wanting to develop accurate and compelling exhibits and public programs. This project will make accessible much-needed and insightful information on Minnesota archaeology to the public and to students wanting to use real data in research projects. Electronic formatting will allow data to be downloaded for further study and manipulation, or to be revised to include new information at a later date.

III. PROGRESS SUMMARY - JULY 1, 1999:

FINAL PROGRESS SUMMARY

We are pleased to report the completion of the "Enhancing Public Access to Archaeological Knowledge" project. All phases of the project have been accomplished, and the web site has been launched under the name "From Site to Story: The Upper Mississippi's Buried Past." Its Internet address is: www.fromsitetostory.org. The web site will continue into perpetuity as an important IMA project, and will be maintained and expanded with information and new resources.

Each of the three phases was completed as follows:

PHASE I INVENTORY AND ASSESSMENT (\$29,354.36 - \$29,354.36 = BALANCE \$0.00) COMPLETED 10/30/98

- All hardware, software, and internet-related technologies were identified, acquired and incorporated. After consultation with electronic specialists, the Project Team determined that it is more practical and economically feasible to lease domain space through a local Internet hosting service, rather than to purchase an Internet server and contract for maintenance and technical services into perpetuity. A commercial service also provides the ongoing technical expertise that a site of this magnitude and

complexity requires. In addition, the cost of direct access to the Internet is prohibitive, compared to the relatively lesser expense of leasing space through a service.

- We received substantial professional support and encouragement from the archaeological and heritage communities. In fact, we were able to include significantly more detailed information, more relevant site reports, and many more archive visuals and graphics than previously imagined. In addition, we enjoyed the participation and contributions of several organizations and individuals with whom we had not previously collaborated. These participants contributed ideas, time, and materials to the success of the project, and many have committed to continuing to help improve and maintain the site as a key resource.

PHASE II MATERIALS PREPARATION (\$90,096.64 - \$90,096.64 = BALANCE \$0.00)
COMPLETED 4/30/99

- Once we were well into the materials preparation, the actual content of the web site presented some special challenges. The archived technical reports that this web site is designed to interpret are maintained in separate locations from the physical data they discuss. Like the reports, these materials are also in scattered and relatively inaccessible archives. Often the reports contain poor graphics, photocopies, and maps, and, as a result, it was necessary to go to the original artifacts and field notes. In the end, some of the chosen content did not lend itself to quality presentation. As a result, in the final months of the Materials Preparation phase, the Project Team found it was necessary, in some cases, to choose other sites for the "stories" and to seek more appropriate content. This in turn, required additional time for identifying, locating, and digitizing graphics, maps, and database information relating to the new material. In some cases Team members were required to travel out-state to borrow, access, or discuss materials that were needed to support the "stories." Thus, content writing and editing took much longer than projected. The Web Master in turn was delayed in launching a pilot review site for testing, comment, and evaluation. In hindsight, the materials production schedule should have been completed much earlier to allow for such a possibility.
- Two additional Advisory Board meetings were held, as well as numerous individual meetings, telephone conferences, and consultations with Board members. Members' recommendations and contributions were solicited and incorporated. Although several members were less active, other Advisory Board members participated in drafting and editing materials for the site including Scott Anfinson, Mark Dudzik, Jim Jones, and Rhoda Gilman. In the end we very much appreciated the guidance, participation, and contributions of the Minnesota Indian Affairs Council representative, Mr. Jim Jones.
- Unrelated organizational restructuring, unexpected business duties, and an office move created delays and project timeliness and oversight problems. A volunteer project co-manager stepped up and adjustments were made. The January work program update

was not filed, instead a meeting was held in the LCMR staff offices. In hindsight, a full-time project manager should have been hired immediately to oversee the continuation of the project.

- In addition to many other publishing organizations, the Minnesota Archaeological Society (MAS) granted permission for the placement of several of their publications on the "From Site to Story" web site. This new material will greatly enhance the resources of the site.

PHASE III DISSEMINATION (\$34,300.00 - \$34,300.00 = BALANCE \$0.00)
COMPLETED 6/30/99

- The Project Staff and Electronic Specialists acquired the software and electronic lists necessary for advertising and global listing of the site. The site will be found on all major search engines, and the most popular listings of related sites. We have broadcast to all major related web sites requesting linkage on their "links" pages. A full color brochure was designed and produced for advertising the web site through the mail to all nationally recognized tribal groups; Minnesota historical societies, museums, and research centers; parks and land managers; educators and students; nation-wide universities; humanities and heritage organization members; Minnesota press; IMA Friends, foundation and corporate entities, colleagues, and volunteers; LCMR staff, Advisory Board, and legislators; and cultural resource management firms throughout Minnesota and across the United States.
- Project Leaders and Advisory Board disseminated information throughout the state, region, and nation at conferences and meetings, including the annual Society for American Archaeology Conference, The River of Dreams: Humanities and the Upper Mississippi River Conference, and the Fillmore Mississippi Heritage Conference; as well as many other professional meetings, including those of the World Archaeology Congress, Council for Minnesota Archaeology, and heritage related list-serves.
- Numerous organizations and agencies have already created links on their own web sites to the "From Site to Story" web site. These sites include, among many, the Chippewa National Forest, The Mississippi National River and Recreation Area, and Mankato State University's Department of Anthropology. The IMA anticipates a major increase in the number of linking web sites in the very near future as a result of our mail broadcast asking for this consideration.
- It was determined that CD-ROM copies of the information available on the web site would be produced for distribution upon request to those who do not have Internet access. However, the Team recognizes that it must first resolve several issues surrounding various copyright limitations that apply to elements of the software that are legally licensed for use on personal computers or the web site, but are problematic when copied for distribution.

- The Project Team continues to monitor and evaluate the success of the site and respond to inquiries. Statistical tracking and analysis software is tracking the origins, numbers, navigational choices, and details of visits to the site. A report will be forwarded after the first formal evaluation.
- The web site will be an important ongoing program of the IMA and its partners. Additional funding is currently being sought from many sources including private corporations, heritage preservation organizations, governmental agencies, and the National Endowment for the Humanities. Other sources of additional funds are being researched for development of specific areas. Several agencies have expressed interest in expanding our coverage to include areas of the Mississippi River watershed such as the Little Falls and Lake Mille Lacs areas, and the St. Cloud area. Others have encouraged us to pursue focus areas in the Minnesota River Valley.

PROGRESS SUMMARY - JULY 15, 1998:

Phase II - Materials Preparation

- First, we are pleased to report, nearly every "Phase I" element reported as unfinished in the January 1998 Work Program Update, has now been completed: 1) inventory and assessment of the three areas has been completed, and a mechanism for updating the database files on a quarterly basis has been determined; 2) consultation with an environmental specialist occurred and an environmental database has been finished; 3) the Outside Readers have completed their investigations of the available data resources; and 4) a basic framework for the web has been developed, the web site host service and equipment have been contracted for, and database management software has been chosen and is currently being tested for compatibility with our project.
- As the project has moved forward we have been able to determine that the remaining unfinished elements from Phase I more likely should have been scheduled for Phase II, and will follow more appropriately after the specific archaeological sites and story concepts have been determined. The GIS and mapping work could not proceed until those choices were made, as is also the case with the collection or production of photos, illustrations, which will follow more appropriately after the specifics are chosen.
- The second phase of the project began with the investigation and development of mechanisms to link multiple databases and textual information, both archaeological and environmental. In addition to the databases completed by our teams of Outside Readers, we became aware that two archaeological databases that held much of the same information were available at the State Historic Preservation Office (SHPO). We were greatly appreciative that these databases were made available to this project, (with certain prudent limitations, such as precise location information,) and this contribution greatly speeded the development of our project. In addition to the data

available on the SHPO databases, which include site and compliance report information, our inventories supplement that information with unpublished, literary, academic, and non-compliance cultural data, as well as environmental data. In addition, as a result of this collaborative effort, a more complex design is necessary for incorporating multiple databases, graphics, and narrative information, and will require a more complex framework. This, of course, also requires greater web design expertise and experimentation.

- The Computer Staff investigated all technical aspect of the project, i.e., database compatibility, search mechanisms, and web page construction. The necessary equipment and services were identified, i.e., host servers, software programs. Technical registrations were completed, i.e., domain name and address. A behind-the-scenes web management page was developed to enable the Project Staff, Advisory Committee, and many others to view the web site as it develops and to make comments, suggestions, and contributions.
- The initial web site has been housed on a local host server that is capable of supporting such a complicated web site. The Project Leaders have determined that it will be wiser to lease space on state-of-the-art equipment until next year when the long-term equipment needs of the projects will be better understood. The project staff has met with Communications Experts to ensure Web accessibility and will continue to coordinate with specialists in each area of responsibility.
- The Computer Specialist worked together with Dr. Howard Mooers, of the Department of Geology, University of Minnesota - Duluth, to create a database of paleo-environmental information that is compatible with the archaeological and cultural materials that will be available on the web site.
- The Staff Writers and Editors continue to update inventory lists, database materials, summaries, and reports, continue to winnow and refine the archaeological and environmental data, and continue to communicate their findings. As mentioned, the bulk of the information has been collected, with the exception of photos, illustrations, artifact drawings and maps. A new Regional Specialist from the Headwaters area, Mr. David Kluth, has been contracted through the Leech Lake Tribal Historic Preservation Office. Mr. Kluth drafted the first of the preliminary overviews, and it has been disseminated to the other Writers for discussion.
- An Advisory Committee meeting was held to report on the project's progress at the half-way mark, and to solicit recommendations and suggestions for the development of the "stories" that will be told on the web site. One Advisory Committee member, Kathy Kraemer, an educational web site specialist, was present who made valuable contributions to the design and conceptual framework. The Support Staff continues to coordinate meetings, take minutes, oversee contracting, bookkeeping and invoicing, and continues to facilitate all administrative duties.

PROGRESS SUMMARY - JANUARY 15, 1998:

Phase I: Inventory and Assessment

- During the initial stage of Phase I, we developed an overall work plan, laid out production guidelines, identified and contracted with project personnel, and held a series of meetings with Electronic Technicians, Regional Specialists, Editors, and Publishers. We reviewed a series of issues on and obtained recommendations about state-of-the-art electronic publishing. One major decision was to implement a Web page early in 1998 and obtain feedback from visitors and users about the types and format of information they would find most useful.
- In the second interval of Phase I, Regional and Environmental Specialists initiated the investigation and inventory of the data resources of each region. Bibliographic standards were developed and comprehensive bibliographies and a database for each region were completed. An existing and very comprehensive bibliography of published and readily available sources for the entire state was also made available for the project by IMA. A document describing the methods used in compiling these bibliographies, primary repositories and sources that were reviewed, and other secondary repositories that might be of some interest, were identified. Recommendations for sites and documents that were particularly amenable to interpretation and presentation were developed. The first meeting of the Advisory Committee (which now includes organizations identified in our original proposal as well as additional interested parties, e.g., Leech Lake Tribal Historic Preservation Office, Science Museum of Minnesota) was held on December 19, 1998. Members attending provided a variety of useful comments and insights on the preliminary documents and materials which were provided to them. The Project Leader is presently meeting with outside contractors to begin design of the Internet Web page.
- The final portion of Phase I is now being completed. We are finalizing the organization of data, identifying suitable illustrations, hiring a Web development contractor, finalizing the basic framework, format, and equipment needs for the Web page, meeting with specialists to design and choose the first materials to be placed on the page, and reviewing the initial bibliographies for quality and content. Because a much larger number of sources and documents were identified than we had anticipated, the annotation of the preliminary inventory list is still underway.
- The LCMR Director John Velin contacted Dobbs about a concern that had been raised about the representation of the Minnesota Indian Affairs Council (MIAC) in the project. Dobbs contacted Mr. Joe Day, Executive Director of MIAC, and discussed the situation with him. It is our understanding the concerns raised by MIAC have been resolved. The follow is extracted from a follow-up letter sent to Mr. Day:

"When we were first formulating the project, I mentioned that we were going to be putting the proposal together to Jim Jones in the course of discussing several other matters. Subsequently, I also asked the State Archaeologist to coordinate for us with the Indian Affairs Council and make sure that you were aware of the proposal. I also informally notified other potential agencies who were to serve on the Advisory Committee about the project as well. Therefore I assumed, erroneously it appears, that everyone was 'on the same page.' In retrospect, I should have been more formal and gotten letters from everyone involved. In future, this is the procedure that we will follow.

In both our proposal and testimony, we indicated that several groups would be asked to serve on the Advisory Committee, including the Minnesota Indian Affairs Council. We tried to be very clear that these various groups would be asked to have representatives on the Advisory Committee. The State Archaeologist was present and in the audience during our testimony and had told us we could say that his office supported the project. However, we tried to be very careful about what we said about the other groups since many of them had proposals that were also being considered by the LCMR at the same time. As I mentioned in our conversation, we asked all of the various groups who we hoped would serve on the Advisory Committee to appoint a representative in early August of 1997 after we knew that the project had been approved and would be moving forward.

I enclose for your use a copy of the original proposal, the minutes of the first Advisory Committee meeting, and the bibliographies and background materials prepared by the working group during the first six months of the project. I am also sending these materials to Jim Jones at your office as you requested.

Again, I'm sincerely sorry that there has been confusion about all of this. I hope you'll accept my sincere apology for any concerns that this has created for you. If you have any additional questions or comments, I hope that you'll contact me at any time. My telephone number is 612-623-0299 and my email address is cdobbs@bitstream.net."

IV. OUTLINE OF PROJECT RESULTS: Budget:	\$200,000.00
Amount invoiced as of June 30, 1999:	<u>\$200,000.00</u>
Balance Remaining:	\$ 0.00

This pilot project will use state-of-the-art electronic and Internet technology for distribution of project results. Products of the project will include archaeological and environmental information, including primary data on artifacts, archives of photographs and illustrations and site analyses. This project will make accessible much-needed and insightful information on Minnesota archaeology to the public and to students wanting to use real data in research projects.

Phase I: Inventory and Assessment (\$29,354.36 - \$29,354.36 = Balance \$0.00)

- In the initial phase, the Project Leaders will develop the overall work plan and will lay out production guidelines. They will identify the project personnel and make arrangements for office space, equipment, and data resources. This will happen through a series of consultation meetings with Electronic Technicians, Regional Specialists, Editors and Publishers, Clerical Support, and Data Entry team members. The Project Leaders will collect together professional recommendations for state-of-the-art electronic processing and presentation of information. Each meeting will result in agreed upon work schedules, priorities, format, data standards, and future recommendations. (July and August, 1997 = **Balance \$0.00**)
- In the second interval of this phase the Project Leaders will meet with Environmental and GIS Specialists to set work plans, production standards, and data standards, in order to begin to identify the environmental and archaeological resources that will be used for the three regional reports. The Project Leaders will also coordinate with Editorial Staff, Outside Readers, and Materials Analysts, in all investigations of the inventory resources. At this time, each of these individuals will have begun to investigate the data resources of each region. This initial research will be used for a preliminary report of findings and recommendations. The Project Leaders will call together a meeting or series of meetings with the Advisory Board, to receive their comments on the preliminary research, and to ensure that all project efforts are comprehensive. Together they will set a schedule to meet approximately every six months. The Project Leaders will meet continue to meet with Outside Contractors to determine the illustrations, photos and maps that will be produced or collected for inclusion in the archives, and together they will also begin to design the Internet web page. The Outside Contractors will then begin to implement their assigned duties. (September and October, 1997 = **Balance \$0.00**)
- This final interval of the **Inventory and Assessment** phase will culminate in a preliminary collection of data to be used in development of the three regional summaries. The accumulation and organization will be conducted by the Data Inventory Staff, Regional Specialists, and Support Staff, under the direction of the Project Leaders. Once in hand, the Project Leaders will conduct a quality evaluation of the proposed materials, in consultation with the Advisory Board. At the same time the selected data is being inventoried and collected, the Project Leaders will meet with Specialists to design and choose the basic framework and electronic equipment and format that will ultimately be used to present the regional information in an electronic form to the public (Web page plus inventory database). The team's efforts in identifying and narrowing the environmental and archaeological information will result in an annotated inventory list with summaries and locations of resources. (November and December, 1997 = **Balance \$0.00**)

Phase II: Materials Preparation (\$90,096.64 - \$90,096.64 = Balance \$0.00)

- The second phase begins with organization, data entry and data capture. The Project Leaders and Material Analysts will complete quality evaluation of the collected data. The Project Leaders will circulate project updates and will coordinate regular meetings and communications with the Advisory Board. The Report Synthesis Staff Writer/Materials Editor will develop preliminary summaries and materials. Project Leaders will investigate possibilities in every technical aspect of the project, i.e., GIS, maps, illustration production, graphics, photos, and Web page construction. With the assistance and recommendations of the Electronic Technicians, the Project Leaders will acquire the necessary equipment, i.e., computers, programs, video recorders, scanners, and printers. (January and February, 1998 = **Balance \$0.00**)
 - * *Each piece of equipment purchased with LCMR funds for the Enhancing Public Access to Archaeological Knowledge will be housed and maintained separately in a designated space in the IMA offices, which will ensure the stability and usefulness of this equipment throughout the course of this project. It is anticipated that this equipment will be used for only this Web Site project for the entire useful life of the equipment.*
- In March and April, the Regional Specialists will continue to work together under the direction of the Project Leaders to enter the collected information into the computer, draft initial summary texts, update inventory lists, images, and archive illustrations, maps, and photos for each of the three regional areas. The Editorial and Support Staff will continue to facilitate all efforts, to produce the reports, and to circulate them for review. The inventory list of materials will be entered, housed, and maintained in the LCMR computer by the Computer Staff. (March and April, 1998 = **Balance \$0.00**)
- During the next period, the Project Leaders will oversee the preparation of the databases and illustrations for the three areas. The Project Leaders will meet with Communications Experts and Educators to ensure Web compatibility and accessibility and will coordinate with all specialists in each area of responsibility. The Computer Staff will complete the database input and conduct ongoing maintenance and fine-tuning. The Editorial Staff will edit materials, produce progress reports, collect reviews and suggestions, and make necessary corrections. The Project Leaders will coordinate with the Advisory Board for progress recommendations. (May and June, 1998 = **Balance \$0.00**)
- The Regional Specialists, Outside Readers, and Materials Analysts will undertake the study of the materials. Along with the Project Leaders, they will winnow and refine the archaeological and environmental data of the three areas: the Metro Area, the Red Wing area, and the Mississippi Headwaters area. The Staff Writers and Editors will continue to update inventory lists, database materials, summaries, and reports and will communicate their findings to the Project Leaders and Specialists for continued development of

materials. The bulk of the inventory will be in the computer and this period will be used for mailing, editing and writing. The Project Leaders will continue developing the technological aspects of the project. (July and August, 1998 = **Balance \$0.00**)

- The Staff Writer and Materials Editor will begin final revisions of the texts and data. The Project Leaders will communicate with individual Advisory Board members for reviews of texts and materials. Specialists and Editors will bring together their materials for inclusion in the electronic database, i.e., GIS, maps, photos, illustrations. These will be reviewed by the Electronic Publisher, Editors, and Technicians. (September and October, 1998 = **Balance \$0.00**)
- In the final period of Phase II: **Materials Preparation**, the Project Leaders will oversee the completion and approval of all texts, data, and formats. The Editorial Staff will assist in the analysis, editing, and organization of all corrections and enhancements. The Outside Contractors will have nearly completed an electronic framework for data access and use and will begin to organize and manage the electronic material on-line. (November and December, 1998 = **Balance \$0.00**)

Phase III: Dissemination (\$34,300.00 - \$34,300.00 = Balance \$0.00)

- The Project Leaders, Staff, and Electronic Specialists will produce a Web site that will be used for review, testing, and evaluation. The Project Leaders will communicate with the Advisory Board and receive their suggestions and comments. Project Leaders will work with staff to bring final graphics, maps, and database information to the site. (January and February, 1999 = **Balance \$0.00**)
- The Project Leaders will work with Editors, Analysts, the Advisory Board, and Staff to publish the three regional summaries and to begin to market and announce this archaeological resource. Enhancement, evaluation, and assessment of the site will be managed by the Project Leaders with the help of staff and specialists. Electronic Specialists will help with the advertising and global listing of the site. (March and April, 1999 = **Balance \$0.00**)
- Project Leaders and Advisory Board will formally announce the Web site and will disseminate marketing information to the interested public throughout the state, region, and nation. Project Leaders will work with specialists to produce and distribute CD-ROMs to accompany the Web site. Project Leaders will make the required project summation report to the LCMR by June 30, 1999. (May and June, 1999 = **Balance \$0.00**)
- In the final period of this phase, **Dissemination**, Project Leaders and staff will produce and circulate reports on the ongoing state of site. Project Leaders will monitor and evaluate the success of the Web Site and respond to inquiries. Data will be amended and ameliorated on an ongoing basis. (May and June, 1999 = **Balance \$0.00**)

V. DISSEMINATION

During the project period three regional summaries and supporting databases of technical information will be developed from existing compliance reports in the files of the Minnesota Department of Transportation (MnDOT), other agencies, and additional appropriate research and sources. These data sets will focus on the story revealed by archaeological research carried out at sites along the Mississippi River, beginning with the Headwaters region, continuing to the Twin Cities metro area, and the Red Wing Locality. The reports will make available primary data, archives of photographs and illustrations, and site analyses needed by archaeologists, technicians, land managers, local governments, and regulators. The published reports will be widely available, disseminated through electronic formats, including the World Wide Web. As such, they can be downloaded for further study and manipulation, or revised to include new information. A series editor will oversee writing, editing, and production, in consultation with an advisory board.

VI. CONTEXT:

A. SIGNIFICANCE:

To comply with federal and state legislation enacted during the past twenty years, public agencies have sponsored over thirty million dollars worth of archaeological research in Minnesota alone. The results of this research remain largely inaccessible in unpublished reports containing sensitive site location information and focusing on the compliance issues for which the research was funded by MnDOT and other agencies. In many cases, interpretation in the reports was not carried beyond the compliance level, thus not fully documenting the data collected. This "gray literature" is not readily available to those who need it to make wise resource management decisions, or to the scholars who need an accurate database of archaeological research. And the public, who in large part have paid for the research and who deserve to benefit from it, still rely on Elden Johnson's 1968 Prehistoric Peoples of Minnesota to satisfy a thirst for information fed by the flood of TV specials and reports of cutting edge archaeological research in the national media. Meanwhile, Minnesota communities want to know more about their history, teachers and heritage organizations are asking for local archaeology resources, and environmental educators seek to include a culture history component in their programs. MnDOT wants to see wider dissemination of the completed research, but their job is to build roads, not to carry out public education in archaeology.

This project is part of a long-term commitment by IMA to support quality archaeological investigation and to provide public access to research results. Founded in 1982 as a private nonprofit institution, IMA's mission focuses on archaeological research, outreach and education, and stewardship of heritage resources. IMA carries out research and education programs with many partner organizations, including Hamline University's Center for Global Environmental Education, the Minnesota Historical Society, the Mississippi Headwaters Board, and the Science Museum of Minnesota.

B. TIME:

The objectives include the translation of archaeological site reports into more accessible language and formats so that the data derived from more than 20 years of excavations in the Upper Mississippi Valley can be used to enhance public understanding of Minnesota's past peoples. Funding provided by LCMR will allow for the acquisition, editing and rewriting in accessible form of such data, and its initial dissemination through electronic (Web) and other means.

Subject to additional funding, however, a far wider range of products is planned. This will encompass, but will not be limited to, the creation of electronic media for use in schools, the production and dissemination of age-appropriate curriculum materials dealing with different periods of Minnesota's past and the peoples that occupied regions of the state at various times, brochures, booklets, videos, museum displays, and instructional media developed for use by state agencies and land managers in the execution of their responsibilities.

It is expected that the project entitled "Enhancing Public Access to Archaeological Knowledge," then, will be an ongoing program of the IMA and its partners. Additional funding is currently being sought from the National Endowment for the Humanities under the "Teaching with Technology" program, and other sources of additional funds are being researched for specific product development.

Archaeology is a dynamic scientific process of research and analysis. As more archaeological sites are excavated in compliance with legislation over the coming years, materials produced with this and other grant funding will require updating to ensure that the information available to the various publics targeted in the LCMR project remains on the cutting edge of scientific research and cultural interpretation. The Web Page, particularly, cannot be viewed as a static entity. IMA undertakes the responsibility for ensuring that the Internet-accessible data will be amended and ameliorated on an ongoing basis for the foreseeable future.

C. BUDGET CONTEXT:

	<u>July 1995 - June 1997</u>	<u>July 1997-June 1999</u>	<u>July 1999-June 2001</u>
	<u>Prior expenditures on this project</u>	<u>Proposed expenditures on this project</u>	<u>Anticipated future expenditures on this project</u>
1. LCMR	\$0	\$200,000.00	\$0
2. Other State	\$0	\$0	\$0
3. Non State Cash	\$0	\$0	\$0
Total	\$0	\$200,000.00	\$0

PERSONNEL

Title	# of	Percent/Tim	Duration	Total
Project Leaders	2	20	entire	50,000
Outside Readers	Variabl	N/A	N/A	20,000
Data Inventory	2	100	4 months	14,000
Editorial Support	1	20	18 months	9,000
Staff Editor	1	100	12 months	32,000
Computer Staff	1	100	6 months	16,000
Computer Staff	1	50	6 months	10,000
Production Support	1	50	6 months	7,500
Total for Personnel				158,500

EQUIPMENT

Description	Amount
Computer and Software	7,000
Printer	1,500
CD ROM Writer	1,500
Paper/Disks/CD ROMs/Misc.	2,000
Total for Equipment	12,000

OTHER

Description	Amount
Graphics and Web Pages design and	7,000
Photo and map reproduction	4,500
GIS Services	2,500
Internet services during grant period	3,500
Travel	5,000
Postage/Courier/etc.	2,500
Telephone	1,500
Copying/Report Production Final Production	5,000
Total for Other Expenses	31,500

TOTAL FOR ALL EXPENSES	200,000
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VIII. COOPERATION:

A technical advisory group will provide assistance and guidance for the project. The following agencies will be asked to participate in this group and tentative staff assignments are shown below. No payment for participation in advisory group will be provided.

- Minnesota Department of Transportation (G. Joseph Hudak)
- Office of the State Archaeologist (Mark Dudzik)
- State Historic Preservation Office (Scott Anfinson)
- Minnesota Indian Affairs Council (To be assigned by MIAC)

VIII. LOCATION:

Attached is a map entitled "Target Areas, 1997-1999" indicating the regions from which the data will be drawn.

IX. REPORTING REQUIREMENTS:

Periodic work program progress reports will be submitted by the following dates: January 15, 1998, July 15, 1998, and January 15, 1999. A final work program progress report and final report will be required by June 30, 1999, or by the completion date as set in the appropriation.

X. FOR RESEARCH PROJECTS: N/A.

INSTITUTE FOR MINNESOTA ARCHAEOLOGY - LCMR

ENHANCING PUBLIC ACCESS TO ARCHAEOLOGICAL KNOWLEDGE

1997 - PHASE I: INVENTORY AND ASSESSMENT

Deadline	Personnel	Objective	Result/Deliverable	Psnl	Equip	Other	Total
August 31, 1997	Project Leaders	Organize project	Work plan	1,000			1,000
	Project Leaders and Electronic Technicians	Initial series of 3 meetings	Equipment needs identified; meeting minutes and recommendations	1,000			1,000
	Project Leaders	Establish work area	Ensured stability of project resources	1,000			1,000
	Project Leaders	Advisory Board meeting; electronic communication	Work plan finalized; meeting minutes	1,000			1,000
	Project Leaders and Electronic Publisher	Initial consultation meeting	Set format; schedules; meeting minutes and agreement	1,000			1,000
	Project Leaders and Advisory Board	Advisory Board meeting; electronic communication	Set work schedules; set priorities; set data standards	1,600			1,600
	Clerical Support and Data Entry	Ongoing support	Circulated work plan; minutes; production standards; correspondence; record keeping	600	1,800		2,400
August 31, 1997 SUBTOTAL				7,200	1,800	0	9,000
October 31, 1997	Project Leaders and GIS Specialists	Initial meetings	Set work plan; minutes; production standards; data standards	7,000			7,000
	Editorial	Review all units	Work plan; production standards	2,400			2,400
	Outside Readers and Materials Analysts	Inventory data sources from each project	Inventory results report	5,000			5,000
	Outside Contractors	Photo & Map/GIS/Internet				2,500	2,500
	Outside Contractors	Trvl/Data Acq./Rsch/Mtgs				2,500	2,500
October 31, 1997 SUBTOTAL				14,400	0	5,000	19,400
December 31, 1997	2 Data Inventory Staff	Collect data to be used in development of regional summaries	Initial database entered	14,000			14,000
	Project Leaders	Set work plan, etc.	Completed work plan; quality evaluation; annotated inventory list with summaries and locations	6,400			6,400
December 31, 1997 SUBTOTAL				20,400	0	0	20,400
Phase I TOTAL				42,000	1,800	5,000	48,800

1998 - Phase II: MATERIALS PREPARATION

Deadline	Personnel	Objective	Result/Deliverable	Psnl	Equip	Other	Total
February 28, 1998	Project Leaders	Select and organize data to be used	Quality evaluations	3,333			3,333
	Editorial and Support		Data entry and data capture	1,000			1,000
	Project Leaders and Advisory Board	Circulate reports; review; collect; meet	Comments on report	3,333			3,333
	Project Leaders	Equipment purchase	Computer; programs; printer		8,000		8,000
	Report Synthesis Staff Writer/ Materials Editor	Organize and edit report	Edited, developed materials	5,333			5,333
February 28, 1998 SUBTOTAL				12,999	8,000	0	20,999
April 30, 1998	Project Leaders	Synthesize data to be used	Draft texts	3,333			3,333
	Report Synthesis Staff Writer/ Materials Editor	Synthesize data to be used	Assisted with drafting of text	5,333			5,333
	Outside Readers and Materials Analysts	Assist in the selection of data to be used	Inventory list of data on-line	7,500			7,500
	Computer Staff	Database maintenance	Electronic materials updated	5,334			5,334
	Editorial and Support		Developed images and archives	1,000			1,000
	Outside Contractors	Grphs/Web Pg Dsg/ Impl	Production updates			7,000	7,000
	Outside Contractors	Photo & Map/GIS/Internet	Graphics updates			5,500	5,500
	Outside Contractors	Trvl/Data Acq./Rsch/Mtgs	Meetings/inventory			4,500	4,500
April 30, 1998 SUBTOTAL				22,500	0	17,000	39,500
June 30, 1998	Project Leaders and Communications Specialists	Synthesize data	Report in progress	2,334			2,334
	Computer Staff	Database maintenance	Completed database	5,333			5,333
	Editorial and Support		Report produced	1,000			1,000
	Project Leaders and Advisory Board	Advise on project progress	Meeting minutes and approval	1,000			1,000
	Report Synthesis Staff Writer/ Materials Editor	Edit data	Edited text and reports	5,333			5,333
June 30, 1998 SUBTOTAL				15,000	0	0	15,000
August 31, 1998	Outside Readers and Materials Analysts	Assist in the selection of data to be used	Revised data report	7,500			7,500
	Editorial and Support		Edited reports produced	1,000	1,400		2,400
	Report Synthesis Staff Writer/ Materials Editor	Organize and edit report	Edited report	5,333			5,333
	Support	Equipment	CD-ROM writer		1,500		1,500
	Computer Staff	Database maintenance and input	Completed database	5,334			5,334
August 31, 1998 SUBTOTAL				19,167	2,900	0	22,067

October 7, 1998	Project Leaders	Synthesize data	Report in progress	3,333			3,333
	Editorial and Support		Progress report produced	1,000			1,000
	Report Synthesis Staff Writer/ Materials Editor	Edit data	Edited text	5,333			5,333
October 31, 1998 SUBTOTAL				9,666	0	0	9,666
December 31, 1998	Project Leaders	Finalize all text	Report in progress	3,335			3,335
	Editorial and Support	On-line framework	Enhanced data access	1,000			1,000
	Report Synthesis Staff Writer/ Materials Editor	Finalize all text	Analyzed and edited on-line data	5,333			5,333
December 31, 1998 SUBTOTAL				9,668	0	0	9,668
Phase II TOTAL				89,000	10,900	17,000	116,900

1999 - PHASE III: DISSEMINATION

Deadline	Personnel	Objective	Result/Deliverable	Psnl	Equip	Other	Total
February 28, 1999	Project Leaders and Advisory Board	Mtg to advise on Web pg; begin Web site constr	Sample Web site on-line	2,500	300		2,800
	Computer Staff	Texts and d-bases on Web	Internet; database; graphics; maps	3,337	500		3,837
	Production Staff	Product production	Updated report		1,500		1,500
February 28, 1999 SUBTOTAL				5,837	2,300	0	8,137
April 30, 1999	Project Leaders	Publish and distribute regional summaries	Regional summaries	2,500			2,500
	Computer Staff	Ensuring final information	On-line database	3,333			3,333
	Distribution Support	Support dissemination efforts	Mailing lists; electronic postings	4,167			4,167
	Outside Contractors	Photo & Map/GIS/Internet	Electronic photo & graphics archive			2,500	2,500
	Outside Contractors	Trvl/Data Acq./Rsch/Mtgs	Meetings & circulated work plan			2,000	2,000
April 30, 1999 SUBTOTAL				10,000	0	4,500	14,500
June 30, 1999	Project Leaders and Advisory Board		Announcement of Web site and internet resources	1,500			1,500
	Computer Staff	Final electronic editing	Completed electronic information	3,333			3,333
	Distribution Support	Support dissemination efforts	Announcement disseminated	3,330			3,330
	Project Leaders	Preparation and submission of final report	Final report	1,000			1,000
June 30, 1999 SUBTOTAL				9,163	0	0	9,163
August 31, 1999	Project Leaders	Evaluation and enhancement of site	Enhanced database	2,500			2,500
August 31, 1999 SUBTOTAL				2,500	0	0	2,500
Phase III TOTAL				27,500	2,300	4,500	34,300
GRAND TOTAL				158,500	15,000	26,500	200,000