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Arizona

Arizona State University, Tempe, AZ

[LG-95-17-0158-17](#)

\$249,983.00

Arizona State University, in partnership with Arizona State Library and NISE Net, will develop a field-tested, replicable, low-cost toolkit of citizen science resources for public libraries. The project team of librarians, citizen science experts, informal STEM educators, practitioners, and scientists, will: 1) develop and evaluate citizen science toolkits that will be available for and through the public library partners; 2) create associated resources to train, support, and communicate with librarians and citizen scientists; and 3) work with stakeholders to create a plan to scale the model to interested libraries, statewide then nationally. The project will leverage SciStarter, an online community that brings together science researchers and citizen scientists, with a database of over 1,600 citizen science projects. Summative evaluation will assess the library staffs' knowledge of citizen science, their capacities, and sense of self-efficacy in engaging patrons in citizen science activities, and will also measure the extent of patrons' participation in citizen science as a result of the library programming.

California

Art Center College of Design, Pasadena, CA

[LG-74-17-0134-17](#)

\$25,000.00

ArtCenter College of Design's College Library will develop and test best practices for archivists and librarians working with designers to develop digital tools and interfaces for archives and special collections. The project will bridge the disparate perspectives and vocabularies of librarians, archivists and technology designers with the aim of distilling essential expertise from both fields. The results, in the form of practical, easily understood pointers and sample work processes, will be shared in a national white paper and online content to be disseminated widely through targeted channels to the library and design sectors.

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San Jose State University Research Foundation, San Jose, CA

[LG-98-17-0209-17](#)

\$100,000.00

The San Jose State University School of Information iSchool will investigate ways that blockchain technology can be used by libraries to partner with other organizations and to support city or community goals. Blockchain technology is a shared digital/electronic ledger featuring a constantly updated list of transactions. It is supported by a peer-to-peer network that may be either public or private. This technology has the potential to help libraries develop a distributed metadata system; facilitate better digital rights management; and create a protocol for supporting community based collections. The proposed National Forum would bring together 20-30 technical experts in libraries, blockchain technology, and urban planning to discuss ways that blockchain technology can advance library services to support city or community goals. The resulting commentary from a project blog, national forum, and conference and the survey data will be evaluated and included in the project's final report, which will be available online. The recommendations will serve as a guide for both large and small, urban and rural libraries to implement blockchain technology or consider other directions.

Colorado

Regents of the University of Colorado, Boulder, CO

[LG-96-17-0176-17](#)

\$385,327.00

The University of Colorado Boulder's Information Science Department, in collaboration with Boulder Public Library and Denver Public Library, will conduct a study to understand cultivation of computational literacy among parents and children. Up to 100 family members, including children ages 4-7, will create and learn together using design-based activities with computing during workshops facilitated by library staff. Researchers will use design-based research incorporating ethnographic approaches and the Connected Learning framework. The work will result in a model of family engagement with young children in computational literacy, resources for librarians, including a facilitator guide, project website, webinars and professional development at conferences, and evidence-based case studies of family participation and library facilitation. Children and parents will get first-hand experience with creative technologies; partner libraries will have increased capacity to engage children and

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families in computational literacy; and more libraries will be able to provide computational literacy opportunities for young children and families.

Indiana

Trustees of Indiana University, Indianapolis, IN

[LG-72-17-0139-17](#)

\$49,773.00

Researchers at the School of Informatics and Computing at Indiana University Indianapolis and Indiana University Bloomington will work toward the development of a conceptual framework for assessing libraries' capacity for big data curation. This planning grant will provide a research-based foundation for a future project to develop a big data curation capacity assessment toolkit that would be freely available to libraries across the country. The conceptual framework will be informed by three specific research activities: systematic literature review, online survey, and in-person focus groups. Research findings will provide informative sources for academic and public libraries that are interested in or are planning sustainable and scalable big data curation programs. It will assist library staff in understanding their current environments as well as potential impediments to building successful curation programs.

Trustees of Indiana University, Indianapolis, IN

[LG-96-17-0184-17](#)

\$355,816.00

Indiana University's Department of Library and Information Services will explore community data reusers' practices across multiple states, including Michigan, Texas, and Massachusetts, to offer insights into developing and adapting public-library services to meet community data reusers' needs. The project team will support community members' data reuse by connecting them with existing resources and data infrastructure as well as helping them understand their data practices and reuse workflow. The project team will describe 30 community members' data-reuse practices and strategies and map the practices and strategies to existing infrastructure, focusing on public libraries. The team will also conduct a study of 15 librarians to investigate their roles in supporting their communities' data needs, efforts, services, challenges, and opportunities and the knowledge and skills librarians need to effectively deploy data services. Results will support development of a theoretical model of community-

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inclusive data exchange/workflow and collaborative work with partner libraries to design prototype library services.

Iowa

Education, Iowa Department of, Des Moines, IA

[LG-99-17-0142-17](#)

\$25,000.00

The State Library of Iowa will partner with the Iowa Arts Council to adapt elements of the Creative Aging Toolkit for Public Libraries for use in rural settings, fostering relationships between 18 rural public libraries with nonprofit arts organizations or artists. The project will offer free art classes for older Iowans in public libraries, engaging them with participatory, skills-based arts programming that meets their creative, cognitive, and social needs. This project adapts existing resources previously funded by IMLS and developed by the Westchester Library System in partnership with AARP Foundation, American Library Association's Public Program Office, Selfhelp Community Services, and Lifetime Arts.

Kentucky

University of Kentucky, Lexington, KY

[LG-96-17-0199-17](#)

\$393,876.00

The University of Kentucky, in collaboration with the Kentucky Department of Libraries and Archives, the State Library of Indiana, and the State Library of Ohio, will conduct a three-year research project to investigate public library storytime programs' support of school readiness of young children. The research team will videorecord 72 storytime sessions in 36 public libraries across three states to observe interactions between librarians, children, and adult participants and administer two surveys: one to parents/caregivers and one to librarians. Based on findings and a comprehensive needs assessment, the team will develop guidelines and digital learning modules to train librarians and other community program providers. Because few studies of adult-child interactions or the language environment of young children have taken place in informal learning contexts beyond the classrooms and homes of young children and little empirical evidence exists regarding the development of high quality public library

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storytime programming, the project will contribute substantially to the professional knowledge base.

Maine

President and Trustees of Bates College, Lewiston, ME

[LG-95-17-0189-17](#)

\$249,760.00

Bates College will expand the functionality and usability of the Diverse Book Finder, an online repository which includes records for more than 2,000 children's books published since 2000. This phase will focus on developing a collections analysis tool to help children's librarians identify potential gaps in their collection as it relates to racial representation; improve search engine operability; and provide training opportunities for librarians in Maine in collaboration with Maine State Library. The project will enhance libraries' position as community anchors through the development of collections that reflect and serve their local communities and it will help librarians support the development of positive self-image and intercultural competence among children, thereby contributing to their ability to thrive in our increasingly diverse world. The online format of this project offers the potential to reach a broad audience, including public librarians, school librarians, K-3 teachers, higher education faculty and students, parents and catalogers of children's materials as well as publishers.

Maryland

University of Maryland, College Park, MD

[LG-71-17-0159-17](#)

\$240,139.00

The Digital Curation Innovation Center at the University of Maryland's iSchool will research, develop, and test software architectures to improve the performance and scalability of the Fedora repository. This project will create a new Fedora implementation without current performance bottlenecks relating to storage size, enabling institutions to manage Fedora repositories with petabyte-scale collections. It will apply the new Fedora 5 application programming interface (API) to a repository software stack called DRAS-TIC. Fedora community partners will be engaged to help develop use cases and performance expectations. The project will produce open source software, tested system configurations, documentation, and best-practice guides.

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Massachusetts

Massachusetts Institute of Technology, Cambridge, MA

[LG-73-17-0162-17](#)

\$92,170.00

The Massachusetts Institute of Technology will convene a workshop to identify gaps, opportunities, and best practices for designing library information systems that can incorporate local knowledge, accommodate different modes of learning and cognition, and foster diverse approaches to organizing information. The goal of the project is consider how best to provide services that are accessible to communities with a range of abilities and viewpoints. It will address concerns that algorithms, interfaces, and ontologies embedded in current library systems incorporate substantial biases. The primary output of the project will be a white paper summarizing the significance and areas of need for diversity and inclusion; identifying high-impact design principles that are accepted and emerging in the broader community; characterizing approaches and methods for applying these principles to library information systems; and identifying potential next steps for software developers that develop these systems and for library institutions that adopt and deploy them.

Simmons College, Boston, MA

[LG-98-17-0137-17](#)

\$72,220.00

Through a National Forum grant, Simmons College will organize a symposium comprised of panels, workshops, and brainstorming sessions for up to 70 stakeholders on the role of library and allied institutions as community anchors for information access and literacy. The forum will focus on how libraries can serve as hubs for professionals across disciplines to promote information literacy. Working with related professionals, such as journalists, social media experts and educators, participants will produce a white paper, curricula to develop information literacy, a research agenda, and recommendations for LIS programs and associations that prepare librarians to implement information literacy programs.

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Missouri

University of Missouri System, Columbia, MO

[LG-97-17-0183-17](#)

\$50,000.00

University of Missouri's School of Information Science & Learning Technologies, in partnership with the Hook Center for Educational Renewal, will study the role of rural school libraries as anchors for community mental health literacy efforts. The university will examine the capacity of school libraries to work in this space and document existing efforts and practices. The assessment will inform recommendations for a national agenda for school libraries and school librarians to strengthen policy, research, technical assistance, and training on mental health literacy for schools and communities. The project team will also produce a state-specific best practices resource guide featuring indigenous mental health literacy initiatives that other states can adapt to serve their own communities.

Washington University, Saint Louis, MO

[LG-88-17-0171-17](#)

\$99,960.00

The Washington University in St. Louis Libraries, University of Iowa Libraries, and the University of Michigan Museum of Paleontology will hold two meetings titled "Community Standards for 3D Data Preservation" (CS3DP), to bring together stakeholders to work toward establishing shared standards, practices, and technologies for digital 3D data preservation, documentation, and dissemination. While some resources exist for learning how to create and work with 3D data, resources related to preservation are lacking. The first forum will bring together diverse experts from the community to explore digital 3D preservation topics and establish working groups. Between meetings, working groups will continue to engage online. In the second forum, participants will explore the working groups' solutions and agree on a roadmap for digital 3D preservation. The forums will produce a community-developed plan to move 3D preservation, documentation, and dissemination forward, will make recommendations for standards and best practices through a white paper, and will create a plan for sustaining these investments.

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New York

Brooklyn Public Library, Brooklyn, NY

[LG-95-17-0195-17](#)

\$248,553.00

Brooklyn Public Library will partner with Committee for Hispanic Children and Families, New York Early Childhood Professional Development Institute (PDI), and Business Outreach Centers to develop Growing Providers, a seven-session program designed to help aspiring childcare providers successfully apply for New York State registration as family childcare providers, while also providing them librarian-led training on early literacy and business resources. Growing Providers builds on a recent, highly successful pilot project conducted at BPL's New Lots Library that assisted new and existing immigrants in registering for a state license as family childcare providers. Growing Providers will provide librarian-led training in highly effective early childhood early literacy activities and access to valuable business information and guidance, affirming that libraries can serve as providers of job training and economic engines rather than simply as facilitators and points of access.

Council of State Archivists, Albany, NY

[LG-70-17-0196-17](#)

\$210,240.00

The Council of State Archivists (CoSA) will gather, develop, and share best practices and guidance materials to improve creation, management, preservation, and use of permanent state government digital records and information. CoSA will collaborate with the National Governors Association (NGA), the National Association of State Chief Information Officers (NASCIO), the National Association of Secretaries of State (NASS), and the Chief Officers of State Library Agencies (COSLA), as well as content creators in state government and users of government data, to help improve preservation and use of permanent state government electronic records. The project will result in the publication of five collaborative reports, ten case studies on electronic records or digital preservation issues, six webinars, and engagement with stakeholders through articles, conference presentations, and focus groups.

Pratt Institute, Brooklyn, NY

[LG-72-17-0179-17](#)

\$49,650.00

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The School of Information at Pratt Institute will develop a prototype of DADalytics, a modular tool that performs supervised entity extraction from archival documents for generating linked open datasets, lowering barriers to entry for institutions seeking to create linked open data from archival materials. This project will build on previous work to develop the Linked Jazz Transcript Analyzer, extending that tool's functionality and making it more widely available for use by other institutions. Grant funds will support the research and data gathering needed to inform the redesign and reengineering of the tool, including an environmental scan, a series of meetings with key stakeholders and the development of a prototype.

Research Foundation of State University of New York, Albany, NY

[LG-96-17-0144-17](#)

\$456,394.00

The Center for Technology in Government at the University of Albany, in partnership with the American Library Association's Center for the Future of Libraries, will explore the role of public libraries as community anchors in smart city initiatives to understand how public libraries can advance their role as community anchors by contributing to the community's understanding of and participation in smart city initiatives. This three-year project will use a multi-method research approach and include a literature and current practices review; case studies of Ignacio Community Library in Colorado, Saratoga Springs Public Library in New York, Chattanooga Public Library in Tennessee, and Chicago Public Library in Illinois; and a national survey. The project will result in increased and sustained relationships among public libraries, local governments, researchers, and community organizations; an Opportunity Agenda, Roadmap Report, and Smart Libraries Toolbox to guide libraries willing to advance their role as community anchors and catalysts; and demonstrable improvements in library services.

Rhizome Communications, Inc., New York, NY

[LG-73-17-0119-17](#)

\$100,000.00

Rhizome, in collaboration with the University of California at Riverside Library (UCR), the Maryland Institute for Technology in the Humanities (MITH), and the Documenting the Now project, will design and host a National Forum on Ethics in Web Archiving. The three-day meeting will convene many stakeholder groups, including representatives from libraries, archives, and museums, socially engaged artists, activists, and members

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of community organizations, and interdisciplinary practitioners such as social media researchers and lawyers. Participants will discuss the ethical challenges, both technical and social, involved in archiving the web and social media. Following the forum, a best practices white paper and proceedings will be published.

Trustees of Columbia University in the City of New York, New York, NY

[LG-89-17-0218-17](#)

\$20,422.00

A team from the Media Center for Art History at Columbia University will apply image processing, deep learning, and optical character recognition (OCR) techniques to investigate methods for automated processing and data extraction from digitized 35mm slides to support archival discovery. The 35mm slide library, once the cornerstone of teaching art history at all levels, now languishes in storage, with valuable image resources trapped inside its drawers. This project aims to make these legacy collections accessible again, with the potential to increase available teaching resources, make significant images available for study, and to preserve the institutional memory and pedagogical history retained in these collections. They hope to discover techniques that will allow for less time-consuming and more cost-effective processing of legacy slide collections, enabling libraries across the country to partially automate the cataloging and identification of significant images.

North Carolina

North Carolina State University, Raleigh, NC

[LG-72-17-0132-17](#)

\$49,808.00

The North Carolina State University Libraries, University of Kansas Libraries, and University of Illinois Urbana-Champaign School of Information Sciences are exploring the need for, and ideal components of, an open educational resource (OER) for teaching library students and professionals about scholarly communication. Scholarly communication is recognized as a core competency for librarianship but there is currently no unified educational resource available for training and continuing education. Scholarly communication is interdisciplinary and quickly evolving, which makes it difficult to create a standard commercial textbook. In consultation with many stakeholders, the project team will design and conduct a nationwide survey and workshop to engage directly with the two central stakeholder groups: library school

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instructors and scholarly communication experts. These activities will identify the extent to which an OER is needed, the components of the OER, the potential obstacles to its adoption, and the partnerships and promotional activities that would accelerate its use.

Ohio

Kent State University, Kent, OH

[LG-71-17-0124-17](#)

\$458,319.00

Kent State University's KNEXT project will bring advanced data analytics and business intelligence (DA&BI) services to public libraries in order to support small businesses, entrepreneurs, and community advocates. This project will further develop a coalition of academic, public libraries, small business development centers, small businesses, and community advocates by identifying sources of useful data (national, state, county); consolidating data in a repository for long-term access and delivery; and creating a platform and dashboard for libraries to provide DA&BI services to the community using machine learning, data mining, web mining, and text analytics.

Pennsylvania

Trustees of the University of Pennsylvania, Philadelphia, PA

[LG-74-17-0161-17](#)

\$25,000.00

The University of Pennsylvania Libraries will demonstrate and provide tools and data for opening access to the large body of scholarly and general serial literature from 1923-1963 that is in the public domain, but not freely accessible online. Though libraries hold many serials published after 1922 that are in the public domain and contain unique and valuable information for researchers, most have not been made available online due to the uncertainty and difficulty of establishing their copyright status. The project will result in a complete, searchable inventory of serials with issue and contribution renewals made between 1950 and 1977, as well as procedures for using the inventory and other data to decide whether a portion of a serial is in the public domain.

University of Pittsburgh, Pittsburgh, PA

[LG-70-17-0146-17](#)

\$224,761.00

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The University Library System at the University of Pittsburgh, in partnership with the Carnegie Library of Pittsburgh, the Western Pennsylvania Regional Data Center, and the Urban Institute, which supports and coordinates the National Neighborhood Indicators Partnership, will develop the capacity of public and academic libraries to serve as key partners in local open civic data ecosystems. The project's primary output will be a guide and toolkit to help public and academic libraries: identify local needs and contexts around open civic data; consider roles, opportunities, practices, and governance in the civic data ecosystem; anticipate and address common challenges; measure local civic open data health and capacity; and learn from examples of successful civic data partnerships.

Texas

Texas A&M University, College Station, TX

[LG-99-17-0212-17](#)

\$25,000.00

Texas A&M University Libraries, in collaboration with Veteran Resource and Support Center, will adapt military-style orientation processes to develop an online orientation checklist that familiarizes veterans with the library services and resources essential to their academic success. The project team will design an in-processing checklist, colloquially known to many veterans as a "dance card," that incoming student veterans can use to become oriented to the library. The dance card, which will be developed and made available in an online format, will include two primary components: 1) a pre-assessment that librarians will use to identify specific library resources and services appropriate for each student veteran, and 2) an accompanying series of modules that will guide the student veteran to visit library spaces and services and become familiar with the resources available to them. Texas A&M will develop a model and project that can be adapted by other academic libraries working with student veterans.

University of Houston System, Houston, TX

[LG-70-17-0217-17](#)

\$249,103.00

The University of Houston Libraries, in collaboration with Stanford University, DuraSpace, Indiana University and the Digital Public Library of America, will develop a toolkit to help institutions accomplish complex system migrations. Focusing primarily on

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migrations from CONTENTdm to Hyku, the toolkit will allow institutions to better understand their digital library ecosystems and how they can prepare for migration. It will include content such as documentation on the theoretical approaches to migration, instructions on how to conduct a needs assessment based on analyzing metadata structures and understanding system requirements, best practices for preparing repository data for migration, and specialized tools to assist users with migration to Hyku.

University of North Texas, Denton, TX

[LG-71-17-0202-17](#)

\$318,988.00

The University of North Texas Libraries and the Computer Science and Engineering Department will research the efficacy of using machine-learning algorithms to identify and extract publications contained in web archives. The overarching goal of this project is to understand if machine-learning models can successfully identify content-rich PDF and Word documents from web archives that align with library and archives collecting plans. The researchers are working in two phases. They are first increasing their understanding of the workflows, practices, and selection criteria of librarians and archivists through ethnographic-based observations and interviews. Next, this increased understanding informs the use of novel machine-learning techniques to identify content-rich publications collected in existing web archives. Identifying these documents will empower libraries, archives, and museums to meet their curatorial missions.

University of North Texas, Denton, TX

[LG-88-17-0129-17](#)

\$87,000.00

The University of North Texas, in collaboration with the University of North Carolina at Greensboro, the University of California at Santa Barbara, the University of Missouri, the University of Pennsylvania, Stanford University, Yale University, the Center for Research Libraries (CRL), the Educopia Institute, and the Scholarly Publishing and Academic Resources Coalition (SPARC) will hold national forums in 2018 to address national concerns regarding the preservation of electronic government information (PEGI) by cultural memory organizations for long term access by citizens of the United States. By convening a series of expert groups and key stakeholders the project will identify and surface a broadly shared national consensus and agenda on specific future steps needed

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to preserve and provide long term access to electronic government information in the United States.

Virginia

Virginia Polytechnic Institute and State University, Blacksburg, VA

[LG-73-17-0141-17](#)

\$95,024.00

Team members at Virginia Tech, Indiana University, and the University of Oklahoma will organize meetings to develop a roadmap and white paper for library adoption of Three Dimensional (3D) and Virtual Reality (VR) services. Lower costs and greater computational power have made 3D and VR technologies financially realistic for a broad variety of institutions. Many academic libraries have developed archives for other forms of research data, but there is an absence of standards and best practices for producing, managing, and preserving 3D and VR content. This gap is an information management problem suited to the strengths of libraries and can benefit librarians and researchers alike across institutions. The team will host three national forums, each on a different 3D and VR theme: content creation and publishing, visualization and analysis, and repository practice and standards.

Washington

University of Washington, Seattle, WA

[LG-74-17-0190-17](#)

\$25,000.00

The University of Washington Health Sciences Library will plan, design, build, test, and assess a Virtual Reality (VR) and Augmented Reality (AR) program and studio for medical professionals in a health sciences library environment. They will then develop a "how to" primer for other libraries across the country. With this primer, medical and research libraries will be able to design, plan, implement, and evaluate VR and AR studios for healthcare team use in an easy to understand format. Since scholarly and medical literature are now almost entirely digital, providing the space, technology, and expertise for using VR and AR equipment can allow medical libraries to bring researchers and clinicians back into the library space.

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Wisconsin

University of Wisconsin System, Madison, WI

[LG-96-17-0220-17](#)

\$524,874.00

The University of Wisconsin, Drexel University, and the University of Oklahoma will conduct research and develop screen media education training modules for public librarians working with parents and other caregivers of children ages 5 to 11. Working in six different public libraries in three different geographic areas, Navigating Screens will gather a rich set of data based on interviews and surveys to help librarians across the country deliver programs for parents and caregivers to become effective media use mentors and educators. The research will result in a set of locally-adaptable educational products, including a model of how caregivers make decisions related to their screen media practices; resources about screen media; an evaluation matrix caregivers and practitioners can use when selecting and evaluating information sources related to screen media practices; and replicable training modules for librarians and community organizations to use to strengthen their expertise when assisting parents.