

Title: Expanding Open Data Opportunities for Small Public Libraries

Asotin County Library is requesting a Planning Grant of \$134,195 for a one-year planning project “Expanding Open Data Opportunities for Small Public Libraries”. We are addressing the following goal and objective: National Leadership Grants for Libraries Goal 2: Build the capacity of libraries and archives to lead and contribute to efforts that improve community well-being and strengthen civic engagement. Objective 2.1: Develop or enhance replicable programming, models and tools that engage communities and individuals of diverse cultural and socioeconomic backgrounds.

Asotin County Library (ACL) is proposing a planning project to test whether the processes and tools we developed as we carried out the Asotin County Open Data Project ([Accelerating Promising Practices LG-28-19-0229-19](#)) (APP), wherein we procured and published local open data, can be used by other small and/or rural libraries to successfully publish open data. This project is designed with two goals in mind: 1) developing an Open Data Publishing Toolkit, in partnership with selected small public libraries, that enables small libraries to take an open data leadership role in their communities; 2) setting the stage for a future National Leadership Grant application for an implementation project in which we would create a professionally designed and developed website, and promote it throughout the nation via state libraries, state and national library associations, webinars, articles in professional journals, and conference sessions.

Project Justification

Why is open data important? Easy access to open government data is beneficial for communities of any size. It provides information that people need to make decisions about their personal lives as well as the health and well-being of the places they live. In addition, open data is key to government transparency and accountability.¹ How does the interested resident gain access to this data? In many parts of the country, large libraries have taken a role in publishing open data in partnership with their cities’ technology departments. Small libraries do not usually have that kind of resource. It is vitally important that they not be left behind in the open data arena.

The ACL project team believes that the tools and processes we developed during our APP grant can be adapted and used by small libraries nationwide who want to publish open data. We are a small library serving a county of 22,306 (2016 estimate).² We understand the limitations of being understaffed and under-resourced that so many libraries face. We are confident that we can provide a method that supports the unique needs of small and rural libraries.

The target group for this project is small and/or rural public libraries in the United States. We are currently in the process of talking to potential partner libraries whose service populations are under 50,000. We will be selecting libraries based on degree of interest, evidence of ability to manage projects,

¹ “Starting an Open Data Initiative” World Bank. Accessed February 21, 2023. <http://opendatatoolkit.worldbank.org/en/starting.html>.

² Asotin County, Washington, Accessed February 21, 2023, <https://www.co.asotin.wa.us/372/Quick-Facts>

diversity (geographic, ethnic/racial, and socio-economic), capacity, and proximity to other participating small libraries, enabling them to function as a cohort. This will allow them to learn from each other and keep the travel costs of the ACL project team at a minimum. Partner library participation is a key part of this project because we will be getting feedback and suggestions from the cohorts and modifying our materials as we move through the steps of the grant.

The ultimate beneficiaries are libraries around the country who will utilize the toolkit developed as the primary deliverable of this project. Their communities and local governments will also benefit by having easy access to local government data.

The Open Data Toolkit we develop while working with our partner libraries will provide the means for small public libraries to give their communities this important asset which enables civic engagement and furthers digital equity. The toolkit will be designed so that even libraries with limited resources can be engaged in the open data movement.

Asotin County Library became aware of the need for open data in small communities when we were preparing to beta-test the curriculum we helped develop as part of the [Data Equity for Main Street](#) 2016 Knight News Challenge on Data grant. We discovered that there was no open data for Asotin County other than that which could be found in Census reports. Having local examples would have made the classes much more interesting and relevant. This experience led to our application for the IMLS APP grant.

Access to information is core to the mission of public libraries, which have a long history of collecting and archiving information in the form of publications and data produced by governmental entities. With President Obama's [Executive Order 13642 of May 9, 2013](#),³ this data is now required to be available as open data. What does 'open data' mean? In the Open Data Handbook, the Open Knowledge Foundation defines open data as "data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and share-alike".⁴

The benefits of open data, a term primarily used to refer to government data, are many. Perhaps the most succinct statement of those benefits comes from the 2013 Executive Order, which states "Openness in government strengthens our democracy, promotes the delivery of efficient and effective services to the public, and contributes to economic growth. As one vital benefit of open government, making information resources easy to find, accessible, and usable can fuel entrepreneurship, innovation, and scientific discovery that improves Americans' lives and contributes significantly to job creation".⁵

³ Exec. Order No. 13642, 3 C.F.R. 28111-28113, May 9, 2013, Accessed February 1, 2023, <https://www.govinfo.gov/content/pkg/DCPD-201300318/html/DCPD-201300318.htm>

⁴ "What is Open Data?" Open Knowledge Foundation. (n.d.), Accessed February 1, 2023, <http://opendatahandbook.org/guide/en/what-is-open-data/>

⁵ Curanzy, Lillian, "Persuading the Gatekeepers - Open Data Literacy," April 30, 2019, accessed February 21, 2023, <https://medium.com/open-data-literacy/persuading-the-gatekeepers-caaadaf90c1e>

Because the very purpose of libraries has been to collect, organize and provide access to information, it is not surprising that there are notable examples of libraries stepping into the open data world by collaborating with local government and their communities to improve open data publishing, access and use. Chapel Hill Public Library in North Carolina hosts the city's [open data portal](#) and offers data literacy instruction for their community. Boston Public Library partnered with the City of Boston to launch the Knight Foundation-funded "Open Data to Open Knowledge" (link not currently available) initiative in 2015, with the library focused particularly on data literacy education. Providence Public Library launched its "[Data for Good](#)" project in partnership with Tableau® in 2019. The [Civic Switchboard \(LG-70-17-0146-17 and RE-246295-OLS-20\)](#) was developed by Carnegie Library of Pittsburgh in conjunction with the University of Pittsburgh, Western Pennsylvania Regional Data Center, and the National Neighborhood Indicators Partnership.

Clearly, large libraries have been able to do this work in collaboration with the technology personnel at their city or county governments. Can small libraries do the same? Often their communities do not have adequate resources to staff similar positions in local government. Therefore, a library may be the only agency with the information expertise to take the lead in an open data project. Even if a small library has limited capacity and is only able to openly publish their own data, they are adhering to the mandate of Executive Order 13642 of May 9, 2013.

These factors alone are impetus enough for creating a toolkit that makes it possible for small public libraries to help their communities gain access to this world of information. In our experience, there have been benefits that go beyond providing access to open data. The process of meeting with local government agencies can build civic relationships that have the potential to benefit the library and the community in unexpected ways. When ACL formed the Asotin County Broadband Action Team in 2021, the partnerships we had developed through the open data project resulted in enthusiastic participation by community leaders from business, non-profit agencies and government. For example, the Director of the Port of Clarkston credits this spirit of collaboration as the primary reason she recently received over \$5,000,000 in federal grants to bring high speed broadband to underserved areas of the county.

Although this is anecdotal information and not backed by data, there are several other instances which we believe are directly attributable to the relationships we have built over the course of our open data publishing project. In addition to the Asotin County Broadband Action Team, other entities we are now working more closely with are the City of Clarkston Public Works Department, which agreed to install a StoryWalk® display in a local park; the Asotin County Health Department, who gave us COVID-19 tests to distribute freely; the Southeast Washington Economic Development Association who is using the library as a place to poll people about perceived needs for our community; and CHAS Health who has made a social worker available in the library.

Our involvement in the open data project has increased our visibility in the community as well as broadened our network of non-profit and government agencies, leading them to approach us with projects in a way that was not happening before. We hope that our partner libraries will experience the same expansion of community relationships and partnerships.

As we reviewed the professional open data literature, we found that, while there are other open data toolkits available, none of them fit the needs of our target audience. While the others are specific to large

entities such as global federal governments or the scientific community, and are theoretical rather than practical, ours will have step-by-step guidance and tools for implementing publication of open data and will be designed for small public libraries. In addition, our toolkit will integrate the proven Data Equity for Main Street curriculum, which covers open data basics, metadata, visualization, feedback and engagement with open data publishers. This curriculum is designed for the general public, library staff and government officials. No background in open data is required.

This project is a natural outgrowth of our APP grant. If awarded, this grant will leverage the funds previously invested in our open data initiative, while providing a valuable resource for small libraries.

Project Work Plan

The project work plan is based upon the process we followed in our previous IMLS grant. For that grant, the ACL project team brought together community and government leaders to learn from Kathleen Sullivan, Open Data Librarian at Washington State Library and Will Saunders, at that time the “Open Data Guy” at the Office of the Chief Information Officer for the State of Washington. They discussed what open data is and its benefits to local agencies and the community. We provided a Data Inventory tool to the agencies to aid them in assessing their data. We conducted a focus group with broad representation from the community to ascertain what data they would like to see made available. The ACL team then met with the community leaders to select data from their agencies. Once acquired, we cleaned, formatted and created metadata for publication on [Data.WA.gov](https://data.wa.gov), the state’s open data platform. To date we have published fifty-six datasets, and are updating them on an annual basis. We created a page on our [website](#), which groups the datasets by topic and links to Data.WA.gov.

For this project, we will partner with small library cohorts of two to three libraries each in two regions of the country. Using the Data Equity for Main Street curriculum, the project team will train key library staff in open data practices. Each cohort will also work with the ACL project team in these areas: educating patrons in understanding and using open data; gathering and publishing locally relevant open data as determined by the libraries using tools such as focus groups and questionnaires; and finding avenues for spreading open data practices in their regions.

As we move through this grant period, we will be using the processes and tools we developed in the IMLS APP grant and soliciting feedback from our partner libraries. By utilizing a continuous feedback loop, we will incorporate suggestions from our partner libraries to improve our methodology with the goal of creating a toolkit that will be scalable to libraries nationwide.

Should we be awarded this grant, after the initial administrative tasks such as contracting with the participating libraries, we will teach the open data curriculum developed by the Data Equity for Main Street project. Although there is a [version of this curriculum](#) available wholly online, we will be teaching it in synchronous Zoom classes with both cohorts participating together.

We will then hold separate site visits with each cohort of libraries. Each library will be asked to bring a few sets of their own library statistics. The first day will be spent showing them the data ingestion tool that was developed by our consultant, Lillian Curanzy. The ingestion tool helped us organize and format the data and create metadata so our datasets would be ready for upload to Data.WA.gov, which uses the

Socrata platform. Using the ingestion tool, we will walk the library staff members through the process of cleaning and formatting their library data, creating metadata, and publishing the datasets. We plan to work with each library in advance to find the best portal on which their data will reside. If the chosen portals use something other than the Socrata platform, we will work with the libraries to adapt the ingestion tool to that platform.

After the group meeting day, we will travel to each library to attend meetings with representatives from local government agencies and organizations. The purpose of these meetings will be to convey the value that open data has to the agencies and to the community and to enlist them as data contributors.

Other areas of focus in working with the libraries will be the following: developing methodologies for community input about which datasets are important to them, which might include focus groups, dot voting boards, casual conversations or presentations; seeking out open data portals on which to publish data, whether a state-wide portal or an open-source platform such as CKAN; and learning powerful ways to present data through visualization software.

We have assembled a prestigious, highly competent advisory board. Members include Cindy Aden, University of Washington iSchool Professor of Practice and Distinguished Practitioner in Residence; Toby Greenwalt, formerly of the Civic Switchboard ([LG-70-17-0146-17\(a\)](#)); Wendy Pearson, Kansas City Library, who was the mentor for the APP Digital Inclusion Cohort ([LG-00-19-029](#)); Kathleen Sullivan, the Open Data Librarian at Washington State Library; and Ayoung Yoon from Indiana University/Purdue University, IMLS grants recipient ([LG-96-17-0184-17](#); [LG-250098-0L6-21](#)). The advisory board will meet with the ACL project team and partner libraries on quarterly Zoom meetings, review the materials to be included in the toolkit, offer feedback and advice, and evaluate our grant performance.

Project Work Plan Timeline

Activity	Timeframe	Responsible Person(s)
Prepare & Execute Contracts	August 2023	Jennifer Ashby
Assemble Draft Tools	August 2023	Mary Neuman/Jennifer Ashby
Prepare Feedback Forms	August 2023	Mary Neuman/Jennifer Ashby
Site Visit Planning	August 2023	Mary Neuman/Jennifer Ashby
Introductory Zoom Meeting	September 2023	Mary Neuman/Jennifer Ashby
Quarterly Zoom with All	September 2023 - July 2024	Mary Neuman/Jennifer Ashby
Monthly Zoom with Partners	September 2023 - July 2024	Mary Neuman/Jennifer Ashby
Teach Open Data Curriculum	September - October 2023	Mary Neuman/Jennifer Ashby
Begin Ongoing Feedback Loop	September - October 2023	Mary Neuman/Jennifer Ashby
Site Visits	October 2023	Mary Neuman/Jennifer Ashby
Demonstrate Visualizations	December 2023 - April 2024	Mary Neuman/Jennifer Ashby
Create & Publish MOOC	January 2024	Mary Neuman/Jennifer Ashby
Begin Compilation of Toolkit	February - March 2024	Mary Neuman/Jennifer Ashby
Distribute Draft Toolkit	March 2024	Mary Neuman/Jennifer Ashby
Compile Toolkit into Final Form	April 2024 - May 2024	Mary Neuman/Jennifer Ashby
Distribute Toolkit	May 2024 - June 2024	Mary Neuman/Jennifer Ashby
Advisory Board Evaluates Project	June 2024	Mary Neuman/Jennifer Ashby
Exit Interviews	June 2024	Mary Neuman/Jennifer Ashby
Submit Professional Conference Proposal	July 2024	Mary Neuman/Jennifer Ashby
Submit Article	July 2024	Mary Neuman/Jennifer Ashby
Final Report	August 2024	Mary Neuman/Jennifer Ashby

We will check our timeline before each monthly Zoom meeting and at that time verify that the partners as well as the ACL team are on course for completion by the end of the grant period.

We anticipate that the toolkit will include the following items, with the understanding that the list will likely change and grow.

- Recognition of IMLS, advisory board and partners
- What is open data? Why libraries?
- Brief description of original project
- Link to curriculum
- Selecting a portal
- Acquiring datasets
 - List of potential partners
 - Inventory tool
 - Talking points to use with government partners
- Ingestion tool
- Visualization tools
- Resources
- Link to MOOC

The partner libraries, which will each be compensated with a stipend of \$12,000, will be asked to commit to the time necessary for the activities listed below:

- Initial Zoom meeting with all participants, including the advisory board
- Eight hours of Open Data Curriculum training delivered over two weeks via Zoom
- A one-day in-person meeting with their cohort and the ACL team, followed by one day with the ACL team and community leaders and representatives from their local government agencies
- Monthly Zoom meetings with their cohort and the ACL team
- Gathering, formatting and publishing several open data sets
- Completing feedback forms the ACL team provides for various elements of the project as well as contributing ideas that may come to them as they go through the steps of gathering and publishing the data
- Evaluation of the toolkit
- An exit interview at the close of the project

The financial resources needed will be provided by grant funding and cover the 480 hours the ACL project team anticipates spending over the course of the grant. We do not anticipate needing additional funds beyond what are being requested in the grant.

Other resources required are:

- Zoom subscription (we will use the existing Asotin County Library account)
- Tools that Asotin County Library used in the APP grant, such as a data inventory form and the data ingestion tool which the ACL team used to clean and format data prior to publishing. Other aids will be developed as we move through this grant.
- A data visualization tool such as the free version of Tableau®
- An open-source data management system for each cohort, such as CKAN (or equivalent) if there is not a statewide portal available

At several points throughout the project our consultant, Lillian Curanzy, will write articles and publish them on the online publishing platform, Medium. As part of our participation in the 2017 Indiana University IMLS grant, we created a Massive Open Online Course (MOOC). We plan to replace it with a MOOC that will be created as part of our grant project. Some of the information will be the same, but much of it will be new and informed by our partner libraries' experiences. It will continue to be hosted by Indiana University Department of Information & Library Science. We plan to submit proposals for conference presentations and webinars, both at the state level for the states in which our cohorts reside and at the national level. We also plan to submit articles regarding the project to professional journals published by the Public Library Association, Association of Small and Rural Libraries, and state library associations in the cohorts' states.

Project Results

Our intended results for this project are 1) to verify that the tools and processes that we produce during the grant period are replicable and scalable for libraries; 2) to produce a toolkit, robust enough to be used by libraries who may not think they have the capacity for this work; 3) that the partner libraries will have acquired the skills and knowledge to proceed with their own open data initiatives. The step-by-step plan for publishing open data that will be included in the toolkit has application for all libraries. Although our testing and development of the plan in this project was done by and with small libraries, the materials and methods in the toolkit will be scalable to libraries of any size.

We will house the toolkit on Asotin County Library's website. To ensure that the toolkit is readily available, we plan to ask the cohorts' state libraries, as well as our own state library, to provide a link to it on their websites. A link to the toolkit will be included in any article or presentation we do. We hope that it will be available on the IMLS website as well.

Our ultimate goal is to complete the cycle of grant maturity, the first stage of which was an IMLS

Accelerating Promising Practices 2019 grant, in which we published open data relevant to Asotin County; the second stage is the current project outlined in this application; and the final stage would be an implementation grant, giving us the means to achieve national dissemination and awareness of the toolkit through a website, webinars, articles, social media, conference sessions, and communicating with state libraries and state, regional and national library associations.

We feel that the toolkit resulting from this project will enable libraries, both small and large, to participate more fully in the open data movement, thus providing their users with an important means by which to become better digital citizens.

Schedule of Completion

Asotin County Library

Year 1 August 2023 -July 2024													
	August	September	October	November	December	January	February	March	April	May	June	July	August
Prepare & Execute Contracts													
Assemble Draft Tools													
Prepare Feedback Forms													
Site Visit Planning													
Introductory Zoom Meeting													
Quarterly Zoom with All													
Monthly Zoom With Partners													
Teach Open Data Curriculum													
Begin Ongoing Feedback Loop													
Site Visits													
Demonstrate Visualizations													
Create & Publish MOOC													
Begin Compilation of Beta Toolkit													
Distribute Draft Toolkit													
Compile Beta Toolkit into Final Form													
Distribute Beta Toolkit													
Advisory Board Evaluates Project													
Exit Interviews													
Submit Professional Conference Proposal													
Submit Article													
Final Report													

Digital Products Plan

Type

Microsoft Word documents will include the following:: Recognition of IMLS, Library Partners, and Advisory Board; What is Open Data/Why Libraries?; Asotin County Library Open Data Initiative; Acquiring your datasets; Inventory Tool; Talking Points for recruiting government and organizational partners; information on how to obtain CKAN and free Tableau software for libraries needing to use it for their open data collections; articles referenced in this application and additional articles if new ones are published that we believe fit in our toolkit; and possibly case studies.

Excel files will include our ingestion tool specifically designed to be used with Socrata. If any of the libraries are using different software, whether because their state portal uses something else or because they need to use a free resource such as CKAN, we will create modified ingestion tools for them.

Resources will include: links to the Data Equity for Main Street Curriculum; links to the Washington State Data.wa.gov portal as well as portals used by library partners; and a link to our MOOC;

All of the above items will be included in our Open Data Toolkit for Small Libraries.

Availability

We will house the toolkit on Asotin County Library's website. To ensure that the toolkit is readily available, we plan to ask the cohorts' state libraries as well as our own state library, to provide a link to it on their websites. A link to the toolkit will be provided in any article or presentation we do. We hope that it will be available on the IMLS website as well. Our ultimate goal will be to write and receive an implementation grant which will result in broader use of our model and publication of a professional, comprehensive website where we will provide the information and toolkit from our IMLS grants as well as provide a forum for any libraries publishing or considering publication of open data.

Access

We will release the materials that we create as part of our toolkit under Creative Commons license without restriction, except in the case of the ingestion tool for which we will require attribution to Lillian Curanzy.

Sustainability

The primary location for our digital items will be the Asotin County Library webpage: www.asotincountylibrary.org. We plan to keep the toolkit available for the long term on our site. We already pay for the hosting of our site, so it will not cost any more to store the toolkit there. We plan to update links to software as it is upgraded and add newer open data articles while retiring some of the more dated ones.

Asotin County Library Organizational Profile

Mission Statement:

The Asotin County Library was created by and belongs to the people it serves. The library exists to advance intellectual curiosity, promote lifelong learning, provide recreational materials, and enrich environments in which minds can grow. It supports an active, informed community by providing all people with access to materials in various formats representing diverse points of view. Asotin County Library Policy Manual. Approved by the Asotin County Library Board of Trustees, March 10, 2018.

Asotin County Library is a Junior Taxing District in the State of Washington and, thus, is not part of a parent organization. Its service population is 22,285 (2021 estimate). The geographic region served is the same as the boundaries of Asotin County, a rural area in the southeastern corner of Washington State covering 636.08 square miles. Included are the communities of Clarkston and Asotin which are annexed to the library district. Our demographic characteristics are:

Sex	Female	50.9%
	Male	49.1%
Age	Under 18	20.2%
	18-64	55.4%
	Over 65	24.4%
Race	White alone	92.5%
	Black or African-American alone	.9%
	American Indian & Alaska Native alone	1.9%
	Asian alone	1.1%
	Native Hawaiian & other Pacific Islander alone	.5%
	Two or more races	3.1%
	Hispanic or Latino	4.7%
	White alone not Hispanic or Latino	88%
Income	Median Household Income	\$57,263
	Persons in Poverty	13.9%

Asotin County Library became a library district in January of 1965. Prior to that time, it was the Clarkston Carnegie Library, which was originally built in 1913. A staff of three professional librarians, four additional full-time staff and 13 part-time staff provide a wide range of library services, with recent focus being on digital equity and career services. We have three branches. The Downtown Branch is in the City of Clarkston. The Heights Branch is in the populated area of the county adjacent to Clarkston and the Asotin Branch is in the City of Asotin. The work outlined in this grant application will be completed by two of the professional librarians at the Downtown Branch.