North American Railway Foundation (NARF)

The North American Railway Foundation (NARF) is a nonprofit, private operating foundation. Our purpose is to explore, nurture and support railway safety, efficiency and technology and to educate about and preserve the history of railroads. To achieve our goals, the foundation provides direct financial support to deserving persons and non-profit organizations that exemplify its purpose.

Application for Direct Project Funding (Note: NARF does not offer grants) - Fiscal Year 2005-2006 and Continuing Rail Labor Organization Support

Please type or print. Please make additional copies as needed for this fiscal year. General Information - All Questions Must Be Answered Or Addressed:

Applicant Information

Applicant Organization Name: **Friends of the Railroad Museum of Pennsylvania (FRM)**

Applicant Organization Address: **P.O. Box 125, Strasburg, PA 17579**

Applicant Organization Telephone: **717 687-8628**

Main Contact Person/Agent for the Applicant Organization:

Name: **David W. Dunn, Museum Director**

Address: **P.O. Box 15, Strasburg, PA 17579**

Telephone: **(717) 687-8628**

Fax: **(717) 687-0876**   E-mail: **dadunn@state.pa.us**

Position or Relationship with the Applicant Organization: **Museum Director, Ex-Officio Member, Board of Directors, Friends of the Railroad Museum; acting in concert with Robert R. Donecker, President, Friends of the Railroad Museum (FRM)**

What is the overall purpose of the applying organization? (If additional space is needed for these questions, please attach additional pages)
> **The FRM exists to support the educational and historical objectives of the Railroad Museum of Pennsylvania by providing volunteer manpower, advocacy, financial support, and related efforts. The FRM is a 501c3 nonprofit organization chartered under the laws of Pennsylvania and operating under an agreement with the Pennsylvania Historical and Museum Commission, which owns and operates the Museum. The FRM's legal documents are**

available for review on the Museum's Web Site at:
http://www.rrmuseumpa.org/membership/frmcorporate/incorppapers.htm

Briefly describe some of the projects that the organization has been involved with in the last two years:

Stewart Junction Railway Education Center. Construction and implementation of this highly successful facility has greatly enhanced the Museum's ability to provide professional, attractive and interactive learning opportunities for visitors. See our web site at http://www.rrmuseumpa.org/education/rec2000.htm for additional information. NARF funding was critical to this project.

Cab Simulator Project. This project retrofitted an actual locomotive cab with a computerized program that simulates actual locomotive operation. The project provides visitors an opportunity to enter the cab (donated by Norfolk Southern) of a diesel locomotive, and participate in a simulated cab experience. NARF funding was critical to this project.

1915 "Golden Age of Railroading" Street Scene. Design and construction of three 1915 era building facades between the "Stewart Junction" Freight Station and the "Steinman Station" Passenger station on Platform One, West. This project utilizes students from Thaddeus Stevens College of Technology and the Lancaster County Career and Technical Center to construct the three buildings as part of their classroom instruction. When completed, the first floors will be used for exhibition and the second floors used for collections storage. NARF funding was critical to this project.

Other Projects. In addition to prior funding from NARF, the Museum has received support from a number of other respected sources, including the Institute of Museum and Library Services, TEA 21 and ISTEA Enhancement programs, Save America's Treasures Grant program, and the Commonwealth of Pennsylvania. An overview of some of the more recent grant-supported endeavors may be found at http://www.rrmuseumpa.org/whatsnew/more/progress.htm.

Tax Information - All Questions Must Be Answered Or Addressed:

Applicant's Organization's (Org.) Form? (circle one) **Not for Profit Corporation**
        Individual
Applicant's Org.'s Nationality? (circle one) **United States**   Canada
If Applicant Org. is an individual, are you a citizen of the nation indicated above? Yes No
Applicant's Org.'s U.S. Federal I.D.#, **23-2230742** Canadian I.D.# or Social Security I.D.#:
Is the Applicant Org. U.S./Canadian Tax exempt? **Yes** No
If exempt, under what U.S. Federal (IRS)/Canadian code section? **501(c)(3)**
What state(s)/province(s) is Applicant Org. incorporated/located in? **Pennsylvania**

Has the Applicant Org. been audited by the U.S. Federal Government (IRS) or its Canadian counterpart within the last 5 years? Yes or **No** (If yes, please attach results/findings.)

Please provide us with the following documentation related to the Applicant Organization (MANDATORY):
1.) Most recent U.S. Federal tax return or Canadian Equivalent **See Attached**
2.) Most recent audited financial statements &/or LM-2 or LM-3 (LM's are for labor organizations) **See Attached**
3.) Copy of the U.S. Federal IRS Exempt Status Determination Letter or Canadian Equivalent **See Attached**
4.) Labor Organizations must attach a letter from their President, Secretary/Treasurer or Chairman (other than the officer applying for the funding) that clearly states their approval of this application and that they understand that any approved project materials or services purchased on their behalf cannot be used for political or lobbying activities.
Your Project - All Questions Must Be Answered Or Addressed:

Please explain the purpose of the Applicant Organization's request for funding (i.e. your project) from NARF (include a detailed explanation of your project, its goals, its targeted beneficiaries and a detailed budget)*** :
Under which funding category would the Applicant Organization's project be classified?
Please select those that apply:
Railway Safety
Railway Education **XX**
Railway History **XX**
Railway Efficiency/Technology

Total amount/range of funding being requested: **$31,500**
Estimated project timeframe and completion date: **This phase of the program will commence on August 1, 2005, and will be in operation by June 1, 2006. Further work involving cataloging of additional materials and possible expansion of the system will occur subsequently (See project description for further details**).

When will you need a decision on the funding of your project? **July 15, 2005.**

Will there be a contractor(s) or subcontractor(s) involved with this project? **Yes***** or No If yes, please name them:

Technical setup and web hosting services by Andornot Consulting Inc., the leading reseller of and consultant on Inmagic special library and collections cataloging software. We have been using Inmagic's DBTextworks as a primary cataloging tool for several years, and recently acquired their CS WebPublisher Pro package which is currently being set up to allow on-site searches on our Local Area Network. Andornot will take us to the next step of allowing these catalog listings to be searched via the Internet. The majority of the records preparation work and project management will be performed by FRM volunteers working under Museum staff direction.

Main Street Software, Inc. will provide several hours of technical services getting the new server installed. We will absorb that cost.

Will other organizations provide funding in addition to what the Applicant Organization may receive from N.A.R.F. for this project? **Yes** or No If yes, please name them and provide some detail as to their participation:

The Friends of the Railroad Museum will provide in-kind volunteer services for project management and cataloging of additional materials. This level of effort approximates 2,000 hours of contributed time at an estimated value of $20,000 per year. In addition, an estimated $1,300 of FRM support expenditures will be provided related to connecting the service to our Local Area Network. Further, prior to the requested grant period, the FRM has invested nearly $100,000 in computer hardware and software that will serve as underlying infrastructure to this grant's proposed activities.

The Pennsylvania Historical and Museum Commission, through paid staff assigned to the Museum, will provide continuing professional oversight, as part of their responsibility for Museum management.

Signature
By signing below, you attest that the information above is true and accurate and that you have provided, or will provide, all the necessary documentation to support that information upon our request.

Name of Applicant Organization and Contact Person/Agent

David W. Dunn, Museum Director, acting for the Friends of the Railroad Museum of Pennsylvania, in concert with Robert R. Donecker, President, Friends of the Railroad Museum.

Contact Person/Agent Signature : _____

Title of Signer: **Director, Railroad Museum of Pennsylvania**
Date: **June 14, 2005**

Please submit this application along with all related documents requested to:

North American Railway Foundation
c/o Mr. Philip J. Sullivan II, CPA, Executive Director P.O. Box 867
Harrisburg, PA 17108-0867
Note: Your application may not be considered if all applicable documents requested are not detailed and included in your submission packet.

Executive Summary
Direct Project Funding – Library/Archives Data Retrieval System
(LADRS) Web Access Project

The proposed funding will allow free access via the World Wide Web to an online catalog initially listing over 100,000 items in the Railroad Museum of Pennsylvania's Library and Archives, as a joint presentation with the North American Railway Foundation. In addition, a demonstration prototype that includes small images of some holdings in the online catalog will be pursued.

Although a similar project was not funded by NARF last year, the FRM was able to begin partial implementation of that proposal by investing its limited resources in the system. The completion of the first phase of the project will make some finding aids available, but only for the Museum's on-site staff using a few workstations with access to the FRM Local Area Network. This limited initial phase will be operative by late summer 2005.

The requested funding for this year will expand the project to allow searches of these holdings through any viewer's browser on the World Wide Web, allowing researchers and the general public to directly access the Museum's finding aids for our library and archival resources. The project will go beyond the successful experience of the California State Railroad Museum (CSRM), which employed earlier versions of similar software under a previous NARF grant to place several of its databases on the web, but which only allowed visitors to search one database at a time.

With assistance from Inmagic Inc. and Andornot Consulting, the Museum will improve on the existing process by allowing web visitors to search a number of databases simultaneously. Our search and result screens will be enhanced for clarity, conformity with web site standards and appearance, and greater ease of use. Search and results screens will provide credit to NARF. NARF will also be recognized in all project publicity which will include press releases to all museum and railroad history publications and postings in the Museum's research area and on the Museum's web site.

In addition, we propose a modest prototype test program that will include, on the search results screen, a digitized image for selected items. This pilot program will assist the Museum in determining the methodology for cataloging and searching for digital images of photos and negatives.   Digitizing images will provide better access to the Museum's photographic collections for scholars and result in significantly less damage to the precious original images through handling.

As cataloging of additional archival collections continues, they will also be entered into this web system in subsequent years.

Beneficiaries of this project will include scholars, researchers, archival managers, the public at large, members of NARF-supporting labor organizations, and those interested in railroad history. Many of our holdings are unique, and of great historic value to those interested in North American railroads, in particular those in Pennsylvania and the Eastern United States.

Project Description
Direct Project Funding - LADRS Web Access Project
Friends of the Railroad Museum of Pennsylvania

Background

The Railroad Museum of Pennsylvania maintains an extensive and significant Library and Archives of railroad history materials including ten thousand railroad history volumes and twenty thousand issues of serials, tens of thousands of original negatives from railroad companies and railroad equipment manufacturers, priceless collections of photographic prints, timetables, original builders drawings, and other historic ephemera. A general description of these holdings may be found on our web site at http://www.rrmuseumpa.org/about/library/library.htm.

For a number of years, the Friends of the Museum has been engaged in the challenging process of sorting, identifying, and cataloging these holdings, collected over the past thirty years, to facilitate their use by researchers and historians. Since 2001, this effort has been supervised by the professional curatorial staff of the Pennsylvania Historical and Museum Commission (PHMC), which owns and operates the Museum. The process of cataloging collections data has gone through several generations of organization and computerization, progressing from paper lists to sophisticated, integrated databases now denominated as LADRS.

LADRS is the Museum's Library and Archives Data Retrieval System. Its main purpose is to support the Museum's ability to serve researcher needs through the development of a modern computerized cataloging and finding system for cataloging the Museum's collections of books, serials, archival and other ephemera. Ancillary to this, various collections management and physical plant enhancements have been addressed as part of a long-range collections management plan. This project does not extend to the management of large objects such as locomotives and rolling stock, which are managed by PHMC through other means.

This effort has entailed:

- Since 1999, over 21,000 hours of volunteer effort identifying, cataloging, and data-entering the Museum's holdings; with efforts to physically sort, prepare and to properly store and handle the items as well

- Development of appropriate preservation methodologies in concert with Museum and PHMC staff and consistent with available FRM resources

- Investment in computer equipment and systems and related training. This year, we invested about $14,000 of FRM funds in a major interim step now being implemented, which involves:
  - The acquisition of the new Inmagic CS WebPublisher Pro software product, to run on our Local Area network, allowing *local* use of modern browser search capabilities.

- The acquisition of a new server to handle our regular business operations, on which temporary initial installation of the CS WebPublisher Pro product is being undertaken, with provision for a second staging server (requested in this grant) to be devoted exclusively to this project (to accommodate the large file sizes that are emerging, and to provide appropriate security).
- Acquisition of server infrastructure including a new rack cabinet, power supply equipment, initial Network Attached Storage, and the Windows Server 2003 operating system. These are now in place. We have also invested in rewiring the building so that the local server equipment can be relocated to a more efficient location once the new Museum façade building is built next year.
- Purchase of an Inmagic Jumpstart consulting package to assist us in initial conversion of the DBTextworks files to the CS WebPublisher Pro format and creating local search screens. This is being implemented this spring and summer.

- Making the resulting finding aids available for researchers through a series of successive refinements on the FRM's Local Area Network. This limited local searching capability involved prototypes using Inmagic's DBTextworks program for books and serials, and a series of Access tables for other archival enumerations. The logical next step is a more user friendly, state of the art web-based search system to make this information available to the public in an Internet setting. Inmagic specialists concluded, and we concur, that their CS WebPublisher Pro (CS WPP) software can provide the public access capability.

- While cataloging of some of the extremely large collections will continue for several more years, most major holdings are already completely cataloged and in data form, providing a critical mass of information that can be made available, immediately, on the Museum's web site. This project will provide better public access and a more modern browser-based searching system. This phase, the subject of this Direct Project Funding request, will produce several additional benefits which are described later in this document.

PROPOSED PROJECT STEPS (not sequential)

- Perform final quality reviews of completed/substantially-completed databases, as indicated on the attached list, and export them as needed into Inmagic CS WebPublisher Pro.

- Continue cataloging efforts for the other tables, and add them as they are completed.

- Use NARF grant funds to acquire a local staging server (Dell PowerEdge 2850 Rack Server) and shift existing CS WebPublisher Pro software to the new server. Current Access tables will also be exported into the system. Place final working copies of data files on this server as completed. All file management functions will be performed at the Museum on this server,

which will be attached to the FRM LAN. This server will also hold a limited prototype set of images to allow testing of subsequent inclusion of images on search result pages.

- Acquire a small, professional-quality scanner and scan a selected sample of items for inclusion in the test of images in search results.

- Andornot Consulting will assist search screen design, table conversion / configurations, and other technical setup for use in publishing this to the web.

- Actual serving to the web will then be performed by Andornot's web server, with necessary files uploaded by periodic File Transfer Protocol or other methodology from our production server. Visitors will access the public server by first going to the Library and Archives section of the (existing) www.rrmuseumpa.org web site, and then linking over. The search screens will mimic the look and feel of the museum's main web site pages, and will include credit to NARF by inclusion of appropriate language and/or NARF's logo.

BENEFITS OF PROJECT

o Railroad employees, relatives, researchers and the general public will be able to log on the Museum's website and ascertain, before their Museum visit, what materials are available. This will be a major breakthrough in enabling greater public access to these historic materials. Currently, there are only several limited paper catalogs covering a small percent of our holdings, and these must either be purchased or viewed on-site. This will, for the first time, provide any person with a computer on the Internet, access to listings of our treasured materials covering mainly Pennsylvania and Eastern US railroads, which are predecessors of current major railroads such as Norfolk Southern and CSX.

o Searching will be available on several integrated databases for the first time, thus improving the efficiency of our service to research visitors. Currently, of the 1,100 annual researchers and scholars physically visiting the Library/Archives, a high percentage spend a major part of their time (and that of staff) just determining what we have and what they want to see. Similarly, responding to the thousands of phone calls and hundreds of research inquiry letters requires manual searches, which could be performed faster and more accurately with computer searching access.

o We will build on the NARF-supported experience of the California State Railroad Museum, which is using an earlier Inmagic software version on a limited number of separate databases. We contacted their Librarian, who offered insight into their experience, and confirmation of the system's value

to researchers. We have agreed to share relevant experience with California.

o   As part of the project, we will conduct a modest prototype demonstration of CS WebPublisher Pro's ability to include digitized images as part of search results. For instance, a listing for a photograph of a particular locomotive would include a small, low-resolution image of that negative. The viewer could then decide whether it is the right one, and perhaps in the future, actually place an order for a print. While the imaging of our holdings would be a major future project in itself, we anticipate that this indeed will have to occur as a means of preserving images that otherwise would deteriorate, and the ability of the Inmagic system to catalog and display them could be a key component of such an effort.

o   This project will also generate additional visitation to our 230 page web site, thus exposing more people to significant information on our rich railroad history. (Currently over 200,000 discrete visits to the site are logged annually.)

o   In addition, while the effort is heavily motivated by the need to serve the needs of researchers and the public, we will also observe professional standards to make the system helpful for internal library and archival management needs. These efforts are seen as central to the Museum's forthcoming effort to secure accreditation by the American Association of Museums.

Project Budget
Direct Project Funding - LADRS Web Access Project

Item	NARF	FRM	TOTAL
Annual software Maintenance, CS Textworks / WPPro	1,000	1,000	2,000
Dell 2850 local staging server, with related components (FRM will provide Windows Server 2003 software)	7,400	500	7,900
Acronis Server software (1K) for hard drive imaging, and Veritas file backup software (500), with both sets of files to be backed up to a Linksys Network Storage Device (1K)	2,500	-	2,500

Name Deleted Consulting:
  --Services to analyze databases, establish methodology for and prepare files for web hosting; provide assistance in image demo planning
 	
  --Database web hosting: web server setup and one year operation for estimated 4 consolidated databases
 	
  --See next page for summary of Andornot preliminary proposal
	16,200	-	16,200

Main St. Software, Inc. Setup local production server hardware	-	300	300
FRM local LAN workstation, for expanded access for onsite researchers, with small laser printer	2,400	-	2,400
Est. FRM volunteer manpower for data entry and project mgt. based on 2,000 hrs. valued@$10/ hour	-	20,000	20,000
Scanner and materials for image prototype	2,000	-	2,000
TOTAL	**31,500**	**21,800**	**53,300**

Inmagic WebPublisher Hosting Services

Name deleted is an authorized Inmagic Partner and has been providing hosting services for Inmagic databases since 1998. Our extensive hosted client base includes both public and restricted access sites for a wide variety of organizations from across North America. A partial list is provided on the web at http://www.andornot.com/Services/Hosting/HostedClients.aspx. Andornot servers are co-located at the Peer1 secure data center in Vancouver, B.C. (http://www.peer1.net).

The services to be provided include:

- setup of a subdomain on the Andornot servers, for example, rmp.andornot.com
- build of a template to integrate with your website (for example using the page at http://www.rrmuseumpa.org/about/library/library.htm as a starting point.) This will ensure that all search and results pages have this same branding and navigation links. Key pages to also feature credit to the North American Railway Foundation.
- advise on the optimum method of providing search access to your 20 or so underlying databases.
- set up of search and results pages for the specified databases.
- access to usage statistics via a web based login to our license of Livestats.XSP from DeepMetrix (http://www.deepmetrix.com).
- monthly updates of new and revised records.
- 30 minutes per month for minor modifications to the hosted site and databases if required.

The first step would be to provide an analysis of the possibilities for providing a combined search feature. Many of the databases have a presumably similar structure and can readily be merged for hosting purposes, i.e. the various Negative Collections. Andornot would assist with the mapping and normalizing of field names to ensure that your existing databases can be kept as separate entities for internal use, but that records from each can be exported and merged into a more limited number of databases for web searching. This can be achieved either by changing field names in existing databases (preferred) or by creating an XML import file using an eXtensible Stylesheet Language Transform. (XSLT).

Once it has been determined which databases can be merged for hosting purposes we will have to establish the design of each search page. Based on your notes it appears there may 4 of these. At this stage I would recommend:

- a Quick Search box which searches significant fields in ALL 4 databases. The results would then be displayed grouped by database with a link to the search page for each for users to then carry out more detailed searches if needed. This will require deciding on the lead textbase and mapping the fields for combined searches. A combined results form will be needed in each textbase.
- an advanced search page for each database. Andornot would use a combination of index browse buttons, dropdowns and radio buttons to make the interface as user friendly as possible. Search hints and examples would also be added to each page.
- a brief and a full results form for each database. The brief pages would contain a hyperlink to the full record. Full records would typically contain "See Also" hyperlinks on any controlled vocabulary terms such as Railroad or Builder etc. (I notice that neither of the CS textbases I looked at had any validation or substitution links and yet

the entries were pretty consistent - you might want to consider adding validation in the future.)
- some Topic searches. These could be added to the Quick Search page as hyperlinks with embedded canned searches of the database(s). This lets users get an appreciation for typical records without having to try and guess what search terms to type in. For some of your smaller databases these might bring up the whole collection, ie. for your Menus.
- adding our ImageHandler for a prototype of image displays for a selected database. This will allow you to upload only one image and resize it on the fly as needed, plus add watermarking if required. (see http://www.andornot.com/Products/Addons/ImageHandler.aspx). Andornot can also provide integration with a shopping cart functionality if required at a later date.

We would ask you to assist us with the design by suggesting the search boxes to be included, what should appear in the brief display, and the order of fields in the full record form.   We have extensive experience with library, archival and museum databases but not with specific terminology such as Whyte Type or Wheel Arrangement. We would therefore rely on you to help us determine the significance and placement of these types of fields.

We would build the design based on initial discussions and then request a compilation of any modifications. After this round of changes, there should only be very minor modifications required before going live.

Costs:

For the purposes of this grant, I am assuming 4 hosted databases. As I mentioned, our standard fee is $125 per month for the first database and $75 per month for any additional ones. The monthly total would therefore be $350 or $4,200 per annum.

The setup cost for the site itself would be $1,500. This includes creation of an advanced search page and brief and full results for one database. We would charge an additional $7,000 for the consultations regarding field mapping, combined search pages and results, topic searches and the advanced search pages and results forms for the other three databases.

Total would therefore be: $8,500 startup + $4,200 pa.

However since a comprehensive budget was requested, and this project may entail additional analyses and work, I have included an additional $2,500 for contingency as we have not had a chance to look at each database or discuss in as much detail as I would have liked had time permitted.

I noticed that your desktop forms do not contain much in the way of navigation buttons or color to assist in use. Since you had mentioned that many of your users are volunteers, it will be useful to include our standard desktop interface. We will do this for one database and then you can implement this yourselves for the rest by exporting, importing and modifying the forms. Cost: $1,000

Thus, summary costs:
```
 $8500   Startup Costs
   4200   Annual Hosting
   2500   Contingency
   1000   Enhanced Interface Formats
$16200   Total
```

Railroad Museum of Pennsylvania Library and Archives Cataloging Status
(Note – figures are changing as work progresses)

LIBRARY

Books and Serials, cataloged and entered in Inmagic DBTextworks: 5,628 entries, reflecting a much larger number of actual items.

ARCHIVES DATABASES, with number of records entered (exported to DBTextworks as completed) 137,673 entries:

As of 25 May 2005

Databases now available as DBTextworks databases	Size (Num Records)
Major Combined Collections	
Curatorial and Reference	4719
General Photograph	4535
General Negative	43,382
Other Combined Collections	
Currency	25
Financial Instruments	190
Menus	68
Passes	9369
Oversized Archival Materials	6050
Corporate Collections	
Baldwin Negatives (Broadbelt)	17,603
Vulcan Locomotive Build List	7136
Other Archival Collections	
Edson Collection	1505
Kline Archives	443
Kline Negatives	4466
Kline Photographs	988
Miscellaneous	
Some Two Dimensional Artifacts	59

Databases ready for conversion to DBTextworks databases (currently various formats)	Size (Num Records)
Major Combined Collections	
Annual Reports	5834
Museum Slides	7632
Corporate Collections	
Baldwin Specification Cards	7194
Budd Negatives	10,398
Vulcan Drawings	619
Vulcan Negatives	597
Other Archival Collections	
Fredericks Negative collection	598
Hoffman Negative collection	1059
Leath Negative collection	3204
Databases in progress to be LADRS databases	Size (Num Records)
Schedules Timetables	
LHR collection	
Arend/Leath Negative collection	
McFadden collection	
Vulcan Builder Photos	
Vulcan Iron Data	

Note: All DBTextworks files to be converted to CS Textworks for inclusion in CS Web Publisher Pro. Decisions will be made regarding combining some databases for web hosting purposes for cost and user efficiencies.

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