The University of Idaho Library seeks the support of a National Digital Infrastructures and Initiatives Planning Grant in the amount of $99,562.50 to refine, test, and promote CollectionBuilder, a digital exhibit platform that utilizes structured metadata to programmatically generate websites for visualizing, browsing, and accessing collections. Unlike currently available platforms, CollectionBuilder provides information professionals with the mechanisms and support needed to independently create digital collections and exhibits without specialized IT systems or expertise. The project team will use the IMLS grant to 1) refine and expand the development of CollectionBuilder and its documentation; 2) build a community of collaborators to test CollectionBuilder and contribute to its refinement; and 3) map the creation of future web publishing tools that situate libraries and information professionals at the forefront of their development and implementation.

At its core, CollectionBuilder leverages librarians' specialized skills in metadata creation and subject analysis to create web publications based on a "collections as data" model. The tool generates accessible user interfaces and interactive discovery methods using collection data, while simultaneously exposing that data in open, reusable formats. Powered by modern static-web technologies and deployed on lightweight infrastructure, CollectionBuilder uses Jekyll and a "[JAM]" stack approach to build complete websites from three basic components: a spreadsheet with well-formed metadata, a directory of assets, and a configuration file. This data-driven, minimal computing-based approach offers secure and sustainable solutions for libraries that lack the resources, time, and expertise required to implement commercially marketed library platforms for digital collections and related web publications.

CollectionBuilder will become the foundational tool of a more ambitious project called Lib-STATIC, which we envision as a suite of static-web tools that, like CollectionBuilder, are built for and by librarians. By refining the suite's first tool and building a community of collaborators around the open-source project, we will establish a model for developing and implementing similar "Lib-STATIC" tools, while creating a network of contributors that will help advance and support the tools and project in the future.

Statement of National Need: The technical needs of small and medium academic libraries and similar cultural institutions, as well as the capacities and expertise of librarians and information professionals, have been consistently ignored in the development of library web platforms. While information professionals are extensively skilled in areas related to the description, classification, and publication of information, they often lack the specialized technical knowledge needed to implement and maintain complex server infrastructures. Yet overly complicated and technically bloated systems are seen as a requirement to create and manage digital collections and related platforms such as institutional repositories, digital humanities projects, and research guides. For the majority of use cases, these complex platforms are overloaded with features that do not meet the needs of libraries, librarians, or users, and also introduce unnecessary risks to security and privacy that do not reflect our institutional values and commitments.

System developers' disregard for these discrepancies often results in one of three outcomes: 1) the systems require such extensive staff time and specialized technical knowledge that they are all but impossible for libraries to implement; 2) libraries that do implement them must often dedicate a full-time staff or faculty member to their maintenance in order to avoid deterioration and security risks; or 3) libraries pay a third party to run or host the systems and enter into complicated and often unforeseen relationships (e.g. bepress/Elsevier). In contrast, CollectionBuilder is a librarian-focused toolkit that gives libraries and information professionals total control over every aspect of the system and leverages their specialized expertise to efficiently meet library and patron needs.

Project Design: We currently have a working prototype for a static-web, data-driven digital collection builder that can automatically assemble visualizations such as maps, timelines, tag clouds, and other interactive browsing features using standards-based metadata from a spreadsheet provided by the user (in most cases, a CSV). For example, our [timeline visualization] sorts all collection items by date and then displays item thumbnails down the page in shaded groupings based on year or era. After developing this prototype, we now believe that this approach holds great promise for a variety of web publishing platforms currently used by libraries and similar organizations, including and in addition to those connected to digital collections. As such, we intend to use IMLS funds to further **refine/expand** CollectionBuilder, **build** a community of collaborators around the tool's development, and **map** future possibilities for similarly developed projects to be included in the Lib-STATIC suite.

Specifically, we intend to improve CollectionBuilder's technical undergirding and usability by hiring both a user experience (UX) consultant/developer and a graduate student fellow to support the tool's development and to

create documentation for its adoption by others. We will also recruit three to four interested libraries and/or other cultural institutions to serve as institutional collaborators. These collaborators will play a vital role: we will work closely with each to implement the tool for their unique collections and needs, testing the tool's usability in their own institutional context and seeking feedback throughout the entire process. Team members will then use these unique perspectives, needs, and goals to further refine CollectionBuilder features and documentation. Concurrently, we will seek out other librarians and developers working on similar static-web projects and invite them to contribute and comment on our open-source project. At the grant's end, we will have developed a well-tested, easy-to-use digital exhibit builder, built a community of users and contributors invested in the CollectionBuilder tool, and created a roadmap for the future development of other static-web (Lib-STATIC) tools. The timeline will be as such:

Tasks *Months*	1	2	3	4	5	6	7	8	9	10	11	12
Hire a consultant/developer and graduate fellow	■											
Refine CollectionBuilder prototype and documentation	■	■	■									
Recruit institutional collaborators and seek feedback on tool		■	■	■								
Implement tool at each collaborator's site and test its usability				■	■	■	■	■	■			
Incorporate feedback and test results into CollectionBuilder						■	■	■	■	■	■	
Develop map/plan for future tool & community development									■	■	■	■

Diversity Plan: Institutions that utilize CollectionBuilder in its fully developed state will find that the reasonable amount of staff time invested in learning this cost-efficient digital tool is well worth the high-quality, sustainable digital collections that result. By reducing the financial and technical barriers that commonly inhibit libraries from using digital collection systems, we aim to make this tool useful for institutions that serve diverse communities. To ensure that CollectionBuilder meets the needs of diverse constituents and that we, as developers, incorporate cultural and personal perspectives that differ from our own, we will select, as one of our institutional collaborators, an organization that is dedicated to the service of diverse and underrepresented communities.

National Impact: This project has the potential to impact a large swath of libraries, librarians, and other information professionals as well as their patrons and stakeholders. While a minimal infrastructure strategy is not sufficient for projects involving very large or unique data structures, we believe the Lib-STATIC approach embodied in CollectionBuilder will be useful for libraries and cultural institutions of all sizes by providing institutions and their staff with true ownership and agency in their web platforms. We are well situated to pursue this project at the scale proposed for two main reasons. First, we have actively developed our [digital collections](#), [digital scholarship projects](#), [scholarly research](#), and our library's [website](#) using static-web technologies for more than two years. Secondly, we are precisely the type of library that Lib-STATIC tools are intended to assist: we have dedicated and capable library staff and faculty but lack the time, IT staff, and funds to invest in large web systems or vendors that have, in the past, commandeered too much of our time and budgets without providing us with sufficient control. As an open-source project, libraries will be able to use CollectionBuilder and future Lib-STATIC tools immediately, participate in their continued development, and build new iterations that meet their specialized needs.

Budget Summary: We are requesting a budget of $99,562.50. This will cover: $25,000 for hiring a consultant and/or developer for assistance with user experience and advanced technical requirements of the tool ; $15,570 (salary + fringe) for a part-time Graduate Student User Experience Fellow who will assist with tool documentation and project logistics; $15,180 (salary + fringe) for team member time to develop the tool and associated documentation; $18,000 for team member travel, including travel to digital library conferences and meetings for collaborator recruitment and tool promotion, as well as travel to institutional collaborator sites to assist with installation and testing of the tool; and $25,812.50 in indirect costs based on our 35% federally negotiated F&A rate for public outreach projects.