

Curating Data for COVID-19 Programs and Policies in Washington State Libraries

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Abstract

When the pandemic lockdown closed the doors of public libraries across Washington state, library staff had to turn on a dime and evaluate their services and programs to cater to users who could no longer access these public spaces. Washington State Libraries (WSL) subsequently collected data about the services added or modified to accommodate patrons. Our Capstone team curated data for more than 60 city, rural, island, and regional libraries in Washington state and presented our results in a curated dataset, a data curation protocol, and a written report that follows. This collection will serve as an archive of COVID-19 and 21st-century history and help libraries and other public institutions prepare for future disasters.

Land Acknowledgment

Our Capstone group acknowledges that we are on the traditional land of the Coast Salish people, including the first people of Seattle, the Duwamish People past and present. We honor with gratitude the land itself and the Duwamish Tribe.

Introduction

Imagine a curated resource center, a computer lab, a database, a lounge, an arts workshop, and a community center, all in one neighborhood building... Was the multi-use building you imagined a library? Now imagine that this multi-use space suddenly closed its doors for an undetermined amount of time. This scenario is precisely what happened to Washington State library systems at the onset of the COVID-19 pandemic.

Information Problem

When pandemic lockdown closed the doors of public libraries across Washington state, our sponsor, Kathleen Sullivan, Open Data Librarian for the Washington State Library, collected data about the services added or modified to accommodate patrons, plus the dates libraries closed and later reopened their doors. We sorted through and organized that data into a format that makes sense to both humans and computers and facilitates reuse. Datasets do not always start off neat and organized: they need the hand of curators to transform them into the best data they can be. From filling in information gaps to ensuring that formatting is consistent, our capstone team curated data for more than 60 city, rural, island, and regional libraries in Washington. Libraries grappled with continuing to provide services to their communities without access to physical spaces or materials. Availability of library services ebbed and flowed during the 18 uncertain months of building closures and limits, with most branches reopening in sync with Governor Jay Inslee's timeline.

Future Impact

First, this dataset will serve as an archive of COVID-19 and 21st-century history. Secondly, the organized data will help libraries and other public institutions prepare for future disasters. Thirdly, the data and its stories will show the human aspect of librarianship and reaffirm these special institutions' importance. How did library services impact patrons and communities? What programs are here to stay even post-lockdown? How will partnerships between libraries and other organizations continue to flourish and remain mutually beneficial? Why does this data matter? We can look back at the chaos and methodically see what programs

served patrons best and which were underutilized. Finally, this well-curated, organized, and standardized dataset will be publicly available, reaffirming the need for reusable, open-access data. To learn from the past, we must understand it. The data and the following analysis help us encapsulate the ramifications of the COVID-19 pandemic on the Washington library system and communities.

Literature Review

Through reviewing scholarly, professional, gray literature, and social media sites from April 2020 through the present, five main themes emerged around how libraries responded and are continuing to respond to the COVID-19 pandemic. We will elaborate on these themes in the below summaries of literature collected from various resources.

The five main themes include:

1. **Protecting library staff's physical and mental health** was of critical importance.

Advocating and lobbying of local and state governments for protections for library staff increased.

2. **Access to online/digital resources** and broadband, Wi-Fi, and devices was vital for communities.

3. **Immediate responses** by libraries included curbside pick up, delivery, library visits by appointment, adapting programming, maintaining social distancing after doors reopened, and other safety measures.

4. Ensuring **robust communication** includes outreach to the public, decision-makers, business leaders, and community partners.

5. For **future planning**, utilize existing resources such as ALA tools and resources, COVID-19 response from local governments, and compare with other library systems.

Scholarly Literature

The primary scholarly source reviewed was the **Library Journal**. This academic journal is accessible through UW Libraries EBSCO and Academic Search Complete databases. The Library Journal proved to be an excellent resource for highlighting libraries around the country and providing specific, detailed examples of how certain types of librarians (reference) and libraries (public and academic) responded to the pandemic.

Time management challenges for librarians, specifically reference librarians, were a frequent theme in various articles and issues of the Library Journal. Reference librarians are often asked to do more with less: answer more questions, provide additional support, and it has taken a toll on their mental health. Libraries continue to explore processes for answering questions virtually or in person and how to adapt to the new normal (Pierce, 2021). In addition, there is evidence that the pandemic accelerated changes in public libraries already taking place, such as how libraries are designed and how they interact with stakeholders. It exposed troubling gaps in families' access to technology and created new demands within communities. Libraries are engaging with patrons differently. Services are moving online, and buildings are transforming into collaborative learning spaces (Pierce, 2021).

The popularity of public library streaming media entertainment spiked during the pandemic and begged the question: what's next? One library highlighted was Cuyahoga County Public Library (CCPL) in Ohio, and they saw a 105% spike in circs on the Kanopy platform between February-April 2020. From March-June of 2020, 3,899 new CCPL library cards were

issued online via OverDrive's instant digital card feature. To help with the increase in online resources and streaming services usage, many vendors offered special "COVID" deals to help manage costs. These discounts will likely have a long-term impact on collections budgets for these services for many libraries. We should also note that barriers still exist for many without broadband access at home or lacking the technical skills to access streaming services from mobile devices (Enis, 2021).

Matt Enis' April 2021 article, *Race, Wealth Divide in Pandemic Library Access*, illuminates many challenges for libraries, including outreach and services to people of color, low-income households, and those who do not have adequate access to the internet at home. Wealthier households are more likely to be aware of online resources and to have used a library's app or website. The pandemic exacerbated the digital divide, and those that suffered the most were disadvantaged populations and communities of color. This article outlined the following recommendations:

- Policymakers can encourage collaboration between community-based organizations, libraries, and schools by developing grant programs/other incentives. In contrast, funding for needs assessments and further research could enable public libraries to examine how they use their facilities/services within marginalized or underserved communities.
- Funding for tech-support programs at libraries could help improve digital literacy at the local level. Libraries should increase outreach and communication efforts to make everyone in their communities aware of the library's online and in-person offerings.

- Experimenting with mobile offerings for patrons who don't live near a branch is another idea. These outreach programs should focus primarily on low-income households and patrons whose first language is not English.

Professional Literature

Professional literature sources were rife with material about how libraries and librarians responded to the COVID-19 pandemic. The **American Library Association (ALA)** created specific tools and materials to help communities, library workers, and library supporters navigate the challenges of the pandemic. The ALA website provided social media toolkits and information on how libraries could advocate for additional funding. The ALA used its power and reach within the LIS community to mobilize and ensure libraries received the necessary funds through the CARES Act (Coronavirus Aid, Relief, and Economic Security Act of 2020, Pub. L. No. 116-136, 134 Stat. 281). Through powerful advocacy, libraries around the country secured \$50 million from the Institute of Museum and Library Services (IMLS) in the CARES Act. This funding directly impacted libraries in WA state. For example, the Orcas Island library used its allotted funds to purchase additional iPads and Wi-Fi hotspots for their community (ALA, Advocacy & Policy, 2022).

In addition, the ALA's COVID-19 Recovery website offered and continues to provide resources in other areas that can be utilized for current resources and as a historical record of how the ALA served their community of libraries during this time. They have educational resources, including webinars on navigating COVID-19 and information on guidance protocols, including guidance for reopening libraries that take into account laws and recommendations from the CDC. Also provided are state-by-state guidelines and resources which allow for

comparison among library systems. In addition, the ALA provided distance learning materials to help libraries adapt and evolve best practices to maximize their value and service offerings to their communities and information around international resources, materials handling, privacy, school libraries, self-care, and virtual programming (ALA, COVID-19 Recovery, 2022).

Finally, the ALA provided data and research from a library survey that collected responses in May 2020 from all library types (public, academic, K-12). Of the 3,850 respondents, nearly all had a combination of protocols and processes in place for reopening their doors and what that entailed. Some common themes emerged, including tiered or phased re-opening, enhanced cleaning and protections for the health and safety of staff and the public, and quarantining of materials for 72 hours. Some reopening best practices included collaboration, staff well-being, communication, and comprehensive training. This survey shows that there is no best way to write a reopening plan. However, it remains essential to support library workers, build community resilience, help advocate for libraries and colleagues in communities and institutions, clearly layout thoughtful steps for resuming onsite library services, and have plans that adjust as health conditions change (Moving Forward Survey, ALA, 2020).

Another substantial source of pandemic-response professional literature was the **American Libraries Magazine**. Not every issue after March 2020 contained relevant articles, but most did. The focus of these articles included how libraries responded during the crisis, best practices for coping, pushing digital equity, serving disadvantaged patrons, and how libraries showed up for their communities in countless ways. During the first year of the pandemic, responding and adapting quickly to community needs was essential and something libraries and library staff are incredibly great at doing. For example, the Coeur d'Alene Public Library quickly

moved their teen programming online as they were concerned for the mental health of this population. They took COVID-19 into account for all future programming planning, limiting in-person attendance at future events. They even used a Discord server to host Dungeons and Dragons video game groups and digital escape rooms (Ford, 2020).

Librarians shared their best practices for providing resources to patrons, such as information to counter fake news on TV and social media, prioritizing access to library apps for access to digital content, providing crisis prevention resources such as the national suicide prevention hotline, and supporting the skill development of young people as they enter the workforce. In the *Coping in the Time of COVID-19* (2020) feature in American Libraries magazine, Lisa Rosenblum, executive director of King County Library System (KCLS), shared that their library system immediately pulled out its business disaster plan and communicated to the public exactly what the library was doing to keep patrons and staff safe along with providing accurate COVID-19 information on their website. When KCLS was forced to close its doors, it continued to adapt, moving programming and books online, answering reference questions by mail, and increasing Tutor.com's capacity to serve students online. In the May 2022 issue of American Libraries Magazine, the article *A Career Path for Youth* highlighted how several libraries around the country are implementing youth workforce programs to support young people in their communities whose educational path was disrupted by the pandemic. These programs will undoubtedly continue to be an important issue where libraries can have a direct and impactful role for their patrons struggling to find work in a post-pandemic job market.

The most significant theme in the American Libraries Magazine since April 2020 is the focus on the digital divide, digital equity, and ensuring communities have access to Wi-Fi and

digital content. The July/August 2020 issue highlighted the Public Library Association (PLA) survey of 2,545 public libraries and found that 93% leave their Wi-Fi on when their building is closed, 44% have located Wi-Fi access points to improve access outside library buildings, and 23% check out mobile hotspots to patrons. Some events have outreach vans that offer mobile Wi-Fi access. In addition, libraries recognized that the pandemic exposed the widening gap in the United States among those with and without consistent access to the internet. In the March/April 2022 issue, *A Path Forward on Digital Equity Special Report* took a look at the country's broadband landscape and highlighted the Community Anchor Program. This downloadable toolkit helps library staffers understand and improve their broadband services and technical knowledge. "Called the [Toward Gigabit Libraries Toolkit](https://bit.ly/AL-TGLtoolkit) (bit.ly/AL-TGLtoolkit), the open-to-anyone resource grew out of the IMLS's recognition of a significant gap in broadband access in rural and tribal libraries" (Landgraf, 2022). This resource could benefit public libraries in Washington state as they continue to navigate the pandemic.

The final professional literature source, and a consistent resource for libraries through the pandemic, is the **Institute of Museum and Library Services (IMLS)**, which closely monitors [COVID-19](#) and its impact on museums, libraries, and the communities they serve. Their website has provided frequent (at least once per month) updates on how libraries are responding and innovating to serve their communities and how IMLS is providing necessary funding. For example, in October 2020, IMLS awarded more than \$2.4 million that helped libraries build diversity and inclusion programs and offer resources to their communities in the wake of the pandemic. Of particular significance, the IMLS received \$15 million from the CARES Act in response to the pandemic and awarded that money to libraries around the county in August

and September of 2020. These dollars made an incredible impact and allowed libraries to address the communities' most significant needs.

Gray Literature

The information found in gray literature sources includes various blogs, conference websites and webinars, and the official WA state library site.

The **Washington State Library** has a dedicated [COVID-19 site](#) that provides resources for librarians and educators, workers-at-home, and students that can help these groups navigate the pandemic. Resources are vast and include everything from WSL datasets, an interactive map of Wi-Fi locations in WA state, and a tip sheet for libraries looking to boost their public Wi-Fi's reach outside the building to remote learning resources, financial assistance resources, and workplace resources for mental health.

An important blog resource is [Book Riot](#), which offers a more humanistic and possibly controversial perspective on how people in the librarianship profession are being affected during the pandemic and explores what the role of public libraries should and can be for communities. Should public libraries be called upon as an essential service during a pandemic if it risks the health and safety of library workers to do so? In their January 12, 2022 post, *Public Libraries Aren't Essential Services*, Jensen argues that libraries are the catch-all social safety net for many communities because of systemic problems. Still, not enough is done to protect these front-line workers. Libraries want to serve their communities. They went above and beyond during the pandemic to help their patrons by adapting services and even becoming testing and vaccine sites. But at some point, there has to be a limit to what libraries can do when they are not well-funded compared to other social services and city offices. "It's a global pandemic, and

while libraries can provide a safe space for the most vulnerable in the community, it shouldn't be at the expense of themselves" (Jensen, 2022).

As libraries began reopening in the late summer of 2020, many examples of libraries in COVID-19 hotspots highlighted how front-line library workers were often put at risk, were among the lowest-paid staff, and did not receive health benefits. Another **Book Riot** article, *Libraries Reopen in COVID-19 Hot Spots: Are Library Staff Being Protected?*, highlights many case studies showing the toll that premature reopening can take on library staff. The Avondale Public Library, located in Maricopa County, Arizona, employs part-time library staff earning an hourly wage that is lower than the starting wage at Target with no health benefits (Williams, 2020).

One particularly insightful conference/webinar resource we found was [Libraries in Response](#). This weekly Zoom webinar brought together librarians from around the country to discuss best practices and responses to the pandemic. The series is called "Libraries in Recovery" and is part of the Gigabit Libraries Network, which supports library reinvention worldwide and has been refocusing its efforts on the service of heroic libraries facing daunting challenges of providing services during the pandemic. In each Zoom webinar, librarians from various domains and states share about their libraries and present on topics including broadband access, concern for staff welfare, rural communities having access to information, and the massive increase in collaboration amongst libraries/librarians with local service agencies, small businesses, and other economic development organizations.

Social Media

The two primary social media sources we explored were **Twitter** and **Reddit** ([r/librarians](#) and [r/libraries](#)), which provided plentiful sources of insightful and unfiltered information

directly from libraries and staff with the sharing of best practices, a place for people in these communities to vent and share ideas along with some humor as well. The Washington State Library and several news outlets also have a strong presence on Twitter and provide library pandemic-response tidbits.

The Washington State Library ([@WASStateLib](#)) used Twitter to share its updated website and library data tracking during the pandemic. The Open Data Literacy ([@ODLiteracy](#)) project, a [@UWiSchool](#) partnership with public institutions, worked to accurately [track pandemic-response data](#) from WA public libraries. Twitter was a useful platform to promote this information, spreading awareness of the data and showing how the Washington State Library is working on logging precise dates, both for documentation purposes and for reference during future emergencies or pandemics.

[@SPLBuzz](#)'s Twitter feed is constantly active with frequent updates from the Seattle Public Library. It was difficult to scroll back to 2020. Still, the feed is an excellent resource for anyone on Twitter to learn about branch openings, updated schedules, upcoming events, and COVID-19-related posts. @SPLBuzz will often reply to tweets they are tagged in and answer specific questions from the community, such as how Hoopla is used and provide helpful links such as the [SPL's shelf talk blog](#). #ThrowbackThursday is another fun way the SPL uses their Twitter feed. One post celebrating Library staff displayed a [photo from 1909](#) showing a behind-the-scenes view of the Cataloging Department employees at the Central Library. In this way, Twitter can be used during times of crisis to remind the public that the library is a safe and fun place to interact, always showing its value to the community.

Reddit was a helpful platform for librarians and other library workers to share information and gather honest opinions and concerns from others in the profession. It created a sense of community during the pandemic when many libraries struggled with how to serve their patrons best while also protecting themselves. Information sharing was plentiful and included so many interesting posts. For example, in a [Technology Use/Lending](#) post, someone inquired how other libraries were resuming technology services to patrons. Many indicated they were resuming some services to the public, such as lending hotspots, and when patrons are using computers in the library, there are cleaning protocols in place. Someone from Yale shared their [LibGuide](#) on their COVID-19 protocols.

Another Reddit post from 2021 asked, [“What can we offer communities in this time of Covid?”](#) The responses were plentiful and centered around communication and access to library materials. One responder said their library focused on providing the most avenues of communication possible through phone, mail, email, and text chat, focusing on minimizing response time. Offering the services of library workers was another theme by letting patrons know the library can select materials for them, and they can just pick them up. Access to technology, including the purchasing and lending of Wi-Fi hotspots, was also a popular theme. Keeping communities and patrons connected and accessing information is a shared priority among responders to this posting. Other ideas included moving book clubs online, creating book bundles for kids, creating a “take & make” craft kit and helping patrons learn how to place holds and navigate the online catalog. Again, access, access, access!

One **Reddit** post shed light on another area where librarians are called beyond their “typical” job duties. Examples from San Francisco and Memphis of library workers essentially

working as [contact tracers](#) during the pandemic highlight the role libraries play in society and how much the public relies on them during times of crisis.

“Librarians Unfiltered”

Combing through various resources, primarily social media, provided wonderful quotes from librarians highlighting their true feelings and their interesting work.

Reference Librarian, Los Angeles Public Library, said, " You know the public is getting more comfortable with the pandemic when the questions get weirder and weirder. “Can you help me identify a strange herb in my produce box?” and “How much did a Webster’s dictionary weigh in 1860?” (Dar, 2021).

In a [Reddit post](#) about how libraries are enforcing time limits, one person posted in the comment section: “We bought some of those buzzers they give out at the Olive Garden and make everyone take one on their way in. When they hit their hour it buzzes like hell, and usually people skedaddle. It’s worked well so far. I still wish the building was closed to the public but it’s not up to me.”

Another [Reddit post](#) asked *Is your library handing out free COVID tests? If so, how do you feel about it?* “I am feeling a little conflicted about our library handing out COVID-19 tests because, if one is sick, stay home or go to the hospital and don’t come to the library. I see the point of preventative measures etc. but we already have had patrons come in with admitted symptoms to get the test then browse around the library masked and unmasked. There are deeper issues with our governing body for why we are letting this happen that I will not go into, but this is a thing. How are y’all feeling about this new duty we have been tasked with?” The

responses were mixed, but many shared the concern of putting their safety at risk to serve the public.

Another honest [Reddit posting](#) said, “Mission creep is a huge problem in libraries, because we're helpers and like I get it I want to help too but holy shit the amount we as a profession have taken on that goes far beyond a library's focus is wild. It's really, really important to ask when we do things like loan hotspots or offer job resources for the homeless why we're doing these things and how they directly relate to our profession, and if we're really the ones who are responsible for addressing these issues. The end solution shouldn't be "the library will do it" for everything. It has to go beyond us. We can't--and REALLY shouldn't--do everything. I am in full support of circling hotspots and offering job resources for the homeless! But I also want to hold AT&T/Verizon/whomever for not providing reasonably priced internet coverage, hold the federal government & FCC accountable for not making the internet a public utility, and hold local governments accountable for the lack of support for additional resources for the homeless.”

The Dataset

Our sponsor, Kathleen Sullivan, created the original dataset and posted it to [Data.WA.gov](#) on May 7, 2020. The description of the raw data set is the following:

This dataset tracks services that Washington State public libraries continued to provide to the public during the COVID-19 pandemic when many library buildings and facilities were closed to prevent viral spread and protect public health. The dataset also tracks reopening that began in summer 2020.

The dataset was last updated in April 2021, before we first accessed it in January 2022.

A total of 60 libraries and library systems provided answers to this dataset, including the dates that libraries closed and reopened dates, whether they offered different services, and hyperlinks to their social media pages.

User Stories

Libraries

Libraries of any type and size will be able to benefit from this data. For example, information about limited programming may help explain low user participation rates to stakeholders. Having a record of COVID-19 Pandemic protocols can help library administration prepare for future emergencies that may cause closures. Rather than scrambling to develop processes in the moment, library administrators can refer back to this information and implement or improve on these measures.

Library directors should have policies and plans in place that will allow libraries to maintain critical operations with less staff and fewer resources. When the next pandemic occurs, libraries can use this dataset and supplemental information to understand what went well as libraries served their communities and what areas of service were challenging to implement and maintain.

State Institutions

State institutions can use this data to draw conclusions about statewide COVID-19 measures and use the information to compare with other states or regions. Archival documents from the COVID-19 pandemic can be supplemented with this information to provide more context on institutional priorities, flexibility, timelines, and implementation.

Local Governments/Policymakers

This data will benefit local governments by showing how local institutions dealt with the COVID-19 pandemic and subsequent library closures. This information can influence funding, disaster preparedness, and library function. Policymakers can advocate and lobby governments for increased funding and encourage collaboration between community-based organizations, libraries, and schools by developing grant programs or other incentives.

Policymakers are responsible for advocating for library workers during times of social upheaval and providing them with the protections and tools they need to serve the public effectively. Adequate funding will continue to be a challenge. Still, without the resources to ensure the safety of library workers and provide programming and other services to patrons, libraries will not be able to fulfill their mission of being a place for everyone and a source of accessible resources and information.

COVID-19 Historians

These curated data are ready to share with COVID-19 historians, which will provide additional context on the closure situation in one of the first states where COVID-19 was detected. Furthermore, the data may be used as a part of a larger body of information regarding business/institutional closures during the pandemic. It would also highlight the importance of public institutions, particularly libraries, and how they are a consistent source of information, resources, and broadband services for communities over time.

Diversity, Equity, and Inclusion

Through our literature review, examination of the data, and conversations with libraries, we learned that the pandemic often disproportionately affected communities of people that are

often already marginalized from society. These communities include unhoused populations, communities of color, and those without access to internet or broadband services. Libraries and staff focused on helping these communities as much as possible when libraries were closed and when services began to resume. Targeting libraries in less affluent neighborhoods provides an impact regardless of circulation statistics or branch popularity. Continuing to reach out and expand services to those communities will be a priority for many libraries as the pandemic continues to impact people across Washington state. Access to information in whatever form reaches the most vulnerable people should continue in the years to come beyond this pandemic and before the next emergency hits.

Data Curation

Although this dataset was well-designed and quite thorough (especially for being compiled on the fly during the pandemic), we identified some areas of improvement that we addressed in our curation. We supplemented missing data and added other variables that enhanced the data. Using international standards, we standardized data that required it. Finally, we streamlined the data to include only the most crucial information.

Additions

The raw dataset listed 60 libraries and systems and their COVID-19 program offerings. We felt that the dataset would benefit from other contextual information in addition to the name of the library or system, so we divided them into four categories based on location: city, rural, island, and regional libraries. We sourced these designations from Washington State's Municipal Research and Services Center website. Our discussion with David Christiansen made us aware of the Public Library Association's library categories, which might have been a better

way to designate library types. However, being a paid service, we do not have access to PLA's data.

Deletions

Not all of the initially collected data was deemed necessary for our curation project. For instance, the raw data included links to libraries' social media pages and the date that Kathleen initially reached out to them. While this is good metadata to reference back to, we decided to omit it from our final dataset.

Other Modifications

When we first encountered the raw data, each library service recorded only positive answers as "TRUE." Since our goal was to make this data usable by machines and humans, we filled in negative responses lest the program thinks it is just missing data. We achieved this by filling in a negative response, "FALSE," rather than leaving the cell blank.

The raw data featured a couple of different formats that needed standardization. For example, in the column FacilityClosed, there were YYYY-MM-DD HH:MM:SS.SSS, MM/DD/YYYY, and unknown dates represented as "(n.d.) closed." Furthermore, in the FacilityReopened column, the first two types of date formats appeared, plus "Yes (n.d.);" for libraries that had reopened on an unknown date and blank cells for libraries that had not yet opened. In accordance with data curation best practices, we opted to use [ISO 8601](#), which standardizes dates to YYYY-MM-DD and omits superfluous time information.

These and other curation actions all have the goal of increasing accessibility to and comprehension of this data. If, in the future, there are additions or modifications to this dataset, curators can look at this report and identify a starting point for their own protocols.

Case Studies

We gathered information from four libraries around the state to better understand how each responded to the pandemic. To ensure we comprehensively represented the public library landscape, we interviewed libraries representative of city, rural, and island communities. Following are summaries of each of these conversations.

[Seattle Public Library](#), Central Branch | David Christensen, Data Analysis Lead

The Seattle Public Library (SPL) consists of 27 locations, including the Central Branch in downtown Seattle (Seattle Public Library, n.d.). David provided an overview of the COVID-19 pandemic's effect on an extensive library system that serves many vulnerable populations.

The SPL closed on March 13, 2020, and did not reopen in-building services until April 2021. Their hours of operation decreased again in January of 2022 with the Omicron variant COVID-19 surge but resumed in April of 2022. The SPL experienced “significant staffing problems” with illnesses or child care issues, which caused staffing to “collapse quite easily” (David Christensen, personal communication, April 18, 2022). Many locations experienced closures due to low staffing, which SPL charted across all branches measuring total system hours per week. By October 2021, walk-up patrons overtake scheduled appointments for curbside service. Libraries provide “Grab-n-Go” bags with themed book packages and “Peak Picks” containing popular titles. There is no checkout and no expectation to return items.

SPL focused on serving disadvantaged communities during the COVID-19 pandemic. If the COVID-19 had happened 5-10 years prior, SPL might have prioritized the branches that served the largest populations, thereby serving the most people. However, using spatial analysis

to identify relatively disadvantaged neighborhoods, SPL privileged socio-economic needs with decisions such as reopening the Rainier branch before Northgate.

Restroom services for people experiencing homelessness were another crucial need. Since businesses were closed, people could not access typical sites such as Starbucks to bathe or use the bathroom. SPL analyzed the gaps in public restrooms throughout the city and filled them by reopening libraries in sparsely-serviced areas. To determine the need for restroom services, SPL used a dataset from the City of Seattle containing all public restrooms from multiple departments and mapped them onto library locations. The libraries offered their services so that people could come in and use restroom facilities during set hours, for example, from 10 AM-5 PM, even when there was no collection access or services available at the library.

Another impactful SPL policy that removed barriers to low-income people using the library was rescinding overdue fees, which came into effect on January 1, 2020. This policy intended to lower use-hesitancy for patrons who might have been worried about paying for damaged or overdue resources. Because the policy change dovetailed with the start of pandemic-related library closures, the message slowly trickled out by word of mouth after libraries closed. To measure the impact of the fee policy, SPL looks at data from the Race and Social Equity Index from the City of Seattle to ascertain measurables such as: has the number of blocked accounts gone down? Has circulation recovered? And if so, how quickly?

Through times of profound change, SPL learned essential lessons for the future. For instance, SPL offers Wi-Fi hotspots but no Wi-Fi in parking lots due to limited parking lot options. There may be an opportunity to provide Wi-Fi access in public spaces outside their buildings. During pandemic closures, SPL partnered with nonprofits to acquire Wi-Fi hotspots,

and Goodwill, in turn, distributed them to students. In retrospect, it might have been better to reallocate all Wi-Fi hotspots to long-term use for people who need it most. These are the types of learnings that came out of the COVID-19 response and will carry forward for future disaster response initiatives.

Two years into the COVID-19 pandemic, there are still restrictions in place. Staff at SPL wear masks and eat in meeting rooms with space for social distancing. Pages are staged in non-fiction areas to bring materials to patrons, and there is less staffing in those areas. On Wednesdays, the library is fully open, but on other days, patrons can access up to the 5th floor, but not above. Meeting rooms are still closed—some have been turned into staff lunchrooms—and are not available for programs or reservations. Staff must mask while moving around the building and interacting with patrons.

[Jefferson County Library](#) | **Dr. Tamara Meredith, Director**

Jefferson County Library (JCL) serves 22,000 people in unincorporated Jefferson County, except for the City of Port Townsend, which has its own city library. JCL serves the largest demographic of older people in Washington State, including a large retirement population spread over many small communities. Their service area is large geographically but small in population. The main branch is located in Port Hadlock, and the system employs 35 staff at 18 FTE. JCL library has a robust interlibrary loan program that serves a retirement community actively engaged with research.

When impending library closure due to COVID-19 became apparent, the JCL benefited from a director with ample experience in online coursework and operations. They quickly set up employees with remote workstations, including library-issued laptops, passed a telecommute

policy, enacted an administrative leave with pay policy, and trained their staff on remote operations, Zoom, and SharePoint. Because JCL is a taxpayer-funded library district, they were “more able to make changes and adjust more quickly because we have that autonomy in our governing situation” and “could turn on a dime much faster when it came to decision making” (Dr. Tamara Meredith, personal communication, April 21, 2022). Having no layers of county or city government in their decision-making process enabled a high level of autonomy. The director was able to say, “these are the items we need,” and the five-member Board of Directors approved the requests. The JCL has no union, so there were no union negotiations which added to the streamlined decision-making process. These factors came together to facilitate an agile response to a fast-moving situation.

Early reopening spanned from March-June 2020 and included daily all-staff Zoom meetings, which provided an opportunity to connect for work purposes and personally during this challenging time. JCL’s bookmobile—which holds 6,000 items—was back on the road on June 22, 2020. The bookmobile distributed resources patrons requested via phone, online, and through the staff’s prior knowledge of their interests. Due to COVID-19 restrictions, the community could not board the bookmobile, so the team set up tables outside. The library also hung banners with their phone numbers so patrons could call to place holds without broadband access. It opened for curbside service on June 23, 2020, and opened for in-library browsing on March 2, 2021. Their circulation statistics bounced back quickly, and in general, the community was happy with the services JCL offered. The most requested services were in-person storytimes (still held outdoors), access to public restrooms, and indoor places to keep warm. The library also provided training sessions on the Zoom platform and weekly newsletters to keep their

patrons informed. Access to meeting space is also in high demand, with COVID-19 liability issues closing most public meeting spots. The library plans to open public meeting space again on May 1, 2022.

COVID-19 quarantining rules for materials posed some challenges during the reopening period. Returns were quarantined a few days before being checked in, resulting in overdue notices. Confused patrons resulted in the library fielding calls and questions about outstanding statuses. Another significant restraint was the digital divide, with many users not having broadband access. Library staff worked hard to reach out to these users by telephone and word of mouth and even prepared holds for some users using their recollection of preferences. Despite these efforts, some people are just now becoming aware that the library has reopened two years after services restarted.

One of JCL's most noteworthy results from the pandemic was becoming a valued asset to the county due to the library's strong connection to the community. JCL partnered with public health and the county, building stronger partnerships after the pandemic shutdowns between the community and all three institutions. Starting in January 2021, a Digital Equity Navigator, funded by the CARES Act (in response to the COVID-19 pandemic, Congress passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act in late March 2020) and community foundation funding, dealt with broadband issues on the ground. This position provides technical support, navigates subsidy programs, trains in digital literacy, and offers social work support. Though considered a library position, it is entirely externally funded and modeled off the National Digital Inclusion Alliance (NDIA). Additional funding from the FDC's Affordable Connectivity Program (ACP) and PCs for People provided a laptop and hot spot for \$56 to

community members without broadband access. JCL is currently rolling out the Northstar tool database from the state to provide software and tools for users who need them.

Dr. Meredith notes what worked well during the pandemic response. First, collaboration with county and public health. Second, shifting popular collections forward in the building will continue after regular business returns. And third, communication between libraries via listserv and weekly director's meetings leveled the playing field between large and small libraries. These communication channels are much more robust now than before the pandemic.

Dr. Meredith also notes challenges that limited or impacted their offerings, such as conflicting dates for reopening, changes in public health guidance, and moving furniture multiple times given the shifting directives from state and public health mandates.

Taking the learning from this experience and applying it to future emergencies, Dr. Meredith would want to quickly assess what triggers a shutdown, have clear parameters and sequencing for closures and reopenings and provide more data sharing.

The COVID-19 pandemic response has opened communication channels and a consortium between schools and public libraries. Staff continues masking on the floor, and all staff members are fully vaccinated and boosted. Daily staff meetings were helpful, they had no layoffs, and the board worked hard to eliminate fears about jobs and finances. Everyone is tired and burnt out, and Dr. Meredith only half-jokingly notes that they “trade-off melting down.” Still, JCL followed every protective protocol, and Dr. Meredith’s mantra is “staff is our greatest asset, my job is asset protection” (Dr. Tamara Meredith, personal communication, April 21, 2022). JCL continues to focus on the health of their staff with professional development around physical and mental health and providing flexibility for time off when people need it. The JCL

staff has multiple retirements looming primarily because of staff tenure but partially hastened by the stress of operations during a pandemic.

Dr. Meredith notes the one thing that will never go away after pandemic restrictions end is curbside services. Check-outs of digital assets dropped back down after reopening, and users are adept at placing holds, picking up their 20 items, and leaving right away. Currently, all staff and about 30% of patrons are still masking.

[Orcas Island Public Library](#) | Janet Marlow, Interim Director & Administrative Services

Coordinator

The Orcas Island Public Library is a community hub in every sense and serves as a place for patrons to not only check out physical materials but to access broadband, attend virtual storytimes and other programming, and engage in in-person and casual conversation in the way only a small, tight-knit community can offer. The community demographics of Orcas Island are somewhat economically diverse, although the majority of library patrons, according to Janet Marlow, are often retirees, older, and wealthy. This population is active in the library and makes up the majority of its volunteers. There is a younger, well-educated population that is growing as well as transient populations that the library is aware needs their building to provide much-needed shelter. The island's political landscape leans left and resides within “blue” San Juan County.

When COVID-19 shut the Orcas Island library’s doors temporarily on March 16, 2020, it would be another year before they were officially open again to the public (formally opening on March 15, 2021). Curbside services began on June 8, 2020, earlier than the other island libraries. The community was so grateful to check out physical books again despite the initial

confusion of books not being available or not shown as “checked-in” due to the quarantine requirements at the time. The hardest part was serving older patrons who generally do not use a computer but still wanted access to information and books. Access to information remained critical, and the library responded by purchasing iPads and hotspots after receiving funds from the CARES Act, which allowed one year of service. Since then, the library has budgeted for the continuance of these iPads and hotspots as they are necessary now more than ever.

During the closure and reopening, the library emphasized the safety of its staff, patrons, and many elderly volunteers (at the time of our conversation, they had 11 staff members and 35 volunteers). They followed all COVID-19 restrictions carefully to avoid creating super-spreader events and generating negative publicity for the library. Their patrons and community were compliant with the restrictions and remained grateful to have their library open again.

The factors that limited their offerings to the public included the loss of some staff members, not being able to use their volunteers right away, inclement weather being either too cold or too rainy to offer outdoor services, difficulty tracking patron time in the library, and finally, the anxiety of staff and volunteers. The Orcas library tried to keep everyone happy by maximizing utility and managing discomfort as much as possible. Other challenges to note were their book clubs that suffered, everyone experienced “Zoom fatigue,” and the pandemic wreaked havoc on the library’s metrics, from which they are still recovering. For example, checkouts and hours of operation have created two years of weird data, proving challenging to justify to their Board.

The safety measures and services the library began offering during the pandemic that will remain include a new board game collection, Wi-Fi access and hot spots, plexi-dividers

between computer stations, more stations for patrons to bring their own devices, and allowing staff and patrons to continue to wear masks if they prefer. In addition, collaboration with local county agencies has been critical. Partnerships with local agencies increased during the pandemic and will remain important going forward. The Orcas library also communicated with other island libraries. It kept abreast of how the King County Library System and Seattle Public Library systems responded and used this to guide their own policies. The Orcas library staff also used online sources for guidance, such as the Public library director listserv, Washington Library Association (WLA), and the Washington State Library (WSL).

Finally, the data that would help the Orcas library for future emergencies/pandemics will be continuing to access local state data on COVID-19 cases and tracking. Keeping communication open with other libraries and government sources, and most importantly, talking to their patrons in person to gauge their level of comfort and feelings about what is happening. The Orcas library staff has a unique relationship with their community that has been nurtured with open communication and showing genuine concern for their patrons' needs.

[Whitman County Library](#) | Sheri Miller, Interim Director & Youth Services Librarian

Located in the Palouse of Eastern Washington, Whitman County is the greatest producer of wheat in the United States ("Palouse," 2022). The Whitman County Library (WCL) serves rural communities with 14 library branch locations (excluding Pullman) that vary in size, from Colfax, with a population of 2,500, to towns with only 75-80 inhabitants.

The system closed due to the COVID-19 pandemic on March 16, 2020, and had a very cautious soft reopening on August 20, 2020, due to being deemed an essential business. They opened a little ahead of the west side of the state. Still, they took many precautions such as

limited attendees, masks, hand sanitizer, quarantining books, using gloves, suspending programs, and limiting computer time to 20 minutes. They also tracked in-person patrons by jotting down first names or what they were wearing, identifying those who entered the library. This system helped meet social distancing requirements and track the amount of time each patron could be in the building during early COVID-19 restrictions.

WCL experienced some challenges in its reopening efforts. The smaller branches had a more challenging time getting patrons to mask. Colfax was compliant, but enforcement became harder as more businesses reopened. There were local anti-mask protests with blue signs posted on some businesses indicating they were not friendly to masking inside. Communication was difficult, and home connectivity was challenging for workers and patrons. WCL provided online training on accessing their website and Zoom, but some people could not access the content. WCL staff worked mostly in Outlook and did not utilize Google tools, though they did try other sharing platforms such as Canva. Libraries found they were not up to date on patron's emails or phone numbers, making outreach difficult, but there was not much online demand for services as most people preferred in-person services. Lastly, PPE was very expensive due to competition from other library systems and price gouging.

WCL worked hard to overcome those challenges and found certain services and programs were a good fit for their communities, such as curbside services, books by mail, and staff picking books for patrons. For kids, pre-made activity bags, such as rock-painting kits provided through Schweitzer Engineering Laboratories funds, were very popular but time-consuming and expensive. Hot spots were in demand, but they only had 12-15 to lend out for the entire county and often had a waiting list. Libraries distributed masks and Covid tests

supplied by the Whitman County Health Department and distributed to all WCL locations.

Demand for the tests is starting to fizzle, but WCL still has many free kits available to anyone who wants them. Additional partnerships with public institutions were critical in supporting the community. When the blood drive could not accommodate people on their bus, they used the library meeting room, and that partnership with the blood bank continues. Other partners for community support include the council on aging and schools, which provided meals and delivered library-created STEM bags to families.

One exciting development from the COVID-19 pandemic was a shift in library demographics. While pre-Covid, the library predominantly served an older demographic, WCL now has many young families coming into the library. Once there were 12-15 families, there are currently 35-40 families coming to the library for storytime. They are not sure why but guessed that perhaps after Covid, they need more social interaction. This development has been positive, and when the state lifted mask mandates, even more families came in. During playgroups, the families tend to stay in niches, but most are not concerned with direct interaction amongst the kids attending the programs. And again, the library does not contact trace; however, families may do this through their circle of friends and relatives.

Some pandemic responses might change, such as hosting daily Zoom calls for staff to encourage camaraderie and ensure accountability for projects worked on from home. In retrospect, the isolation created lost staff connections. More social interaction may have been good for their mental health. Branch managers had monthly meetings, but some chose not to work and did not want to attend monthly meetings. Going forward to future emergencies, WCL would want more clarity on what they should do. The back and forth with restrictions and

conflicting guidance were confusing, and the health department was spread thin. More contact and direction from public health would have been helpful. City and rural libraries had such different needs during the pandemic and subsequent shutdowns, and more local control may have been better.

WCL notes that looking back, pivoting became standard practice, and that was hard for some people. Sometimes it was hard to give up safety protocols, like masks. They are still not fully back and have cut hours because of a lack of demand and are strategically adjusting hours to meet the needs of their communities.

Project Deliverables

Our final project deliverables include the following:

- [GitHub Repository](#) with the raw dataset, curated dataset, data dictionary, and appropriate license information.
- [GitBook](#) includes this written narrative and data curation protocol components, including a collection policy, data transformation, quality criteria guide, file naming guide, license, and FAQs.
- This written report and appendices will be provided to our sponsor as a PDF file.
 - [Data dictionary](#)
 - [Curated spreadsheet](#)
 - [Data visualizations](#)
 - [Timeline graphic](#)

Conclusion and Future Use

This project began with a data curation focus but became a study about the human aspect of librarianship and what it means to serve unique communities. Amplifying the voices and experiences of our case studies showed how collaboration and different decision-making methods impacted communities in Washington state. Libraries play a unique role in society, and a crisis reveals much about how a library is seen— whether as a place to pick up book bags or as a haven for those who need the protection it offers. Libraries, both big and small, rural or island, can learn from each other to meet the immediate needs of their patrons in the future and be ready to do what libraries do best: serve their communities and be an information bedrock.

Questions for Future Use

This data and accompanying analysis provide concrete information for the future that libraries and staff can use to show the value of collecting similar open data:

- Planning for future disaster response and ensuring continued access to information.
- Understanding which responses worked and which did not.
- Finding societal weak points and knowing where libraries should direct resources in times of turmoil or upheaval.
- Showing the human side of librarianship and how libraries play an integral part in building and using trust in communities as social currency.
- Shoring up services to vulnerable populations/patrons so they will not be hit as hard in future emergencies.

What Was Missing From The Data?

Through our research and analysis, we discovered missing areas from the original dataset that could prove useful if this type of data were to be collected again. Some of these areas include:

- Who helped you develop your protocol?
- Did you provide use of bathrooms or other facilities to the public?
- How did libraries focus on helping vulnerable communities through their COVID-19 policies?

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Appendix

1. [Data dictionary](#)
2. [Curated spreadsheet](#)
3. [Data visualizations](#)
4. [Timeline graphic](#)