
Financial Plan

NDIIPP MetaArchive Project



2008-01

Summary

This document describes the financial plan of the MetaArchive Cooperative for the period 2007–2011. The document briefly covers expectations for the Cooperative’s growth and how this growth will impact the Cooperative’s revenue streams, as well as anticipated expenditures for the Cooperative.

About the Cooperative

The MetaArchive Cooperative is an independent, international membership association that provides collaborative and distributed digital preservation solutions for cultural memory organizations, including university libraries, government and historical research archives, museums, and other similar institutions (<http://www.metaarchive.org>). The central missions of the MetaArchive Cooperative are to support, promote, and extend the practice of distributed digital preservation; to serve as a catalyst and guide for other networks that seek to implement the distributed digital preservation methods it has developed; and to educate cultural memory organizations about distributed digital preservation.

The Market

There are roughly 1,600 universities that contain libraries and archives in the United States alone.¹ The vast majority of these universities, libraries, and archives are currently producing and collecting both born digital and digitized collections of historical, cultural, and political value. As documented by surveys of these communities, very few have solutions to the pressing problem of preserving these digital collections, but many of them are actively seeking such solutions.² To date, more than four-dozen unsolicited inquiries have been made by institutions that are interested in the MetaArchive Cooperative’s distributed digital preservation method and services (see Appendix A of the Market Analysis for a list of institutions). These institutions represent a market segment with an overwhelming need that is currently unmet by other products.

The Proposed Solution

The MetaArchive Cooperative can meet the needs of these communities by 1) hosting content, 2) building networks with member organizations to host collections, and 3) providing the technical and organizational model and tools needed to encourage others to establish their own distributed networks.

¹ See “U.S. Universities” at <http://www.utexas.edu/world/univ/alpha/>; “Museums FAQ” at <http://www.aamus.org/aboutmuseums/abc.cfm>; “National Archives Locations by State” <http://www.archives.gov/locations/states.html> (accessed 1 Dec 2007)

² Pardo, Theresa A., G. Brian Burke, and Hyuckbin Kwon, “Preserving State Government Digital Information: A Baseline Report,” (July 2006). Available at http://www.ctg.albany.edu/publications/reports/digital_preservation_baseline/ (accessed 1 Dec 2007); Clareson, Tom. “NEDCC Survey and Colloquium Explore Digitization and Digital Preservation Policies and Practices” RLG DigiNews, 10:1 (February 2006). Available at: http://www.rlg.org/en/page.php?Page_ID=20894#article1 (accessed 3 Dec 2007).

Our Growth

Obviously, we cannot grow to accommodate the whole market as described above, nor do we intend to do so. Our technical network depends upon the concept of **replication**, which makes our rate of growth particularly important. Each collection in a MetaArchive-LOCKSS network is replicated at least six times in order to secure the content over a distributed area.³ If institution *x* brings 300 GB of content to the network, five additional members will need to make room for an additional 300 GB of content on their servers—a total of 1800 GB space or **1.76 TB** increase network-wide. The per-byte cost of storage is low and continues to drop each year—keeping up with large increases in our network capacity will present only minor financial difficulty. However, the administrative tasks associated with 1) determining which member servers are ready to host new content and 2) tracking these collections across the network will be more challenging, particularly before we reach a critical mass of members.

Too many institutions and collections joining the cooperative at one time would present challenges for ramping up our network quickly *and strategically*; however, once we've reached a critical mass, quick growth will be possible. In the first five years, we need to carefully add members at a measured pace in order to document our practices and build our technical capacity. After this initial ramp up period, we believe that our network will be large enough and strong enough to expand more readily to accommodate quick growth.

We do intend to slowly ramp up our activities to include these target member numbers over the next four years:

Year	University Archives	State Archives	Government Archives	Historical Societies	Museum Archives	Total
2007	4	0	0	0	0	4
2008	8	0	0	0	0	8
2009	16	1	0	0	1	18
2010	20	2	1	1	2	26
2011	24	4	2	2	4	36

Figure 1: Target Membership, 2007-2011

In order to make our activities sustainable, both technically and organizationally, it is imperative that we grow at a measured rate. We are ready to double our overall membership in the coming year—thus, substantially increasing our financial stability and our technical capacity. Within four years, we expect to have at least 36 member institutions representing all of our targeted repository groups (university, state, government, museum, and historical society) in the MetaArchive Cooperative.

Membership Types

The Cooperative welcomes participation at three distinct membership levels relative to the goals and preservation needs of members. All membership terms are for three-year periods. The Cooperative also works with and recognizes a range of affiliate organizations. The levels, costs (as of May 2007), and responsibilities for each membership tier are as follows:

Sustaining Members (\$5,000/year or \$12,000/3 years): MetaArchive Sustaining Members are responsible for the testing, development, and maintenance of hardware and software, network connectivity, and transmission standards. They are responsible for all of the functions of a Preservation Site (see below), as well as for technical development and testing of the computer systems that enable the Preservation Network. The major responsibilities of this development activity include: adaptation and maintenance of the LOCKSS software for preservation of relevant

³ See LOCKSS for more details on why six copies is the lowest number acceptable for preservation in a LOCKSS network. <http://lockss.org>.

digital content; design and implementation of system features dealing with security; content validation and integrity checking; and metadata tracking.

The current Sustaining Members (as of May 2007) are: Emory University, Auburn University, Florida State University, Georgia Institute of Technology, University of Louisville, and Virginia Polytechnic Institute and State University.

Preservation Members - \$1,000/year. MetaArchive Preservation Members are responsible for the ongoing activity of preserving digital content. Preservation Members are responsible for contributing collections, ingesting collections from member institutions, maintaining a network node, and making that node available for testing new software. At a minimum, a preservation site must include a node server of the MetaArchive Preservation Network, satisfying particular technical requirements that may periodically be revised. Taken together, the MetaArchive Preservation Sites collectively comprise the distributed MetaArchive Preservation Network.

The current Preservation Member (as of May 2007) is the Library of Congress.

MetaArchive Contributing Members: \$200/year. MetaArchive Contributing Members are cultural memory institutions that possess digital content they wish to preserve via the MetaArchive Preservation Network, but they do not have any of the technical responsibilities of Sustaining Members or Preservation Members. Specifically, they do not have to maintain any of the server infrastructure associated with the MetaArchive Preservation Network. Contributing Members do bear the responsibility for determining ownership and their right to preserve content prior to submitting it to the MetaArchive Network (i.e., intellectual property and copyright issues).

A Contributing Member may work with the MetaArchive Cooperative's technical staff to ready and submit its relevant digital collections and associated metadata for harvest. Contributing Members have certain rights of access related to requesting the retrieval of their content from the Network for their own purposes (e.g., to replace damaged files on a public web site, to make additional "use files" from a preserved master file, etc.). They receive periodic reports as to the development and operations of the Network and are asked to provide input and feedback regarding the Cooperative's digital preservation service.

Of the members we intend to attract in the next four years (as documented in the chart above), we expect that roughly 40% will be Sustaining Members, 30% will be Preservation Members, and 30% will be Contributing Members. For the sake of these figures, each fee level has been multiplied by its corresponding percentage of anticipated incoming Members (e.g., \$15,000 x .40 (40%), \$1,000 x .30 (30%), \$200 x .30 (30%) – thus 1 Member (100%) is equivalent to a revenue of \$2,360 (e.g., for 2008 – 8 total members at \$2,360 each = \$18,880). [2007 is exempt from these figures because of its known Members and their Sustaining level memberships (e.g., 4 x \$12,000 = \$48,000)].

With this in mind, our **anticipated revenue from the MetaArchive Cooperative's services** is as follows:

Year	Total Members	Total Revenue
2007	4	\$48,000
2008	8	\$18,880

2009	18	\$42,480
2010	26	\$61,360
2011	36	\$84,960

Figure 2: Anticipated revenue from the MetaArchive Cooperative’s services

Because most of our day-to-day work is covered by grant funding until 2010, we anticipate that much of our first three years of revenue will be held for two purposes: 1) a server replacement fund in the case of catastrophic losses at any of our member institutions (at the preservation and sustaining levels), 2) office space (detailed below), and 3) future salary needs of the cooperative’s three core staff members (detailed below) as it transitions from a pilot project into a service provider.

Total Revenue Projections

To sustain the MetaArchive Cooperative, we plan to use a mixed funding model of institutional (membership dues), grant, contract, and service fees. Currently, we have a contract and contract extension with the Library of Congress as one of its National Digital Information Infrastructure and Preservation Program projects. This contract provides our program with revenue through March 2009 (see “Total Contract Funds”). We also anticipate attracting funding from the National Historical Publications and Records Commission to support some of the Cooperative’s work between 2008 and 2010.

We anticipate hosting at least two workshops per year between 2008 and 2010 with registration fees of \$350.00/participant for workshops of up to 30 participants. (See <http://metascholar.org/events/2007/ddp> for details on our pilot workshop hosted at Emory in May/June, 2007.) We anticipate spending approximately \$200/participant on faculty travel, workshop location, and workshop food when hosting in remote locations (half of our workshops) and \$100/participant on those same items when hosting at Emory University or a member institution site (half of our workshops). The total anticipated workshop revenue is therefore \$150 x 30, or \$4,500, for our remote events and \$250 x 30, or \$7,500, for our local events. Our total expected revenue per year from workshops is \$12,000.

Our consulting fees will come from two activities: 1) consulting with institutions interested in joining or running a MetaArchive Private LOCKSS Network and 2) assisting members with tasks such as creating Manifest Pages and Plugins for their collections (these are technical features required by the LOCKSS software that take approximately one day to write for each collection).

Year	Member Dues	Grant Funds (including 1:1 cost match)	Contract Funds (including 1:1 cost match)	Workshop Revenue	Consulting Revenue
2007	\$48,000		\$421,208	\$12,000	\$1,000
2008	\$18,880	181,908	\$749,745	\$12,000	\$6,000

2009	\$42,480	275,329	\$375,204	\$12,000	\$12,000
2010	\$61,360	249,975		\$12,000	\$14,000
2011	\$84,960			\$12,000	\$16,000

Figure 3: Expected revenue streams by year, 2007-2011

Our expected revenue between 2007 and 2011 (anticipating receipt of NARA funds) is as follows:

Total Membership Dues	Total Grants (inc. match)	Total Contracts (inc. match)	Total Workshops	Total Consulting	Total Program Revenues
\$255,680	\$707,212	\$1,546, 157	\$60,000	\$54,000	\$2,623,049

Figure 4: Total Revenue streams between 2007 and 2011

Expenditures

Our expenses incurred by running the MetaArchive Cooperative have been tracked for the last three years. As such, we can predict with a good deal of certainty what our expenditures will be over the next five years. Our expenses break down into two main categories: **Staffing** for the MetaArchive Services Group and **Travel** (including travel expenses for workshops, conferences, and Steering Committee Meetings). Unspent funds will comprise a savings account for the Cooperative and will be used for emergency replacement of equipment at Preservation and Sustaining Member sites when necessary to preserve our network.

Much of our staffing need is currently satisfied by the work provided by the Steering Committee and other personnel who contribute their work currently as part of a cost match for our sponsored projects. Sustaining and Preservation Member institutions will continue to contribute personnel time as coordinators and system administrators of their nodes as part of their Membership Agreement with the cooperative.

As a result, only two FTE and one PTE positions are *currently* needed to run the day-to-day technical and organizational activities of the network: a full-time Executive Director (Project Manager for 2007-2010), a full-time System Administrator, and a part-time Software Engineer. Consultants are needed to assist us with market analysis and business planning/implementation until 2010. We plan to cover some of their activities through grant funds and others through the initial revenue generated by the Cooperative. Beginning around 2009, we anticipate adding a full-time Administrative Assistant that will be paid for through the revenue we generate through membership fees, workshops, and consulting activities. As the Cooperative grows, we anticipate that we will need to add additional staffing—most likely a second System Administrator and an Assistant Project Manager. We do not anticipate adding these additional staff until at least 2012.

Staffing Expenses

Year	Manager/ Director	System Administrator	Software Engineer	Consultants	Administrative Assistant

2007	\$63,654	\$60,000			
2008	\$65,564	\$61,800		\$20,000	
2009	\$67,531	\$63,654	\$60,000	\$20,000	\$30,000
2010	\$69,556	\$65,564	\$61,800	\$20,000	\$30,900
2011	\$71,643	\$67,531	\$63,654		\$31,827

Figure 7: Staffing Expenses for MetaArchive

Travel Expenses

Year	Conferences	Meetings
2007	\$6,000	\$14,000
2008	\$6,000	\$15,000
2009	\$6,000	\$17,000
2010	\$6,000	\$20,000
2011	TBD	TBD

Figure 8: Travel Expenses for MetaArchive

Conference Expenses

To date, we have covered all member institution personnel's travel expenses incurred while attending conferences at which they present about MetaArchive development work. This has been made possible through our contract work with the Library of Congress. It has benefited our Cooperative tremendously, as these conference presentations have provided the most direct way to reach our potential market with information about our services. We intend to continue funding such expenses during the next three years as our outreach activity is at its peak. We will reassess in 2010 to determine what travel we can afford and to whom funding should be made available.

Meeting Expenses

To date, we have also covered all member institution personnel's travel expenses incurred while attending two meetings—the Partner's Meetings hosted by the NDIIP Program (biannual) and our own Steering Committee Meetings, which are hosted biannually at a member site. Travel to the Partner's Meetings have been funded by the NDIIPP contract—once that contract period ends (now scheduled for March 2009), presumably so will the need for our representation at those meetings. All of our member institutions thus far have been Sustaining Members, and thus have a role on the Steering Committee. In 2010, we will reassess what capacity we have to fund travel expenses, as well as hosting expenses associated with our Steering Committee Meetings, but we do hope to continue funding these for the up-to-12 Steering Committee Members that join the MetaArchive.

Future Operations

As evidenced by our budget projections, we intend to be a self-sustaining endeavor as of 2010. We will be able to support ourselves from revenue generated from our membership fees, workshops, and consulting fees.

Notes on this document

This document was drafted by Katherine Skinner in 2008-01, edited by Matt Schultz in 2009-10, and approved by the Steering Committee in 2009-10.