A nationwide collaboration of organizations is seeking a $803,000 grant for a 36-month implementation effort to develop the Collaborative Collections Lifecycle Project (CCLP). The partnership is led by National Information Standards Organization (NISO), Partnership for Academic Library Collaboration & Innovation (PALCI), Lehigh University Libraries, with contributions from Ithaka S+R, the Greater Western Library Alliance (GWLA), the Center for Research Libraries, Colorado Alliance of Research Libraries, ISSN International Centre, Internet Archive, University of Denver Libraries, University of Delaware Library Museums and Press, University of Pittsburgh Library System, Tulane University Libraries, New York University Libraries, the Duke University Press, Project MUSE, JSTOR, Paratext LLC, Index Data LLC, the Boston Library Consortium, the Eastern Academic Scholars' Trust (EAST), and the TriCollege Libraries. The infrastructure will create a suite of best practices, improved standards, and prototype middleware for the development and management of collective collections and will support varied implementation models, data interoperability, and sharing of expertise across a range of institutions and consortia. This project aligns with several IMLS goals by building greater community collaboration (Objective 2.2), supporting both collections management (3.1) and promoting access to collections (3.2) by focusing on improving institutional efficiency through partnership to maximize public access across institutions, while also reducing duplication in collection acquisitions and management.

Project Justification: Networks of libraries have a long tradition of working together to provide more complete collections coverage through sharing of resources and systems. A variety of models have been developed, including consortial purchasing, regional centers of excellence, and even shared collections and services among some libraries. More recently, larger networks have explored wider adoption of cooperative collections management, such as the Big Ten Academic Alliance, ReCAP, HathiTrust, Center for Research Libraries, MetaArchive, Boston Library Consortium, and EAST, to name a few, each with varying levels of success. Several barriers to wider implementation have been observed, which this project seeks to address. These include limited vendor-neutral interoperable systems; insufficient data exchange standards; a lack of governance/decision-making frameworks; and inadequate assessment tools. The data ecosystem for identifying available content to purchase, license, or lend is complex and heterogeneous. Workflows need to be reimagined if they are to function across multiple institutions, and these need to be supported by tools that facilitate collective decision making regardless of the individual institution's software implementation. This project will address limitations in the library application market by creating a vendor-neutral, open, mission-driven infrastructure to optimize the management of these dynamic collections in both print and electronic formats.

The CCLP infrastructure promises to optimize daily, network-first collaboration between libraries on the institutional, consortial, and interconsortial levels. Its availability will improve equitable access to library acquisitions by giving small publishers and open access providers the same logistical footing as established for-profit publishers, and will encourage healthier scholarly communication lifecycle activities by partnering with university presses and not-for-profit providers. Dashboard insight into local and network level collections, their usage, and preservation status will assist heads of library collections and individual selectors to collaborate while increasing data-driven reliance and coordination of prospective collecting to emphasize what is of unique value to their communities. The common infrastructure will also allow for greater logistical efficiency in which centers of excellence act as functional designate nodes to enable a more sustainable overall ecosystem. For example, selectors will be able to designate collections to physical and digital preservation and archiving, to receive metadata enrichment for certain collections in specific languages the network supports, and to further specialize in areas of unique value, etc. CCLP will also act as a registry of the collective decisions made by organizations to support new scalable collection development pathways.

Project Work Plan: The first phase of this effort will be the development of a community-based governance structure and implementation plan with project requirements, specifications, and feature prioritization mechanisms (Deliverable #1). The group will continue by assessing and documenting the landscape and classifying existing standards and current practices of organizations engaged in collaborative collections projects, including those pilots launched by project participants (Deliverable #2). A community working group will then develop model workflows, model user experience,

and activity paths based on defined personas engaged in collaborative collections development at different management levels in libraries and publishing (Deliverable #3). Based on these elements, the group will then build a functional roadmap of key components of the needed infrastructure (Deliverable #4), taking into account existing systems and collaboration workflows and policies, combined with the identified gaps in those systems based on the goals of this project. The team will also model a community-based implementation structure describing interactions, specifications, and feature prioritization mechanisms (Deliverable #5).

Finally, the team will develop middleware tools where those tools do not exist, in partnership with technology vendors (Deliverable #6). The project will develop, pilot, and deploy interoperable, open source middleware with modular applications that will be closely aligned with current collective collections visions and practices. The middleware applications will be developed based on an open standards architecture and will support the flow of data about disparate library collections. This will include holdings information, retention obligations, usage data, aggregation of library staff and subject matter expertise, local/consortial/group-based insights, and publisher/marketplace information necessary to support collaborative decisions at both the local and cross-institutional levels. Initial planned applications include: A) aggregated shared index and knowledge base in which libraries/publishers may share data about their collections and expertise; B) a discovery mechanism for library staff to support searching and browsing for content, information and human resources; C) Communication application that will support interactions across institutions; D) Data aggregation, visualization and reporting; E) Negotiation and group purchasing decision support protocols. After a round of public comment, the combined model and toolset will be vetted by NISO standards committee leadership and, if approved, published openly as a NISO recommended practice. All of the deliverables for this project will be made freely available using Creative Commons or Open Source licenses.

Diversity Plan: The project will seek out a deep engagement with institutions and participants representing historically under-served populations and will directly engage diverse institutions' staff in the project leadership and working groups. The project will improve the diversity and representation of the collective collection by supporting new partnerships between individuals, providers, and organizations representing diverse voices, facilitating net reinvestment of duplicative resources and expertise into areas of social and cultural under-representation. It will also allow partners to redirect resources towards areas of national or international emergency collecting and preserving.

Project Results: A core element of the success of this project will be in establishing community and networks of trust among institutions. Convening of an open Collaborative Collections Lifecycle Community Hub with diverse participation from academic libraries, consortia, publishers, technology organizations, and other library service providers will enable the development of a shared vision, business practices, and infrastructure needs. The deployment of the CCLP middleware will lead to more efficient, sustainable, and responsive library collection-building activities and will encourage further growth of network level partnerships.

Resource Requirements Anticipated: The partners are seeking a total of $803,000 over 36 months from IMLS to support the following resources: Technical project manager ($180,000); Research subcontract to Ithaka S+R ($220,000); Three library-based developers to undertake modeling wireframes and reference implementations ($187,500); User Experience Design specialist ($70,000); Virtual team meetings and two in-person meetings at industry events during the course of the project and underwrite librarian travel costs ($40,000); Travel for conference presentations to build awareness and engagement ($15,000); Creation of training resources for the library community related to deployment of CCLP in libraries ($17,500); NISO/PALCI/Lehigh U. staff project leadership costs and overhead ($73,000). Cost share contributions to this project will include, working group participation by partner staff ($380,000), technology development staff ($333,000) and project technology infrastructure support ($90,000). All partners in this project have committed to contributing to the overall 1:1 cost share matching as part of their involvement in the initiative. Additional funding to support this initiative is also being sought from non-federal sources.