LIBRARY SERVICE AND TECHNOLOGY ACT (LSTA) GRANT APPLICATION

State Form 53456 (R2 / 10-08)

INDIANA STATE LIBRARY

Grant type:	☐ Digitization	☐ Innovative	☐ Institutional literacy	☑ Technology

Project title
Digital Library Collections Access through Hand Held Mobile Devices

Name of applicant *(name of organization or agency)*	**Web address**
Ball State University Libraries	www.bsu.edu/library

Address *(number and street, city, state and ZIP code)*
2000 W. University Ave. Muncie, IN 47306

Name of organization director
Arthur W. Hafner, Ph.D., Dean of University Libraries

Telephone number	**Fax number**	**E-mail address**
(765) 285-5277	(765) 285-2008	AHafner@bsu.edu

Name of project director *(contact person for grant purposes)*
Bradley D. Faust, M.L.S., Assistant Dean for Library Information Technology Services, and Arthur W. Hafner, Ph.D., Dean

Telephone number	**Fax number**	**E-mail address**
(765) 285-8032	(765) 285-1096	BFaust@bsu.edu

Name of fiscal agent *(responsible for financial reports)*
Manzoor H. (Jay) Javed

Telephone number	**Fax number**	**E-mail address**
(765) 285-5285		JJaved@bsu.edu

Federal congressional district(s)	**County**
6th	Delaware

Estimated number of people to be served by project	**Source of this number** *(U.S. Census, library circulation record, etc.)*
20,000 + worldwide users	University student population +

Federal funds requested	**Total cost of project**
$8,000	$8,800

Federal Library Services & Technology Act *(indicate the <u>primary</u> purpose that best describes your project – check only one)*

- ☐ Expand services for learning and access to information and educational resources in a variety of formats, in all types of libraries, for individuals of all ages;
- ☑ Develop library services that provide all users access to information through local, state, regional, national, and international electronic networks;
- ☐ Provide electronic and other linkages between and among all types of libraries;
- ☐ Develop public and private partnerships with other agencies and community-based organizations;
- ☐ Target library services to individuals of diverse geographic, cultural, and socioeconomic backgrounds, with disabilities, and with limited functional literacy or information skills; and
- ☐ Target library and information services to persons having difficulty using a library and to underserved urban and rural communities, including children from families with incomes below the poverty line.

Indiana's LSTA Goals *(indicate the <u>primary</u> purpose that best describes your project – check only one)*

- ☐ Indiana libraries will provide up-to-date, reliable access to information by utilizing effective telecommunications, technology, and resources.
- ☑ Libraries will deliver new and improved programs that anticipate and meet Indiana's needs for library services.
- ☐ Indiana State Library will provide leadership and infrastructure for digital library initiatives.
- ☐ Libraries will strengthen public policy support for upgrading library services through improved communication, collaboration, and partnership efforts.
- ☐ Indiana State Library will provide resources and support to libraries which seek to serve special populations in the state.
- ☐ Indiana State Library will provide resources and support to libraries which seek to serve the un-served or underserved populations.

Primary audience for the project *(mark at least one, maximum of three)*

☐ Pre-schoolers (0-5)	☐ Seniors (65+)	☐ Urban populations
☐ Children (6-12)	☐ People with special needs	☐ Institutionalized persons
☐ Youth (13-17)	☑ Library staff	☐ Non or limited English speakers
☑ Adults (18-64)	☐ Rural populations	☑ Statewide public

PART 1.   PROJECT SUMMARY *(150 words or less)*

This is an abstract of your entire project.

Patrons expect to access library information and resources in their preferred medium on demand. Rapid adoption of next-generation hand held devices such as the iPhone and BlackBerry, with more robust features, offer libraries a new medium for highlighting and presenting collections and services. Ball State University Libraries seeks to develop three applications in response. First, develop an open-source application to provide hand held mobile-friendly access to digital assets in our CONTENTdm-based Digital Media Repository. Second, update our CardCat Mobile and Mobile Journals applications and other mobile web site assets to work better with newer hand held devices. Third, create open-source software to assist patrons in finding an available computer in a given library. With LSTA grant funds, the Ball State University Libraries seeks to create information technology solutions for today's and tomorrow's library patron.

PART 2.   NEEDS STATEMENT

Describe the need or problem that generated this project and how you determined this need. Identify the goal from the State Plan that this project will address and how this project will address this goal. (See the State Plan on the Indiana State Library website http://www,in.gov/library/2704.htm.)

The continued rapid adoption of handheld mobile computing devices with recent improvements in interfaces, larger screen sizes, more capacity, and robust commercial applications warrants another look at providing library services to students, faculty, business people, and statewide adult residents using them. The Apple iPhone and iPod Touch, Blackberry Storm, and other devices can access Internet resources for free via ubiquitous public WiFi networks, whereas earlier smart phones had to place a call to access the Internet, using data plan minutes which cost the customer money.

Ball State University's Digital Media Repository (DMR) hosts a large number of oral history digital audio interviews in collections created and funded through LSTA grants, such as the Black Middletown Project, the Black Muncie Oral History Project Collection, and two Middletown Jewish Oral History projects. The DMR also hosts a number of unique, Indiana-related collections containing videos, such as the Robert F. Kennedy Speech Collection, the Man Haters Film Collection, and documentaries from WIPB, Muncie's public television station. These collections are hosted in CONTENTdm which lacks a mobile device friendly user interface. Developing an open source interface for mobile computing devices to access and highlight such collections will benefit not only Ball State's DMR, but also collections in Indiana Memory, and CONTENTdm-based collections across the country.

This project can help to meet two of the LSTA's Five Year Plan's goals. First, it will help "provide up-to-date, reliable access to information by utilizing effective telecommunications, technology and resources." Second, it will result in a new library application that is designed to "provide all users access to information through local, state, regional, national and international electronic networks." It will also provide "24/7 access to library and local historical organizations' and local historical institutions' collections" through a new technology medium. This project will serve the teaching, learning, and research needs of students, faculty, and researchers on campus and beyond.

First, describe the overall objectives of this project. Second, identify project staff and detail their individual roles in this project. Third, describe how you will measure the impact of this project on the target audience, as well as on the library(ies) involved. For example, describe how you will determine if the needs of the target group were actually met. Refer to http://www.shapingoutcomes.org/course/index.htm for information about outcome based evaluation (OBE), the preferred method for evaluating project success.

Objectives:
1. Update current BSU Libraries' web site for mobile devices to take advantage of the next generation of mobile devices such as the iPhone, iPod Touch, and BlackBerry Storm.
2. Create mobile browser based access to audio and video content from the Digital Media Repository via an open-source, mobile-friendly, server-side application that would allow:
   a. Recordings in the public domain to be:
     i. Downloaded to a mobile device
     ii. Listened to via web streaming
   b. Recordings not in the public domain to:
     i. Be listened to via web streaming
     ii. Have a link sent to the patron's email address for listening to later
3. Create an open-source application that will allow students to find an available computer at Bracken Library from their mobile device, and possibly other public access computer areas.

Project staff:
1. Hire part-time programmer to develop mobile device applications to interact with our Digital Media Repository's implementation of CONTENTdm, implement a redesign the current library mobile web site, and develop the client and server applications for computer availability tracking and reporting.
2. Special Project Developer (currently employed) will plan information architecture structure behind these software packages.
3. Assistant Dean for Library Information Technology Services will supervise, and assign tasks to additional staff as needed.

Measure impact:

Outcome 1: potential website users indicate satisfaction with new interface
Indicator(s): the number and percent of survey respondents who provide a favorable or highly-favorable rating of the new interface.
Applied to: random survey of users online.
Data Source: online survey.
Interval: 3 months
Target: 50%

Outcome 2: increased utilization of oral history resources within the DMR
Indicator(s): Increase in the number and percent of visitors accessing DMR resources
Applied to: featured items in DMR
Data Source: site statistics
Data Interval: quarterly
Target: 15%

Outcome 3: students and other local patrons experience increased availability of public access computer workstations
Indicator(s): the number and percent of online and in-person patrons who report using the software to find an available computer.
Applied to: random surveys of users online and/or in-person.
Data Source: survey
Data Interval: 3 months
Target: 15%

Outcome 4: peer institutions interested in the open source applications implement the free, open source software (FOSS) for implementation.
Indicator(s): the number and percent of institutions requesting copies of the FOSS.
Applied to: online, emailed, telephone or in-person requests.
Data Source: tally
Data Interval: ongoing
Target: 10 institutions

(*NOTE: in the following pages, the abbreviation LITS stands for Library Information Technology Services department within Ball State University Libraries, where the project will be developed. Information about LITS can be found at: http://bsu.edu/library/lits/)

PART 4	TIMELINE	

Create a monthly timetable for your project. Include a list of activities indicating what will be done and by whom.

ACTIVITY	WHEN	WHO
IMPLEMENTATION:		
Plan system architecture for project	during Month 1	LITS staff
Hire programmer	during Month 1	Assistant Dean
Interface development	during Month 1 -2	LITS staff
Development of computer availability module	during Month 1 - 3	programmer and LITS staff
Update of mobile-friendly library web site	during Month 3 - 4	programmer and LITS staff
Development of DMR interface for mobile devices	during Month 6	programmer and LITS staff
Revisions and debugging of all modules	ongoing through Month 9	programmer and LITS staff
Create and conduct survey on website interface	during Month 4 and 7	LITS staff
Create and conduct survey on computer availability	during Month 4 and 7	LITS staff
Track tally of requests for software from other institutions	ongoing	LITS staff
Generate, analyze and report DMR site statistics	quarterly	LITS staff in cooperation with Archives & Special Collections
Prepare reports for submission to IN State Library	June & Oct. '09, Jan. & Sept. '10	programmer, Asst. Dean, staff
COMMUNICATION:		
Publicizce for feedback of computer availability module	during Month 3	programmer and LITS staff
Publicize for feedback of mobile web site redevelopment	during Month 4	programmer and LITS staff
Publicize for feedback of DMR interface for mobile devices	during Month 6	programmer and LITS staff
Publicize for feedback of complete software package	during Month 7	programmer and LITS staff
EVALUATION:		
Usability testing for computer availability module	during Month 2	LITS staff
Usability testing for mobile-friendly library website	during Month 4	LITS staff
Usability testing for DMR interface for mobile devices	during Month 5	LITS staff
Online satisfaction survey for website interface	during Month 6 and 9	LITS staff
Survey patrons on computer availability	during Month 6 and 9	LITS staff
REPORTS:		
Quarterly report to IN State Library	July 31, 2009	Asst. Dean LITS or designated staff
Quarterly report to IN State Library	November 26, 2009	Asst. Dean LITS or designated staff
Quarterly report to IN State Library	February 26, 2010	Asst. Dean LITS or designated staff
Final report to IN State Library	October 1, 2010	Asst. Dean LITS or designated staff
Financial report and plan for evaluation	July 1, 2010	Asst. Dean LITS or designated staff

PART 5.	COMMUNICATION PLAN

How do you intend to promote the program? How will you reach the target audience? Grantees are expected and encouraged to publicize the project in available and appropriate media outlets. How and when are you planning to share the results of this project beyond your local jurisdiction? Is the project a model for replications?

All grant projects are required to acknowledge IMLS on all products. For more information, go to http://www.imls.gov/recipients/communication.shtm .

The project will be publicized through the Libraries' monthly newsletter, the Ball State Daily News student newspaper, local Muncie press, the libraries' web site, and campus wide email. In addition, a summary of the project will be sent to a number of professional email listservs through organizations such as the American Library Association, the Library Information Technology Association, and the Association of College and Research Libraries. Notification will also be sent to organizations that support and promote the development of open-source software, such as The Open Source Initiative, Code4Lib, and others. Project staff will offer presentations on this project at professional meetings and workshops and venues for the aforementioned organizations as institutional travel funding permits.

Intellectual property (in the form of software) that will be generated as a result of this project is intended to be a model that harnesses the power of distributed development, peer review, and transparency of process. This can result in better quality, lower cost software options to libraries and other non-profit organizations.

PART 6.	CONTINUATION PLAN

Explain how activities or benefits from the project will continue after the LSTA funding period ends. If the program will not be continued, explain why.

Use of the software developed from this project will continue after the LSTA funding period ends. Ball State University Libraries are committed to maintaining and updating this software solution, as was done for the product developed with the LSTA Innovative Technology Mini-Grant received in 2004. Because of the nature of free, open-source software, it is our goal that the benefits to other institutions using it will continue into the foreseeable future, especially during a time of frozen or shrinking budgets and increasing need for new and adapted services.

PART 7	PROJECT BUDGET			

The Budget should provide an overview of all anticipated project costs from federal and local sources. Round all amounts to the nearest whole dollar. LSTA funds cannot be used to supplant local or system funds. LSTA funds may not be used for administrative overhead.

BUDGET ITEM	METHOD OF COMPUTATION	LSTA GRANT FUNDS	COST SHARING	PROJECT TOTAL
1. Personal Services				
Salaries and wages Programmer	$15/hour for 20 hours/week, 407 hours	7,400	740	8,140
				0
				0
				0
				0
Employee benefits				0
				0
				0
				0
				0
Total for Personal Services		7,400	740	8,140
2. Supplies				
Office supplies				0
Operating supplies				0
Other supplies				0
Total for Supplies		0	0	0
3. Other Services and Charges				
Professional services				0
Communication and Transportation				0
Printing and advertising	Advertising budget for hiring programmer and promoting project	150	10	160
Repair and maintenance				0
Total for Other Services and Charges		150	10	160
4. Capital Outlays				
Furniture and equipment	Two iPod Touch units and accessories	450	50	500
Other capital outlays				0
Books				0
Periodicals and news				0
Papers				0
Nonprint materials				0
AV				0
Software				0
Total for Capital Outlays		450	50	500
BUDGET TOTAL		8,000	800	8,800

PART 8	PROJECT BUDGET NARRATIVE

Budget Narrative: Outline the project budget in narrative form using the four budget categories. If both local and LSTA funds will be used, please specify by source within the categories. Explain how the various budget items are applicable to the proposed project. Guidelines on acceptable use of LSTA grant funds are available on the Indiana State Library's website http://www.in.gov/library/2704.htm .

Personal services: this portion of the budget will be used to hire a part-time programmer to develop the bulk of the project.

Supplies: since most of the project is electronic in nature, incidental office and other supplies will be provided out of existing budgets.

Other services and charges: this category will be used to advertise the part-time programmer position, and print promotional materials if needed. Because of its electronic nature, most advertising and promotion will take place via email, the Internet, and similar venues mentioned previously.

Capital outlays: this portion of the budget will be used to purchase two iPod Touch units for testing of the new systems. These units function similarly to the iPhone, but cost less and do not require monthly subscription fees. Computer hardware, software, and related peripherals will be provided from existing departmental resources and budgets.

PART 9	LSTA OUTCOMES PLAN

Outcome based evaluation (OBE) is the preferred evaluation method for your grant project. For a tutorial, go to http://www.shapingoutcomes.org/course/index.htm .

PROJECT SUMMARY / PROGRAM PURPOSE

1. Provide a mobile-friendly next-gen website that highlights unique oral history collections, and photographic, print and video resources.
2. Facilitate easy discovery of available library computers.
3. Create an open-source software solution that does not currently exist.
4. Update current mobile website for next-gen devices by developing code to recognize newer client devices and formatting output accordingly.

INPUTS

LSTA funds to hire a programmer, and purchase test units. Staff time planning, programming and creating the software. Staff time for planning and coordination. Staff time to create two how-to videos. Staff time designing and running surveys. Assistant Dean's time supervising.

ACTIVITIES

Correspondence with, and notification to, institutions and organizations with similar focus. Recruiting and hiring a part-time programmer. Project staff prepares articles and presentations on the project. Surveying patrons in-person and online, then analyzing results.

OUTPUTS

Master plan detailing delineation of responsibilities, time frames for completion, and tracking and documenting progress.
Two free, open-source software (FOSS) packages. Two how-to videos.
Functional, user-friendly next-generation mobile interface seamlessly integrated with existing DMR resources and CONTENTdm software.
Number of: institutions contacted, articles published, and presentations given.

OUTCOMES

1. Potential mobile web site users indicate satisfaction with the new interface.
2. Increased utilization of oral history and other resources within the Digital Media Repository, primarily from mobile devices.
3. Students and other local patrons experience increased availability of public access computer workstations.
4. Peer institutions interested in the open source applications implement the FOSS for themselves.

EVALUATION INDICATORS

1. The number and percent of survey respondents who provide a favorable or highly-favorable rating of the new interface.
2. Increase in the number and percent of visitors accessing DMR resources.
3. The number and percent of online and in-person patrons who report using the software to find an available computer.
4. The number and percent of institutions requesting copies of the software for implementation in their institutions.

EVALUATION SOURCES / METHODS

For #1, random survey of users online.
For #2, analysis of site statistics.
For #3, online and in-person surveys.
For #4, ongoing tally of requests and implementations.

PART 10.	ASSURANCES

The Institute of Museum & Library Services (IMLS) requires the Indiana State Library to obtain certification from its sub-grant applicants regarding federal debt status, debarment and suspension, non-discrimination, a drug-free workplace, and other applicable assurances. These requirements are incorporated in the Assurances Statement below. Review the Statement and sign the certification form. If you receive a grant, you must comply with these requirements.

By signing the application form, the authorizing official, on behalf of the applicant, assures and certifies that, should a sub-grant be awarded, it will comply with the statutes outlined and all related IMLS and ISL regulations. These assurances are given in connection with any and all financial assistance from IMLS / ISL after the date this form is signed. These assurances shall obligate the applicant for the period during which Federal financial assistance is extended. The applicant recognizes and agrees that any such assistance will be extended in reliance on the representations and agreements made in these assurances, and that the United States government has the right to seek judicial enforcement of these assurances, which are binding on the applicant, its successors, transferees, and assignees, and on the authorized official whose signature appears on the application form.

Certifications Required of all Applicants

1. Financial, Administrative, and Legal Accountability;
2. Debarment and Suspension;
3. Non-Discrimination;
4. Drug-Free Workplace Act of 1988; and
5. Lobbying

Certification of Authorizing Officials
I have examined this application, and I hereby certify on behalf of the applicant organization that:

1. The information provided is true and correct
2. All requirements for a complete LSTA Grant application have been fulfilled;
3. The applicant will comply with all applicable payment, accounting, and reporting requirements; and
4. The applicant will comply with applicable certifications regarding Items 1-5 listed above under **Certifications Required of All Applicants**.

We, the undersigned, hereby certify that should this organization receive a sub-grant, the organization and its leaders will comply with all LSTA regulations, all statutes outlined, requirements as defined in the Indiana State Library (*Library Services and Technology Act Handbook for Subgrant Applicants)*, and all applicable Federal statues and regulations.

Name of applicant *(organization or agency)* Ball State University Libraries	Project title Dig Lib Coll Access HandHeld Mobil	Date of submission *(month, day, year)*
Signature of Principal Officer of applicant	Title of Principal Officer	Date of signature *(month, day, year)*

STATE LIBRARY USE ONLY		
Project number	☐ Approved ☐ Not approved	Amount awarded

Type of library
☐ Public ☐ School ☐ Academic ☐ Special ☐ Multi-type ☐ SLAA ☐ Institutional

These grants are made available through funds from the Library Services and Technology Act appropriated by Congress and administered by the Institute of Museum and Library Services and the Indiana State Library.