

# Evaluation of the Institute of Museum and Library Services Distribution of Coronavirus Aid, Relief, and Economic Security Act and American Rescue Plan Act Funding

## Final Report

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## Executive Summary

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In 2020 and 2021, the Institute of Museum and Library Services (IMLS) distributed funds from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the American Rescue Plan Act (ARPA), respectively, to museums, libraries, and State Library Administrative Agencies (SLAAs) in the United States. This report outlines the results of an American Institutes for Research® (AIR®) evaluation of this funding. Specifically, the report examines research questions related to (a) the \$200,974,861.42 in formula funding expended by SLAAs (including territories and freely associated States) through the Office of Library Services' Grants to States (OLS-G2S) program and (b) the \$30,285,220.55 awarded to museums and libraries through Office of Museum Services (OMS) and Office of Library Services–Discretionary (OLS-D) discretionary grants.

From November 2023 to May 2024, the AIR research team performed a series of research activities, including quantitative and qualitative analyses. The qualitative interview protocol questions covered the following topics: COVID-19 needs, Goals & Impacts, ARPA and CARES Funding, Sustainability, Equity, and Lessons Learned. The team gathered and analyzed administrative grant data from internal IMLS systems for quantitative analysis. These systems included the Electronic Grants Management System (eGMS) and the State Program Report (SPR) system using the same basic research questions. The qualitative analysis included interviews with current and former IMLS staff, former IMLS contractors, and members from SLAAs and discretionary fund grantees.

This report has three sections. The first section provides an overview of the findings from the analysis of the CARES Act and ARPA funding provided to SLAAs from the OLS-G2S program. The second section presents the findings from evaluating the CARES Act and ARPA funding awarded as discretionary grants to museums and libraries from the OLS-D and the OMS. Finally, the third section contains the research team's conclusions and their recommendations to IMLS based on the findings of this report.

### Findings From the Analysis of Formula Funding

The research team based the findings on analyzing administrative data, program officer interviews, and SLAA interviews. First, although SLAAs used different methods to distribute funds, they prioritized the equitable distribution of funding. These efforts included reducing administrative hurdles to receiving subgrants and increasing collaboration with local library organizations. Second, libraries modified existing programming and created new programming to meet community needs with emergency funding. Libraries worked to bridge the digital divide exacerbated by the COVID-19 pandemic. Third, SLAAs took advantage of the transition to the

virtual environment to expand library access to SLAA meetings through digital teleconferencing platforms and virtual professional development opportunities. Finally, although many libraries initially viewed new programming as a temporary response to the COVID-19 pandemic, many reported that they would continue offering programs and services created during the pandemic. This finding was based on increased attendance at these programs and the public desire for hybrid and virtual programming.

### ***Findings Related to SLAAs***

**SLAAs improved internal and external efficiency to prioritize the equitable distribution of funding.** Although some SLAAs reported feeling as if they were mere conduits for providing funding to libraries, the IMLS and SLAAs worked quickly to distribute the funding to those who had the greatest need. As a result, the emergency formula funding had an extensive impact. For example, the CARES Act and ARPA formula programs funded more than 40,000 libraries, 350 museums, and more than 80 Tribal institutions. In addition, they made more than 9,000 subawards. With each allocation, SLAAs and IMLS made strides to ensure that funding reached those with the greatest needs within specific jurisdictions. However, as with traditional formula funding, SLAAs have significant decision-making authority for distributing funding. As a result, there was substantial variability in the method used to distribute funding. Some SLAAs relied on specific data-driven metrics to determine the locations that needed funding; others relied on input from regional library systems that were more in tune with the local community's needs to make funding decisions. In addition, although the IMLS used the existing infrastructure for formula funding, the ability of SLAAs to distribute money varied based on several factors, including the State administrative structure of SLAAs, their ability to transition to remote work quickly, and the current processes and administrative rules to follow for allocating and approving funds. The transition from CARES Act funding to ARPA funding resulted in SLAAs receiving almost six times more funding than they had under the CARES Act. This increase in funding slowed the dispersal of funds, primarily resulting from the challenges that SLAAs and their libraries encountered in establishing adequate administrative structures to distribute the increased level of funds. At the same time, the State- and local-level officials began to question the distribution of all federal ARPA funding. As a result, the dispersal of funds slowed as SLAAs and local libraries found themselves under greater scrutiny, even when the funding was directed toward pandemic-specific operations.

**Libraries expanded programming to meet evolving community needs throughout the pandemic.** During the pandemic, communities across the country shut down because of restrictions imposed by State and local governments. As a result, libraries relied on funding from SLAAs to shift their services and programming to comply with regulations and meet the evolving needs of their communities. Specifically, many libraries used funding from SLAAs to

help them transition their regular programming to a virtual environment. Such virtual programming allowed patrons to stay engaged with their communities through virtual story times, online summer reading programs, and synchronous and asynchronous programs, among other offerings. Many libraries also used this funding to implement contactless services. Such services, including self-checkout machines, curbside pickup, and other delivery methods, enabled libraries to continue allowing access to library materials. In addition, libraries expanded their mobile services so that they could bring library services to vulnerable populations across their communities. Many of these mobile services included Wi-Fi hotspots to assist in bridging the digital divide exacerbated by the pandemic.<sup>1</sup>

**SLAAs transitioned structures to meet the needs of libraries.** Before the pandemic, SLAAs provided administrative support to the libraries in their State. However, they did not need to maintain frequent and continuous communication to enable these libraries to function. As the pandemic evolved and as COVID-19 safety-related information was changing rapidly and becoming fragmented (e.g., multiple sources providing differing information), frequent and constant communication became essential for libraries to function effectively. Although SLAAs typically held in-person statewide meetings, regional meetings, and professional development workshops before the pandemic, these meetings could have been more feasible. During the pandemic, SLAAs relied on virtual meetings more often, which allowed them to share changing rules and regulations related to COVID-19 with their libraries.

After the COVID-19 pandemic, SLAAs continued using virtual communication methods, which allowed some libraries to overcome barriers to participation. For example, many librarians could not attend meetings or workshops with limited library staff capacity and small transportation budgets. However, with the necessity and wide acceptance of using virtual communications during the pandemic, more librarians and SLAAs could participate in these meetings. This helped expand their access to professional training and development opportunities.

**Initially, some libraries perceived the new virtual programs or other service modifications as a temporary requirement of the pandemic.** However, even as the pandemic subsided, many of these institutions witnessed continued active engagement with and desire for such programs and services. Several institutions noted that the emergency funding served as a springboard for permanently integrating virtual services when the initial setup costs were beyond a library's available funding. These services included curbside pickup, touchless checkout, and other virtual programming. The relaxation and removal of some State and local library COVID-19-related operating restrictions directly resulted in some programs ceasing.

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<sup>1</sup> Hotspots are physical devices that can project a wireless internet signal derived from satellite or cellular data signals.



## Findings Related to Discretionary Funding

The funding and use of discretionary awards had clear patterns across the administrative data analysis, IMLS program officer interviews, and discretionary grantee interviews.

- Discretionary fund grantees developed new partnerships across institutions within and outside their specific field.
- Discretionary fund grantees increased accessibility to programming by expanding community-focused programming and creating new programming.
- IMLS funding allowed discretionary grantees to transition to a virtual environment and remain operational.
- The emergency discretionary funding prevented further job losses within the museum and library sector. It also increased the number of part-time employees who became full-time employees. However, the interviews and data did not provide information about the status of these employees. The data did not indicate whether employees maintained this full-time status or returned to part-time status after the award cycles.
- IMLS discretionary program staff took on a more comprehensive role in supporting discretionary fund grantees.
- IMLS improved the review and award process for discretionary fund grants between the CARES Act and ARPA funding cycles. Specifically, they implemented efficiencies, hired two term employees, and engaged contractors to help with the added workload.
- IMLS developed a data-driven decision-making tool to assist in grantmaking decisions during the CARES Act, but incomplete integration between offices resulted in less use than originally intended.

### *Internal IMLS-Related Findings*

**IMLS program officers and specialists took on new responsibilities with expanded duties.** The rapid program implementation and CARES Act funding distribution required a significant increase in grants management responsibilities. IMLS staffing levels were optimized to support non-emergency situations and the rapid distribution of CARES Act funds required creative solutions to manage the large increase in applications. Due to the emergency, the timeline to make awards was abbreviated relative to a normal IMLS grant cycle, and IMLS received more than the total number of usual annual applications for all its grant programs combined. Program officers and support staff successfully processed, reviewed, and made awards for over 1,600 CARES Act proposals; however, this rapid distribution did take a toll on staff. The CARES Act experience offered many lessons learned that were applied to ARPA. IMLS hired two term employees and engaged contractors to assist with monitoring CARES Act awards and to assist

with processing and monitoring ARPA awards. As a result, IMLS program officers were relieved of the substantially increased burden of managing the emergency-funded awards and were able to refocus their attention on the needs being expressed by grant recipients of the non-emergency programs. The pandemic impacted grant recipients from every program, requiring special attention from IMLS program officers in responding to a variety of issues that grant recipients faced. Change requests increased during the pandemic, resulting in increased workload to process and approve requests. Having additional employees and contractors to assist in the management of both the CARES Act and ARPA programs enabled IMLS program officers to manage the increases in their workload for their regular, non-emergency grant programs.

**IMLS improved its efficiency in fund distribution.** After distributing an unprecedented amount of funding from the CARES Act, IMLS assessed the distribution process. IMLS wanted to create a more efficient and equitable process for distributing ARPA funding and reduce the immense burden on IMLS staff. During this transition, IMLS increased its support by hiring two term employees and engaging contractors. It also increased the rate at which it processed applications and issued awards under ARPA compared with the CARES Act, even though there was a significant increase in the number of awards. IMLS improved its efficiency and operational speed in response to the second round of emergency funding.

**IMLS lacked integration for a data-driven decision-making tool that it developed for its CARES Act discretionary grantmaking.** According to interviews with IMLS staff, one of the goals of IMLS senior leadership was to more effectively integrate data-driven decision making into discretionary grant decisions for CARES Act awards. In the CARES Act Notice of Funding Opportunity (NOFO), the legislation sought to push funding toward those institutions with the greatest need in the museum and library field. As a result, IMLS developed a tool to assist program offices in using county-level measures of sociodemographic factors to aid in their decision making. However, there was not enough engagement between the operations staff who developed the tool (the “workbook” as it came to be known) and the program offices who would operationalize its use. As a result, the tool was only partially used, primarily as a public workbook for applicants to reference as support for their CARES Act applications.

### ***Findings Related to Grantees***

**Grantees leveraged funding to create new partnerships.** Although IMLS representatives and discretionary grantees noted challenges related to remote work, institutions described a higher level of coordination with similar institutions and other organizations than was normal. Grantees built these relationships on previous partnerships and created new partnerships to address community needs and expand the collective reach of the institutions. Some institutions created partnerships that aimed to help vulnerable populations. For example, some

partnerships were created to improve broadband access and close the digital divide. Other partnerships involved grantees allowing government agencies to use library and museum space to maintain their operations. Some grantees ensured and expanded access to broadband so that community members had access to necessary systems during mandated closures. Many interviewees also reported working collaboratively with other organizations (even those with similar foci and clientele) to share grant opportunities, support one another in writing grants, and work together to survive the government lockdowns. Not all grantees reported on their plans to sustain these partnerships. However, some grantees emphasized the success of such partnerships in reaching populations that they could not reach previously. They also shared their excitement to continue these partnerships after the pandemic.

**Grantees increased their focus on accessibility for community-focused services.** In such an unprecedented time, discretionary grantees went beyond their routine efforts to create more accessible programs through outreach to local communities. Grantees conducted virtual arts and entrepreneurship meetings, community open houses, fairs for older people, fairs for teens, and other gatherings to get community input for virtual and hybrid programming. Through these activities, grantees became more acutely aware of current needs related to the pandemic. This information enabled grantees to expand or create programs and services specifically for the community in response to the changing environment during the pandemic. Grantees used these programs to ensure that their communities received the support they needed and that programs were accessible to specific populations. Specifically, grantees noted that these programs sought to meet the needs of the populations at greater risk throughout the pandemic. These populations included older people, people with disabilities, and other demographic groups that were at greater risk of isolation with the loss of in-person events. Program officers reiterated that, although libraries and museums relied on community engagement for programming guidance, these organizations used emergency funding to expand their community-focused services during the pandemic to ensure broad accessibility.

**Transitioning to a virtual environment allowed discretionary grantees to remain operational.** Discretionary grant interviewees stated that the transition to remote work allowed them to continue operating during the pandemic. Although some grantees already had digital programming, many created new programs or expanded existing ones to meet current demand and community needs. IMLS program officers reiterated that it was critical to transition to virtual modalities to continue engaging communities, remain operational, and serve as a promising practice for future emergencies. Overall, interview respondents emphasized the need to remain flexible in changing environments. They also highlighted the ways that the pandemic prepared them to respond quickly.

**Emergency funding maintained and created jobs for grantees.** Many organizations used the emergency funding to continue, expand, or create new programming. Because the funding supported programmatic activities, it freed up other funding to sustain staff salaries, convert part-time staff to full-time status, and even create new positions. Grantees reiterated that the emergency funds allowed them to focus on funding programs without having to use funds from their existing budgets, which they could then use to pay staff salaries. Maintaining and expanding the workforce was essential because many institutions within and outside the museum and library sectors had to lay off or furlough staff during the pandemic. However, it is important to note that grantees did not mention whether these positions were sustained after the pandemic. In addition, they did not mention whether staff kept their full-time status or returned to part-time status.

## Recommendations Based on Findings

### *Agency-Wide Administrative Recommendations*

**IMLS should develop and activate a formal business continuity plan (BCP) when IMLS receives an identified level of emergency funding or an otherwise unanticipated funding allocation.**

BCPs are prevention and recovery systems for potential threats or unexpected circumstances, such as the COVID-19 pandemic. They help protect personnel and assets and ensure that organizations can function properly during such times. In this instance, IMLS could develop a formal BCP for receiving emergency or otherwise unanticipated funding allocations. Developing a BCP would require meeting with IMLS staff and managers to identify detailed information regarding changes that streamlined internal administrative processes, staffing changes (additions and/or modifications of duties during the emergency), and short-term internal policy changes that facilitated the distribution of funds effectively and equitably. The BCP should be tested, analyzed, and consistently revised to address any weaknesses.

**IMLS should develop an emergency staffing plan triggered by emergency funding.** During interviews, IMLS program officers identified staffing capacity as a limiting parameter in both the CARES Act and ARPA grant programs. AIR recommends that IMLS review the additional staffing and contractors brought on during ARPA to determine if the numbers were adequate, if they were in the right roles, if the onboarding timeline was appropriate, and if the training plan used at that time would be appropriate if faced with a similar situation. If IMLS receives a similar level of emergency funding again, there is a need to develop an emergency funding staffing plan that incorporates the additional federal staffing needs, additional contracted staffing needs, a plan to train contracted staff, and a training plan to onboard federal and contracted staff effectively and timely.

**IMLS should create and operationalize a road map for developing and integrating data-driven tools, such as the CARES Act workbook.** This road map should provide a step-by-step playbook to integrate program officers, data experts, domain/context experts, and internal administrative data into the decision-making process. Developing this playbook should begin by determining the roles and responsibilities of IMLS staff situated in different offices who bring diverse skills and experiences. The Office of Research and Evaluation (ORE) is the best equipped office within IMLS to lead this process and develop the initial tool launch road map. The development of any new tool should result in IMLS piloting it to ensure its feasibility and applicability to various grant programs. This process can work out any issues relevant to development to improve efficiency for implementation when a grant program requires integrating data such as socioeconomic factors.

**Each program office within IMLS should perform a lessons-learned debriefing shortly after the end of each grant program, for both formula and discretionary funding.** A lessons-learned debriefing uses five steps to review a project and develop recommendations for future projects. Recommendations are based on a postmortem examination or debriefing of prior projects, which identifies successes and failures for future projects. The steps result in specific recommendations, driven by debriefing, to inform future project design.

During interviews with IMLS staff, managers, and contractors, respondents attempted to recall information and stories from 4 years ago. Many respondents mentioned that their memories of specific details could have been clearer and easier to recall if they reviewed old notes. However, by performing a lessons-learned debriefing shortly after the conclusion of each phase of the grant cycle, post grant award, at the conclusion of the grant administration period, and post grant closeout. By performing the lessons-learned debriefing process, IMLS can promptly identify shifts in operations, policies, and procedures that align to a significant event. IMLS could create a repository of these reviews to refine its grant process, improve operational efficiency, and quickly build capacity for new or emergency grant programs.

Topics that should be reviewed during this process include project management, staffing, grant requirements that may result in organizational or office changes (such as specific requirements), communication, business processes, specific issues with implementation, and external stakeholders that affected the process. IMLS could develop a project survey that includes specific questions for each topic. A facilitator could use the survey during the lessons-learned session to guide the discussion. Three key areas should be in the survey: (a) what went right, (b) what went wrong, and (c) what IMLS could improve. Prior to the lessons-learned session, the facilitator should review the key project documents, review the project survey results, and prepare a list of questions specific to the project.

### ***Future Considerations for Data Analysis—Formula and Discretionary Funding***

**Formalize the quantitative fields of OLS-G2S hand codes into the State Program Report (SPR) system and integrate any standard text fields from grant applications and reports into eGMS.** At the start of the project, the research team exported data from the SPR program for analysis. However, the data proved difficult to quantify because they contained duplicative rows: SLAA-related iterations in which the SPR retained those rows, duplicated data due to SLAAs entering information for multiple activities for a single project, and the overabundance of textual fields relative to numeric fields. As a result, OLS-G2S offered to provide the research team with hand-coded data that quantified the textual fields, removed duplication, and cleaned the data. IMLS should remove this manual effort to allow program officers to focus on more substantial tasks by automating and fully integrating data cleaning into the SPR program to optimize the system.

Further, the research team had to request digital copies of the standardized application and grant forms from IMLS because these data were not available within eGMS. However, many of these forms are standard grant applications that contain information regarding project descriptions, abstracts, and so forth. IMLS should consider integrating these standardized text fields into eGMS to improve analytical outcomes. IMLS also should develop other quantitative outcomes from these fields through textual analysis methods, including regular expression matching.

### ***Future Considerations for Data Analysis—Formula Funding***

**For more efficient data analysis, the IMLS data warehouse should include a “final” holding area for all the SPR reports that SLAAs submit and that IMLS approves as final, closing out the formula program for that SLAA.** As with a prior recommendation, the research team determined that the SPR contained duplicative rows, indicating instances in which the system retained the same information twice; IMLS had returned reports to SLAAs for corrections; draft reports that SLAAs had yet to submit to IMLS; and a final version of each report. The duplication and multiple drafts resulted in a significant hurdle to accessing and analyzing these data. Upon completion and acceptance of a report, its row in the SPR should automatically transfer to a final holding area. This would reduce the effort for OLS-G2S and other offices and reduce confusion for those individuals who are unfamiliar with the data. However, after the initial findings of this report, IMLS stated they were in discussions with the developers of SPR to reduce these occurrences and improve analysis capabilities of the system.

### ***Future Considerations for Data Analysis—Discretionary Funding***

**IMLS should add socioeconomic factors to eGMS to provide easy access for program offices to make data-based decisions.** The ORE within IMLS developed an Excel-based workbook to provide program officers with socioeconomic characteristics from the CARES Act Notice of

Funding Opportunity (NOFO) at the county level. However, given the emergency nature of the grant program and a lack of coordination between the operations and program offices, the workbook was never operationalized by program offices. Therefore, the workbook transitioned to a public workbook to support applicants in justifying their CARES Act discretionary grant program applications.

Within eGMS, each institution is identified automatically according to its city, county, and State. IMLS could integrate socioeconomic data from the U.S. Census Bureau into eGMS for each application based on the anticipated audience of each NOFO. Program officers would not be required to consider only these factors. However, having this information would reduce the burden of them toggling to a separate document or manually finding the information (as the CARES Act workbook required). If a grant program includes a specific reference to a socioeconomic factor, integrating such information about the award's anticipated audience into eGMS would enable program officers to see the information for that institution and match that information with median values for each metric across the United States. This would support data-driven efficiencies and reduce the burden on program officers in having to review institutional location-based data manually.

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*Disclaimer.* Throughout this report, the locations are not identified to protect the anonymity of interviewees. However, any identified locations refer only to information part of the public record with a provided citation to the source.

*Note.* Please note that the views expressed in this report do not necessarily reflect those of the Institute of Museum and Library Services or of the U.S. Government.

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## Introduction

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The Institute of Museum and Library Services (IMLS) contracted the American Institutes for Research (AIR) to evaluate the distribution of the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the American Rescue Plan Act (ARPA) funding that IMLS distributed to museums,<sup>2</sup> libraries, and State Library Administrative Agencies (SLAAs) in the United States. This report examines research questions related to (a) IMLS Office of Library Services' Grants to States (OLS-G2S) formula funding to SLAAs in the United States (including territories and freely associated States) and (b) the discretionary grant portfolio of the Office of Museum Services (OMS) and the Office of Library Services–Discretionary (OLS-D).

This work relied on both quantitative and qualitative data. IMLS provided AIR with quantitative data from its Electronic Grants Management System (eGMS) and its State Program Report (SPR) system; OLS-G2S also provided data. AIR used login credentials provided by IMLS to independently collect the data from eGMS and SPR, and OLS-G2S provided AIR with aggregate data at the SLAA/State and project levels. AIR also conducted a literature review to better understand the role that libraries and museums played in their communities during the CARES Act and ARPA award periods, how these federal grant programs helped keep libraries and museums alive during the COVID-19 pandemic, and how the implications of the federal government's investment in these institutions differed from the Great Recession. This review underscored the role that libraries and museums played in addressing the digital divide that was further exacerbated by the pandemic. In addition to expanding internet access for community members negatively impacted by the digital divide (e.g., individuals in rural and low-income areas) through innovative outreach efforts, CARES Act and ARPA funding allowed these institutions to continue serving as a hub for resources and programming during a time when individuals were otherwise isolated.

The library and museum community experienced a similar need for an infusion of funds to support their communities during the Great Recession. However, during the Great Recession, many libraries endured significant budget and staffing cuts without the same level of targeted federal investment through grant funding made during the pandemic. The CARES Act and ARPA funding enabled libraries to pursue innovative strategies to minimize the adverse effects of the pandemic on their patrons and keep their communities engaged to an extent not previously experienced during the Great Recession.

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<sup>2</sup> Museums further include a variety of cultural institutions and locations that house collections that include inanimate and animate objects, including zoos, aquariums, and other institutions. Each IMLS grant program has specific eligibility requirements. For general reference, see <https://www.ims.gov/grants/apply-grant/eligibility-criteria>.



Exhibit 1 provides a high-level overview of the discretionary and formula grant programs from the CARES Act and ARPA grant programs.

### Exhibit 1. Overview of Awards, Applications, Awarded Value, and Requested Value

Grant program characteristic	CARES Act	ARPA	Percentage change
<b>Discretionary grant program</b>			
Total number of applications	1,666	510	-69.39%
Total number of awards	89	360	304.49%
Total requested award value	\$17,266,814.89	\$14,072,052.72	-18.50%
Total awarded value	\$16,537,854.42	\$13,747,366.13	-16.87%
<b>Formula grant program</b>			
Total number of SLAAs	59	58 <sup>a</sup>	-1.69%
Total number of projects	476	1,629	244.40%
Total number of subawards	3,565	6,106	71.28%
Total expended value	\$29,785,658.78	\$171,189,202.64	474.74%

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act; SLAA = State Library Administrative Agency.

<sup>a</sup> The Federated States of Micronesia did not spend any ARPA funding.

### Formula Grant Program

In the United States, there are 59 SLAAs: one in each of the 50 States, one in the District of Columbia, five in the U.S. territories (Guam, American Samoa, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands), and three in the freely associated States (Federated States of Micronesia, Republic of Palau, and the Republic of the Marshall Islands). For the Formula Grant Program, IMLS distributed funding to SLAAs based on a mathematical formula, including a set minimum amount for each SLAA and an amount calculated based on State-level population.<sup>3</sup> In the CARES Act formula grant program, the 59 SLAAs supported 476 projects with a total expenditure of \$29,785,658.78. The 476 projects included 3,565 subawards, a lower level funding distribution from SLAAs to individual libraries and library organizations. The ARPA formula grant program supported 58 SLAAs<sup>4</sup> for 1,629 projects, which was a 244% increase from the CARES formula grant program, the total expenditure was \$171,189,202.64 (a 474% increase) and included 6,106 subawards (a 71% increase).

<sup>3</sup> A full distribution of the SLAA allocation of funding in the CARES Act and ARPA is in [Appendix E](#).

<sup>4</sup> The Federated States of Micronesia did not spend any of its ARPA funding. Therefore, the total number of SLAAs that spent funding was 58, not 59.

However, the CARES Act grant program had a different design, distributing all funding using a per capita formula for each State rather than including a minimum baseline amount (Institute of Museum and Library Services, 2020a). As with the typical formula grant program, the ARPA grant program combined a standard baseline amount for each State in addition to distribution based on per capita. Specifically, each State, the District of Columbia, and Puerto Rico received a baseline of \$2,000,000, and each freely associated State and territory received a baseline of \$200,000 (IMLS, 2021a). The largest shift from the CARES Act to ARPA was the volume of funding and the number of projects. Specifically, ARPA witnessed almost six times the amount of funding and 2.5 times more projects than the CARES Act, resulting in a significantly larger workload for OLS-G2S program officers.

### **Discretionary Grant Program**

During an initial review of the data, AIR gathered several specific data points from the OLS and OMS discretionary grant programs, including the number of applications and awards and the requested and awarded value for each grant program.<sup>5</sup> The CARES Act grant program Notice of Funding Opportunity (NOFO) was initially released in 2020 and received 1,813 grant applications. With limited available funding, IMLS issued 89 awards with a total expenditure of \$16,537,854.42. The ARPA grant program received only 576 grant applications, a 68.23% decrease compared with the CARES Act. IMLS issued 360 awards, a 304.49% increase, with a total expenditure of \$13,747,366.13.

### **Institution Breakdown of the CARES Act and ARPA**

Unlike the formula grant program, IMLS discretionary grant programs are routinely specific to the type of applicant institution (museum, library, or other specialized entity). However, within the CARES Act and ARPA discretionary grant programs, one NOFO was used for all institutions. Therefore, the analysis disaggregated the funding by institution type for each research question in the discretionary grant program. Exhibit 2 provides an overview of the distribution of applications, awards, and value by institution type and grant program.

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<sup>5</sup> The awarded value is a field from within eGMS. However, awarded value refers to the amount the agency spent as part of the initial award. This value can fluctuate based on the awarded value and the overall expenditure.

## Exhibit 2. Distribution of Applications, Awards, and Value Across Institution Types

Program characteristics	CARES Act	ARPA	Percentage change
<b>Libraries</b>			
Number of library applicants	595	145	-75.63%
Number of library grantees	29	101	248.28%
Total of library funding	\$4,038,966.06	\$3,426,705.79	-15.16%
Total of library requested funding	\$4,147,616	\$3,588,911.22	-13.47%
<b>Museums</b>			
Number of museum applicants	1,060	365	-65.57%
Number of museum grantees	49 <sup>a</sup>	259 <sup>b</sup>	428.57%
Total of museum funding	\$10,016,601.75	\$10,320,660.34	3.04%
Total of museum requested funding	\$10,606,743.89	\$10,483,141.50	-1.17%
<b>Museum and library collaboration</b>			
Number of joint applicants	11 <sup>c</sup>	0	—
Number of joint awards	11 <sup>c</sup>	0	—
Total of joint funding	\$2,482,286.61	\$0	—
Total of joint funding request	\$2,512,455	\$0	—

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>a</sup> Four CARES Act awards identified as libraries fall under the purview of the Office of Museum Services (OMS).

<sup>b</sup> Fourteen ARPA awards identified as libraries fall under OMS's purview. <sup>c</sup> Eleven awards represent collaborations between museums and libraries that fell under the purview of the Office of Library Services—Discretionary.

In total, museums submitted 1,060 applications to the CARES Act discretionary grant program, receiving 49 awards totaling slightly more than \$10,000,000. In the ARPA grant program, the number of museum applicants declined by 66% (to 365 applicants), the number of grantees increased by 429% (to 259 grantees), and the total funding expenditure increased by 3%. Although there is a difference between the CARES Act and the ARPA grant program applicants and awards, the overall funding decreased by 4.6%. However, this amount is more reflective of smaller expenditures by libraries than museums, in which funding decreased by only 1.17%.

Alternatively, libraries submitted fewer applications and received fewer awards in the discretionary program compared with museums. For the CARES Act grant program, libraries submitted 595 applications and received 29 awards, with a total expenditure of slightly more than \$4,000,000. In the ARPA grant program, libraries submitted 75% fewer applications (145 applications) and received 248% more awards (101 awards), totaling 15% less than the CARES Act grant program, approximately \$3,400,000.

It is important to note that some applications existed within a museum and library collaboration category, although they appeared only in the CARES Act grant program, with 11 awards totaling almost \$2,500,000.

## Report Methodology

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The research team collected all data for this report from IMLS’s eGMS, the SPR system, documents provided by IMLS offices, interviews with current and former IMLS staff and leadership, and interviews with SLAAs and discretionary grantees.

### Administrative Data From eGMS, SPR, Internal IMLS Documents, and Hand-Coded Data

At the start of the project, AIR researchers accessed two of IMLS’s database systems—eGMS and SPR—through SQL-based authentication credentials requiring dual-authenticated approval. During this process, AIR accessed and archived each relevant table to the analysis, including those unrelated to the CARES Act and ARPA grant programs for comparative, longitudinal, and applicant retention measures. The tables were subsequently loaded into various data analysis programs, including Microsoft Excel, R, and Python.<sup>6</sup> Further, the project included various textual analysis methods on grant reports and other documentation that IMLS provided to the research team.

#### Data Structure

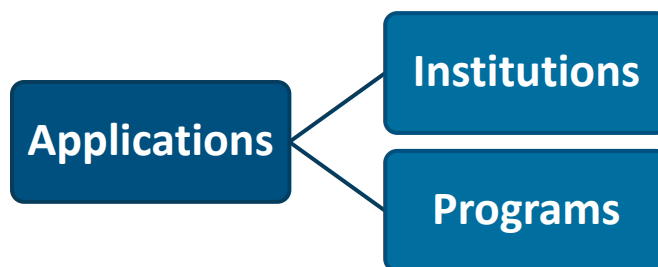
The first system, eGMS, is a relational database system in which each row represents a unique application for a grant program. This system comprises dozens of interconnected files, connected through standard identifiers including “ApplicationID,” “InstitutionID,” and “PersonID,” among others (see Exhibit 3 for a graphical example of the relationship). In consultation with two IMLS offices—the Office of Grants Policy and Management and the Office of the Chief Information Officer—AIR created the relationship structure between the tables. This allowed the research team to identify necessary information about each application and institution.<sup>7</sup>

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<sup>6</sup> The references section provide specific references for the packages and tools the team used to complete the analysis, when applicable.

<sup>7</sup> This process occurred before the start of the evaluation through a separate project related to administrative data analysis.

### Exhibit 3. Data Structure of the Electronic Grants Management System



The second data system, the SPR system, is a hierarchical database system (see Exhibit 4 for a graphical example of the database). This system’s top level comprises the 59 SLAAs that receive Library Services and Technology Act (LSTA) grant awards each year. The second level includes each award, separated by SLAA into projects aligned to the SLAA 5-year plan. These projects include large-scale improvements, such as the acquisition of internet hotspots or other technology for locations throughout the State, or they may work to improve operations at one or multiple locations. The final, lowest level of the system comprises the activities associated with each project. These activities encompass SLAAs’ actions to complete individual projects and their 5-year LSTA plans. Within each LSTA award, some States may grant subawards<sup>8</sup> (as a specific distribution of the total award) to individual jurisdictions to complete various activities.<sup>9</sup>

### Exhibit 4. Data Structure of the State Program Report



Note. SLAA = State Library Administrative Agency.

### Text Analysis

The discretionary grant program needed more data within eGMS to answer many of our research questions. Therefore, IMLS exported grant reports to supplement available data (including files submitted directly by grantees). These files were primarily text based and required either manual review or text processing and natural language processing analytical techniques.

**Text Processing Techniques.** The text methods extracted project descriptions and abstracts from the grant reports and transformed them into text data. The analysis included a series of

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<sup>8</sup> Subawards are lower level monetary distributions of SLAA funding to individual locations as opposed to the lower level distribution of equipment or supplies.

<sup>9</sup> During the work, IMLS provided the research team with incremental updates on the data because some grant awards for ARPA had yet to conclude before the start of the work.

textual analysis methods. The first breaks down each project description into singular words (a corpus). Then we transformed the words to all lowercase to remove any capitalization-related issues. For example, textual techniques would consider “the” and “The” as two different words. Once the data contain the individual words in all lowercase, the algorithm removes the “stop words” (e.g., “the,” “a,” “an,” “of,” “the,” “then,” “by”).<sup>10</sup> These stop words are fillers or pronouns within English that provide transitions but do not include terms that would indicate the overall sentiment or topic of the corpus. At this point, the single words were combined into a two-word series (known as a bigram). During the cleaning process, the analysis removed specific words, acronyms, and frequently used words that would appear within every application (e.g., “IMLS,” “project,” “pandemic,” “covid,” “19”) to ensure that only the most descriptive words were present regarding each project. This removal process also allowed the team to see the most frequently used words across discretionary awards, indicating the focus of each project. After the automatic removal of words and the manual removal of specific words, the research team reviewed each two-word combination manually, identifying issues within the corpus, such as two words joined together without a space between them (e.g., “digitaldivide”), resulting in 1,997 manual corpus changes because of errors. The code was updated for each mistake within the corpus to separate these words, and the analysis was rerun to update the bigram listing. The process was replicated until no issues were identified within the corpus of project descriptions.

**Regex Pattern Matching.** Once in a usable format, the team deployed a regular expression (regex) pattern-matching technique. The team performed this analysis with Python code and R code to process and analyze the data.<sup>11</sup> A regular expression or regex pattern is a predefined sequence of characters that can match one or more specific text patterns. For example, the following regex will search for the use of plexiglass as a safety measure. This pattern searched for “plexi glass,” “plexi shield,” and “plexi barrier” with a hyphen, a space, or as a single word, as well as “protective shield,” “protective barrier,” “plastic shield,” and “plastic barrier.” Any abstract with one of those terms counted toward the number of awards using those items. Regardless of the number of times the term(s) appeared in the analysis, the analysis counted this as only one award.

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<sup>10</sup> The stop words removed included a, about, above, after, again, against, all, am, an, and, any, are, aren't, as, at, be, because, been, before, being, below, between, both, but, by, can't, cannot, could, couldn't, did, didn't, do, does, doesn't, doing, don't, down, during, each, few, for, from, further, had, hadn't, has, hasn't, have, haven't, having, he, he'd, he'll, he's, her, hers, herself, him, himself, his, how, how's, i, i'd, i'll, i'm, i've, if, in, into, is, isn't, it, it's, its, itself, let's, me, more, most, mustn't, my, myself, no, nor, not, of, off, on, once, only, or, other, our, ours, ourselves, out, over, own, same, she, she'd, she'll, she's, should, shouldn't, so, some, such, than, that, that's, the, their, theirs, them, themselves, then, there's, these, they, they'd, they'll, they're, they've, this, those, through, to, too, under, until, up, very, was, wasn't, we, we'd, we'll, we're, we've, were, weren't, what, what's, when, when's, where, where's, which, while, who, who's, whom, why, why's, with, won't, would, wouldn't, you, you'd, you'll, you're, you've, your, yours, yourself, and yourselves.

<sup>11</sup> Python and R are two programming languages common for statistical computing and other data-related analysis techniques.

## Code 1: Python Code Example for Plexi Glass Identification in Project Abstracts

```
"plexi (-)? (/s)? (glass | shield | barrier)? | (protective | plastic)
(shield | barrier) "
```

**Zero-Shot Classification.** An additional textual analysis method involved the Zero-Shot classification model. This system is a machine learning method in which the computer has no prior understanding of the material and relies only on provided information to predict specific outcomes (Hugging Face, 2023; Yin et al., 2019). The technical explanation of Zero-Shot Classification is that it “aims to recognize instances of unseen classes solely based on the semantic descriptions of the classes” (K. Li et al., 2019, p. 1). The benefit of this method is that it does not require the development a specific machine learning model that requires user input to train the computer to recognize and understand the specific categories (J. Li et al., 2020; Saha et al., n.d.; Wang et al., 2019).

## Qualitative Interviews With Government Employees and Public Representatives

The research team conducted semistructured individual interviews with IMLS program officers (November–December 2023), interviews with prior IMLS staff and contractors who handled CARES/ARPA grant awards (December 2023), a group interview with IMLS leadership from OMS and OLS (January 2024), and an interview with one member of senior leadership (January 2024). In addition, the team interviewed representatives from SLAAs, discretionary grantees classified as museums, and discretionary grantees classified as libraries (March–May 2024).

Exhibit 5 provides an overview of the qualitative interviews conducted with federal employees. All program officers, contractors, and previous IMLS staff received the same interview protocol. Regardless of the interviewee, all interviews occurred through video conferencing. The video conferencing software recorded the interview; each interview had a notetaker present. IMLS leadership had a separate interview protocol. After the interviews, the research team developed coding structures for G2S and discretionary funding.<sup>12</sup> Themes and concepts were identified after the coding and additional content analysis.

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<sup>12</sup> During each interview, the interviewer received affirmative verbal consent from the interviewee to record the interview. The interviewer also assured each interviewee that their identity would remain confidential and anonymous when reporting the results.

### Exhibit 5. Overview of First Wave of Qualitative Interviews

Interview participants	Type of interview	Protocol used	Number interviewed
IMLS senior leadership	Semistructured one-on-one interview	IMLS leadership protocol	1
IMLS leadership	Semistructured focus group	IMLS leadership protocol	3
Current and previous IMLS discretionary program officers, contractors, and management	Semistructured one-on-one interview	Discretionary program officer protocol	7 <sup>a</sup>
Current and previous IMLS G2S program officers and management	Semistructured one-on-one interview	G2S program officer protocol	4
IMLS staff (current and former)	Semistructured one-on-one interview	IMLS equity workbook protocol	3

*Note.* Total interviews = 18. IMLS = Institute of Museum and Library Services; G2S = Grants to States.

<sup>a</sup> There were two nonrespondents out of nine invited.

Exhibit 6 depicts interviews that occurred with members of the public. Each SLAA received the same interview protocols but used a separate one for representatives from the discretionary library and museum grantees. Each interview occurred through video conferencing, the software created a recording, and each interview had a notetaker present. Using qualitative methodologies, themes and concepts emerged from the data after the coding and additional content analysis.

### Exhibit 6. Overview of Second Wave of Qualitative Interviews

Interview participants	Type of interview	Protocol used	Number interviewed
State Library Administrative Agencies (SLAA)	Semistructured one-on-one interview	SLAA protocol	34
Discretionary grantees, museums	Semistructured one-on-one interview	Discretionary grantee library protocol	9
Discretionary grantees, libraries	Semistructured one-on-one interview	Discretionary grantee museum protocol	6

*Note.* Total interviews = 49.



## Grants to States

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### Outcomes and Findings

#### *SLAAs Improved Efficiency to Prioritize Equitable Distribution of Funding*

Although some SLAAs reported feeling as if they were mere conduits for providing funding to libraries, IMLS and SLAAs worked quickly to distribute the funding with an emphasis on equity. As a result, the CARES Act and ARPA formula grant programs provided funding to more than 40,000 libraries, 350 museums, and more than 80 Tribal institutions. In addition, they made more than 9,000 subawards. With each allocation, SLAAs and IMLS made strides to ensure that funding reached those with the greatest needs within specific jurisdictions. However, as with traditional formula funding, SLAAs have significant decision-making authority for distributing funding. As a result, substantial variability existed in the method used to distribute funding. Some SLAAs relied on specific data-driven metrics to determine the locations that needed funding; others relied on input from regional library systems that were more in tune with the local community's needs to make funding decisions. In addition, although IMLS used the existing infrastructure for formula funding, the ability of SLAAs to distribute money varied based on several factors, including the State administrative structure of SLAAs, their ability to transition to remote work quickly, and the current processes and administrative rules to follow for allocating and approving funds. The transition from CARES Act funding to ARPA funding resulted in SLAAs receiving almost six times more funding than they had under the CARES Act. This increase in funding slowed the dispersal of funds, primarily related to challenges that SLAAs and their libraries encountered in establishing adequate administrative structures to distribute the increased level of funds. At the same time, the State- and local-level officials began to question the distribution of all federal ARPA funding. As a result, the dispersal of funds slowed as SLAAs and local libraries found themselves under greater scrutiny, even when the funding was directed toward pandemic-specific operations.

#### *Expanded Programming to Meet Evolving Community Needs*

During the COVID-19 pandemic, communities across the country shut down with restrictions imposed by State and local governments. As a result, libraries relied on funding from SLAAs to shift their services and programming to comply with regulations and meet the evolving needs of their communities. Specifically, many libraries used funding from SLAAs to help them transition their regular programming to a virtual environment. Such virtual programming allowed patrons to stay engaged with their communities through virtual story times, online summer reading programs, and synchronous and asynchronous programs, among other offerings. Many libraries also used this funding to implement contactless services. Such services, including self-checkout machines, curbside pickup, and other delivery methods,

enabled libraries to continue allowing access to library materials. In addition, libraries expanded their mobile services so that they could bring library services to vulnerable populations across their communities. Many of these mobile services included Wi-Fi hotspots to assist in bridging the digital divide exacerbated by the pandemic. The trend for funding the purchase of bookmobiles and/or techmobiles began with CARES Act funding, with three SLAAs purchasing vehicles for outreach that included mobile libraries and/or vehicle-based wireless internet access. This trend expanded significantly with ARPA funds. SLAA documentation identified 18 ARPA projects that involved purchasing a vehicle. Through discussions with SLAAs, 24 reported using CARES and/or ARPA funding to purchase vehicles. Eight SLAAs reported that libraries purchased bookmobiles or mobile libraries, with the funding either in whole or part from CARES Act and ARPA funding. Six SLAAs noted that libraries in their State purchased book bikes, book bike trailers, or book golf carts. Six SLAAs reported that their libraries purchased vehicles smaller than bookmobiles, such as vans or other outreach vehicles, which are easier to maneuver and do not require a special driving license.

### ***Transitioning Structures to Meet the Needs of Libraries and SLAAs***

Before the pandemic, SLAAs provided administrative support to the libraries in their State. However, they did not need to maintain frequent and continuous communication to enable these libraries to function. As the pandemic evolved and as COVID-19 safety-related information was changing rapidly and becoming fragmented (e.g., multiple sources providing differing information), frequent and constant communication became essential for libraries to function effectively. Although SLAAs typically held in-person statewide meetings, regional meetings, and professional development workshops before the pandemic, these meetings could have been more feasible. During the pandemic, SLAAs relied on virtual meetings more often, which allowed them to share changing rules and regulations related to COVID-19 with their libraries.

After the COVID-19 pandemic, SLAAs continued using virtual communication methods, which allowed some libraries to overcome barriers to participation. For example, many librarians could not attend meetings or workshops because they had limited library staff capacity and small transportation budgets. However, with the necessity and wide acceptance of using virtual communications during the pandemic, more librarians and SLAAs could participate in these meetings. This helped expand their access to professional training and development opportunities.

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IMLS had a significant impact through the CARES Act and ARPA formula grant programs, reaching more than 40,000 libraries, 350 museums, and more than 80 Tribal organizations. Funding from both programs resulted in more than 9,000 subawards and the acquisition of 15,000 Wi-Fi hotspots, 26,000 other laptops/tablets, and 159 vehicles.

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## Perceived Sustainability of Emergency Programs

Initially, some libraries perceived the new virtual programs or other service modifications as a temporary requirement of the pandemic. However, even as the pandemic subsided, many of these institutions witnessed continued active engagement with and a desire for such programs and services. Several institutions noted that the emergency funding served as a springboard for permanently integrating virtual services when the initial setup costs were beyond a library’s available funding. These services included curbside pickup, touchless checkout, and other virtual programming. The relaxation and removal of some State and local library COVID-19-related operating restrictions directly resulted in some programs ceasing.

## COVID-19 Needs, Goals, and Impacts

### *What were the immediate emergency needs for SLAAs? What other emergency needs emerged across time?*

G2S distributed formula-based funding to SLAAs in the CARES Act and ARPA programs (Exhibit 7). The CARES Act funding supported 476 unique projects, and ARPA funding supported 1,629 projects.

IMLS assigned each activity additional categorical descriptors that detailed how the money was to be spent and what needs each application intended to fulfill. The focal area categories include institutional capacity, information access, lifelong learning, employment and economic development, human services, and civic engagement (IMLS, 2020b). A full definition and description of each category is in Appendix A. These categories directly correlate with IMLS’s strategic plan and various goals and objectives (IMLS, 2022).

### Exhibit 7. Count and Percentage of Focal Areas With CARES Act and ARPA Funding

Focal area	CARES Act		ARPA		Benchmark	
	Number of projects	Percentage of projects	Number of projects	Percentage of projects	Number of projects	Percentage of projects
Institutional capacity	269	56.51%	901	55.31%	460	32.86%
Information access	117	24.58%	314	19.28%	429	30.64%
Lifelong learning	69	14.50%	310	19.03%	421	30.07%
Employment and economic development	12	2.52%	39	2.39%	8	0.57%
Human services	5	1.05%	37	2.27%	33	2.36%
Civic engagement	4	0.84%	28	1.72%	49	3.50%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Using these categorical indicators for projects provides insight into the immediate emergency needs of SLAAs and local libraries. In the CARES Act formula funding, SLAAs sought to improve libraries' institutional capacity (56.51% of projects) nationwide. Such projects included improving the library workforce, technological infrastructure, and operations (see Exhibit 8). During the CARES Act formula grant program, libraries spent significant funding to improve virtual access to library collections, expand internet coverage to include internet access outside the building through Wi-Fi hotspots,<sup>13</sup> and implement other technological upgrades. For example, many libraries set up parking lot Wi-Fi hotspots, allowing community members to access the internet socially distanced and safely. Some libraries also began acquiring and lending technology devices such as laptops and tablets to close the digital divide. The Austin Public Library purchased laptops and 150 hotspots to lend to K–12 and college students, and the Nueces County Keach Family Library in Robstown, Texas, purchased a self-service station for community members to check out tablets, laptops, and hotspots (Texas State Library and Archives Commission, 2021).

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<sup>13</sup> A full list of the distribution of Wi-Fi hotspots that SLAAs purchased is in [Appendix C](#).

## Exhibit 8. Cross Tabulations of Focal Areas and Intents for Projects

Focal area by intent	CARES Act		ARPA		Benchmark (2019)	
	Number of projects	Percentage of projects	Number of projects	Percentage of projects	Number of projects	Percentage of projects
<b>Civic engagement</b>						
Improve users' ability to converse in community conversations about topics of concern.	2	0.42%	5	0.31%	13	0.93%
Improve users' ability to participate in their community.	2	0.42%	32	1.96%	36	2.57%
<b>Employment and economic development</b>						
Improve users' ability to use and apply business resources.	1	0.21%	1	0.06%	1	0.07%
Improve users' ability to use resources and apply information for employment support.	11	2.31%	38	2.33%	7	0.50%
<b>Human services</b>						
Improve users' ability to apply information that furthers their parenting and family skills.	2	0.42%	4	0.25%	17	1.21%
Improve users' ability to apply information that furthers their personal or family health and wellness.	3	0.63%	22	1.35%	16	1.14%
Improve users' ability to apply information that furthers their personal, family, or household finances.	0	0.00%	2	0.12%	0	0.00%
<b>Information access</b>						
Improve users' ability to discover information resources.	16	3.36%	60	3.68%	136	9.69%
Improve users' ability to obtain and/or use information resources.	101	21.22%	250	15.35%	293	20.88%
<b>Institutional capacity</b>						
Improve library operations.	41	8.61%	178	10.93%	110	7.84%
Improve library's physical and technology infrastructure.	221	46.43%	683	41.93%	146	10.41%
Improve the library workforce.	7	1.47%	40	2.46%	204	14.54%
<b>Lifelong learning</b>						
Improve users' formal education.	11	2.31%	164	10.07%	104	7.41%
Improve users' general knowledge and skills.	58	12.18%	150	9.21%	317	22.59%
<b>Total</b>	<b>476</b>	<b>100.00%</b>	<b>1,629</b>	<b>100.00%</b>	<b>1,403</b>	<b>100.00%</b>

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

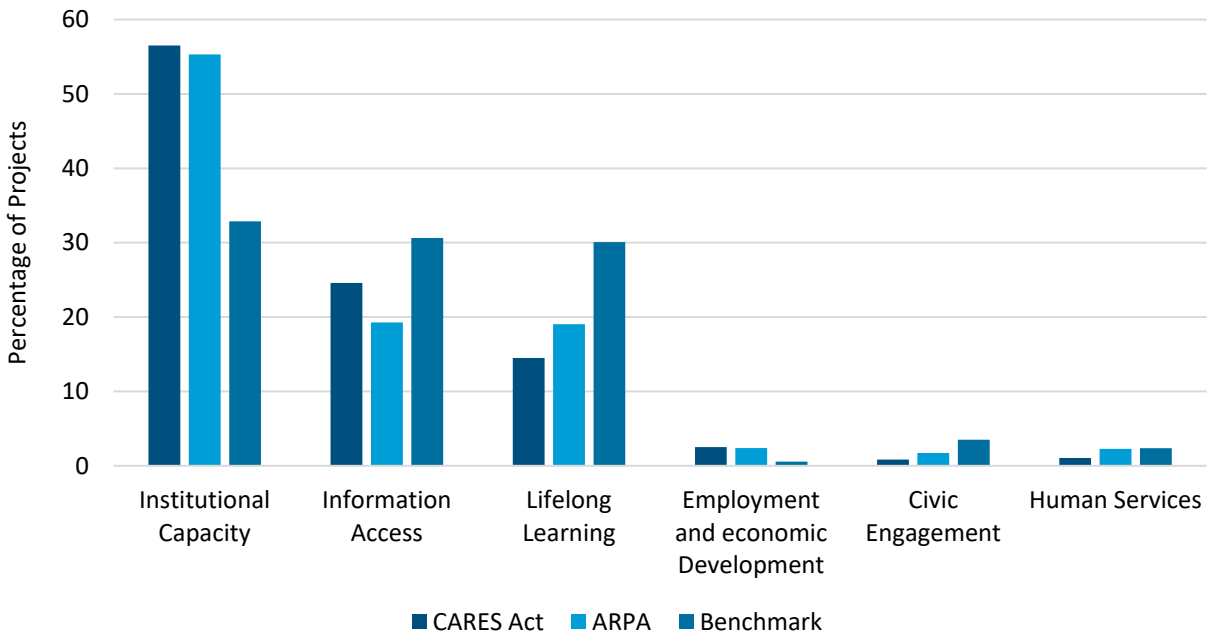
The Eloy (Arizona) Public Library installed a solar-powered workstation with benches for users to charge electronic devices. The workstation “became a lifeline for community members when severe weather in July 2022 destroyed power poles and transformers” (Flores, 2022). After the extreme weather, the library witnessed hours-long wait times for charging services. Beyond the July weather event, from February through October 2022, the workstation was used 1,285 times.

After updating technological infrastructure, SLAAs determined that the second and third largest emergency needs were to improve information access (25% of projects) and maintain lifelong learning (15% of projects). During interviews, IMLS program officers and SLAA representatives stated that their greatest need was to transfer programming to virtual formats, digitize collections, and develop digital products given questions about the safety of using physical materials and closures as ordered by governmental pandemic rules. At the start of the pandemic, SLAAs and libraries experienced immense confusion about the safety measures related to the risk of virus transmission and significant communication barriers related to differential needs across a State and region. As a result, much of the emerging needs revolved around increasing safety for patrons and improving digital assets.

As the pandemic progressed and government officials reduced restrictions nationwide, IMLS released another round of formula funding under ARPA (approximately \$171,000,000). This round of funding was almost six times larger than the CARES Act formula funding amount (approximately \$29,000,000). The purpose of this funding was to facilitate recovery from the impact of the pandemic. At this time, libraries understood the necessity of virtual elements. At the same time, ARPA projects witnessed increased resources needed to improve in-person programming and operations (e.g., contactless services, self-checkouts). As restrictions began to ease, libraries began offering more in-person programming while maintaining their virtual presence and contactless services.

ARPA projects had the same top three focal areas of institutional capacity (55.3%), lifelong learning (19.3%), and information access (19.0%); together, these three areas comprised 93.6% of all ARPA projects (Exhibit 9). During ARPA funding, OLS-G2S program officers and SLAA representatives continued identifying virtual resources as a top priority for SLAAs and libraries. SLAAs focused on developing virtual resources, programming, and digital collections; as the initial emergency period abated, they also focused on increasing public access to those resources. Beyond technological upgrades, a few SLAA representatives discussed delivery services and outdoor programming, such as book walks and yoga classes. For example, some program officers reported the acquisition of tents, furniture, or the components to build story walks to allow for outdoor programming, whereas indoor programming was restricted or less popular during the pandemic.

### Exhibit 9. Focal Area Distribution of CARES Act, ARPA, and 2019 Benchmark Projects



Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Once buildings began to reopen, SLAAs described a shift to improving the physical safety of library buildings, including air filtration systems, self-checkout stations, curbside pickup, 24/7 book lockers, and book drops.

At the same time, some States, such as one Mid-Atlantic State, created a certification process for digital navigators to help more people access electronic resources and digital content. Digital navigators are employees who support patrons in internet connectivity and internet literacy (i.e., ability to use a computer and the internet) and in improving digital and internet-based skills. An example of a project implemented to teach patrons how to access digital content is a new digital navigator program set up by the Southern California Library Cooperative (W. Walker, 2022).

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Navigators helped Californians with all aspects of digital inclusion, such as digital literacy and finding low cost or free internet access and internet connected devices. The team researched existing programs and organizations such as the National Digital Inclusion Alliance (NDIA) and then defined and implemented a program modeled on what was learned. Navigators were hired part time, through a staffing firm, from pilot libraries. A training program was developed, knowledge base and operating procedures were developed, and navigator equipment and IT systems were acquired and set up. The program was piloted with five library jurisdictions for 2 months; then, the program began a statewide rollout, adding public libraries and other partners. (W. Walker, 2022)

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As of December 31, 2022, 45 library jurisdictions were participating in the Southern California Library Cooperative, representing 265 library branches in 26 counties, and serving a population of more than 8.9 million. Other programs are typically narrower in scope or based in a local jurisdiction such as a city or a county.

Across all projects, as shown in Exhibit 8, the most common primary intention was “improv[ing] library’s physical or technology infrastructure,” which accounted for more than 40% of the projects funded by the CARES Act (46.43%) and by ARPA (41.93%), highlighting a strong emphasis across both programs on enhancing library infrastructure.<sup>14</sup>

CARES Act and ARPA funds used for technology had a direct impact on the ability of libraries to help patrons continue their education remotely during the pandemic, provide job seekers the devices and internet access needed to file for unemployment benefits and look for employment, and provide devices for the public to access telehealth services.

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The Connecticut State Library and its Division of Library Development developed a framework of community needs and coordinated with partners to provide community support with CARES Act funding. In broad terms, the State library’s goals were to expand digital access as well as provide technical support services to citizens within the community. This was addressed by acquiring laptops available for patrons to use for job search purposes, applying for unemployment benefits as well as other basic support needs. The library distributed 225 laptops and 225 hotspots to 15 different libraries. One of the recipients was the East Hartford Public Library, when had partnered with East Hartford Adult Education. This partnership provided students with an avenue to complete their high school education as well as assisting job seekers to access unemployment benefits and look for work. “We partnered with East Hartford Adult Education and our collaboration meant that two students earned their high school diplomas at a time when our partner had no devices of their own for students to use. This lending program has enabled participants to access websites such as that of the CT Department of Labor, where they could file for unemployment benefits and access employment service assistance. In addition, borrowers can access telehealth and arrange medical services. 24-hour access to the internet provides many benefits to individuals who cannot afford to pay for internet services.” (LaValle, 2021)

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The South Carolina State Library expanded digital access and technical support to public libraries and local schools. Funded with CARES Act, the State library purchased tablets, hot spot devices and routers. Participating public libraries were allowed to provide a necessary service to library patrons of all ages during the pandemic, while concurrently closing the broadband access gap. In Marlboro County, using the library hotspots, four students finished their studies and graduated, including students graduating from nursing school (Aiken, 2021).

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<sup>14</sup> [Appendix A](#) includes a list of the focal areas and intents for the formula funding program.



The second most common intention was “improv[ing] users’ ability to obtain and use information resources,” accounting for 21.22% of projects from CARES Act funding and 15.35% of projects from ARPA funding. Furthermore, the lifelong learning focal area witnessed the most notable shift, with 2.31% of CARES Act and 10.07% of ARPA projects focusing on “improv[ing] [a] users’ formal education.” In comparison, 12.18% of CARES Act and 9.21% of ARPA projects focused on “improv[ing] users’ general knowledge and skills.” This shift from general knowledge to formal education may indicate that the pandemic increased the need for or the awareness of the importance of formal education rather than general information knowledge and sharing. However, this shift is the responsibility of a single SLAA. Thus, although it may indicate a shift in ARPA compared with the CARES Act, it is not a specific shift across all SLAAs.<sup>15</sup>

Compared with prior LSTA funding years, in 2019 specifically, SLAA projects were split equally between institutional capacity (33.65%), information access (31.38%), and lifelong learning (30.8%). Therefore, SLAA and local library needs shifted to focus on institutional capacity at the start of the pandemic, showing an immense focus on ensuring the continual operation of libraries and SLAAs throughout the pandemic. As the pandemic abated and buildings began to reopen, there was an increase in further technological upgrades, but they focused on internal library operations (delivery, contactless services, furniture, and even air filtration systems).

### ***To what extent did CARES Act and ARPA granting structures align with SLAAs and the needs of libraries and the communities they serve?***

The pandemic resulted in a significant need for quick funding dispersal, particularly in the formula grant programs. OLS-G2S program officers emphasized that the requirements of the CARES Act and ARPA guidelines were designed to prioritize the quick disbursement of funds, allowing SLAAs to use them flexibly while minimizing administrative burden and expanding funding utilization as much as possible.

IMLS filled a specific niche within communities but not completely within the entire library community under CARES Act funding. Specifically, one OLS-G2S program officer described IMLS’s granting structure, dictated by statute, as asking libraries to place their community’s needs first and ignore their own. Some SLAAs agreed with the sentiment that the CARES Act funding was more directed toward libraries and did not support SLAAs. At least one SLAA felt that the formula funding was akin to discretionary granting because it delivered funding to the locations with the greatest need. SLAAs were merely a conduit for the funding.

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<sup>15</sup> Initially, the research team wanted to focus on the intents within the focal areas for a better measure of each SLAA project. However, because the shift from general knowledge to formal education applied to a single SLAA, per interview responses, the research team included an analysis at both the focal area and intent level of analysis.

Despite this, SLAA respondents reported that they believed the granting structure aligned well with their needs, the needs of their libraries, and the communities they serve. Most SLAAs used subgrants to distribute money to their libraries and felt this process worked well, especially because many already had subgranting processes in place. In ensuring that the funding reached as many locations as possible, SLAAs increased subawards to distribute funds rapidly. During the CARES Act, SLAAs distributed 3,565 subawards. Each SLAA distributed an average of 51 subawards during the CARES Act. During ARPA funding, SLAAs increased their subawarding process by 101%, distributing 6,106 subawards. In the CARES Act and ARPA programs, several SLAAs distributed many subawards, whereas others distributed no subawards.

Four SLAAs stated that the granting structure allowed their libraries to choose what to spend their money on rather than mandating what to spend money on. A few SLAAs stated that the granting structure aligned well with their digital inclusion needs, giving them access to digital resources such as digital books, hotspots, and better internet services. Other SLAAs mentioned setting up access to telehealth services within libraries and communities given increased demand at the beginning of the pandemic.

In the ARPA program, IMLS changed granting structures when developing the guidelines to better align with the specific needs of SLAAs and libraries nationwide, allowing funds to be used for salaries, supplies, and services—to the extent the statute would allow—as well as activities to close the digital divide and provide emergency response. For example, the State Library of Oregon used ARPA funds on the following supplies and services to address the digital divide: purchased 176 hotspots and computers; boosted Wi-Fi; upgraded public computers; offered community computer classes and tutoring sessions; purchased six outreach vehicles equipped to deliver books, media, and activity materials; and established designated workspaces for job seekers who did not have reliable internet access at home. The State Library of Oregon also directed ARPA funds to hiring teen interns (State Library of Oregon, 2024). As a result of IMLS's emphasis on aligning the ARPA granting structure with the specific needs of SLAAs and libraries, expediency became a significant part of the ARPA formula program. In response, an SLAA interviewee stated that the State designed its subgranting process to distribute as many ARPA funds as were allowed without requiring additional paperwork from subgrantee libraries.

SLAAs focused on distributing funding to libraries across their jurisdictions as quickly and efficiently as possible to maximize its impact (see Exhibit 10). The data indicate a clear increase in focus on subawards during emergency funding compared with benchmark data from 2019, in which subawards were less common, with an average of 36 subawards per SLAA (46 SD). Before the emergency funding, SLAAs issued only 2,125 subawards, demonstrating a 42% increase during the CARES Act and 187% during ARPA.

OLS-G2S program officers believed that the granting structures under the CARES Act did not align with the SLAA and library needs, pushing them to put the community’s needs first, but SLAAs expressed mixed viewpoints. Some SLAAs believed that the CARES Act funding made them more of a conduit for distributing money rather than working to address pandemic-related issues. Nevertheless, with the shift under ARPA to allow greater expenditure within the range of the statute, SLAAs agreed that the ARPA formula program aligned with the needs of SLAAs and libraries in the community.

**Exhibit 10. Subaward Descriptive Statistics for Formula Grant Programs**

Descriptive statistics	CARES Act	ARPA	Benchmark 2019
<b>Subawards made</b>			
Total	3,565	6,106	2,125
Average	60.42	103.49	36.02
Median	29	92	12
Standard deviation	94.38	97.37	46.01
Minimum	0	0	0
Maximum	486	405	191

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

***What new opportunities resulted from CARES Act and ARPA funding as the emergency stabilized and abated during the pandemic?***

SLAAs and libraries became more aware of specific community needs throughout the pandemic. Under the CARES Act, SLAAs focused on improving technological infrastructure and hardware to allow the community to continue accessing library resources. However, as the pandemic abated and restrictions decreased, SLAAs and libraries shifted to more specific purchases, including outreach vehicles, lockers and self-checkout services, contactless services, and furniture to update and improve library operations within the building. Importantly, the flexibility of IMLS funding streams allowed for this shift because it enabled SLAAs and libraries to adapt to the ever-evolving pandemic and associated governmental restrictions.

Libraries sought to retain services developed during the pandemic that remained in demand as the pandemic abated. OLS-G2S program officers reported that libraries continued some modified services as the emergency stabilized, including virtual and/or outdoor activities that began during the pandemic while reinstating in-person events. For example, libraries continued using systems such as self-checkouts, book drops, virtual resources (e.g., digital collections, subscriptions [when they had the funding]), and services such as a library of things (loaning

physical items that are not traditional library collections [e.g., toys, cooking utensils]) and digital navigation. Libraries also purchased and loaned out technological devices, including laptops and tablets, to patrons so that they could attend school or engage in other virtual opportunities.

In addition to creating programs, libraries also began purchasing diverse services, such as

- subscribing to a digital navigator service that teaches patrons how to use library digital services,
- subscribing to an online summer reading service for students, and
- procuring a GED program to improve formal education for the community for job placement.

As buildings began to reopen, libraries sought to use their space effectively to benefit the community. Some libraries set up private spaces for various purposes, including telehealth appointments, unemployment consultations, and career development services via teleconferencing.

Many people were excited to attend programs at physical locations, but subsets of the population still felt unsafe visiting locations in person. Therefore, several SLAAs established mobile services. These mobile services varied in their purposes, but some examples include technology vans in which patrons could print out materials, check out books, and access the internet. For example, the Mandel Public Library (West Palm Beach, Florida) equipped a mobile van with Wi-Fi hotspots and laptops for checkout; nutritious snacks; and library staff offering help with homework, tutoring, job applications, résumés, and more (Doris, 2020). The Wisconsin Department of Public Instruction used their bookmobile to deliver books and food to patrons unable to travel to their local library (DPI Media Line, 2022).

***What were the greatest challenges for SLAAs administering CARES Act and ARPA funding, including amounts, timing, and allowances/restrictions? How did SLAAs address those challenges?***

OLS-G2S program officers mentioned various challenges to the administration of CARES Act and ARPA funding, including timing, funding amount, State-level bureaucratic challenges, staff turnover and/or shortages, library capacity for fulfilling grant requirements, supply chain issues, and grant allowances (see Exhibit 11).

### Exhibit 11. Challenges Shared by OLS-G2S Program Officers

Challenges	OLS-G2S program officers <sup>a</sup>	
	Count	Percentage
Timing	4	100%
Funding value	2	50%
State-level bureaucratic challenges	2	50%
Staff turnover and/or shortages	2	50%
Library capacity for fulfilling grant requirements	2	50%
Supply chain issues	1	25%
Grant allowances <sup>b</sup>	1	25%

Note. OLS-G2S = Office of Library Services' Grants to States.

<sup>a</sup> N = 4. <sup>b</sup> For example, the types of approved expenses.

The existing OLS-G2S formula funding structure allowed for the quick distribution of emergency funding upon award, yet OLS-G2S program officers noted timing as the greatest and most common challenge. Specifically, a few program officers noted that supply chain issues hampered the timely implementation of grant activities. For example, initiatives receiving materials and vehicles experienced delays. As the delays occurred, the funding remained unrequested and unspent from IMLS, which slowed the SLAA's ability to spend the funds as originally planned. Program officers also noted that States that chose to implement a subgranting system but did not have the existing infrastructure spent time developing and implementing an appropriate infrastructure, resulting in more extension requests than usual on formula funding.

As with program officers, all interviewed SLAAs noted challenges with the abbreviated time to spend the allotment, which was challenging given staff capacity, supply chain issues that usually required extensions to the grant, and State government requirements for fund disbursement. Most SLAAs felt they could have used the money more efficiently if they had had more time. Although some States instituted emergency procurement processes, residual supply chain issues still negatively affected the timing of project completion.

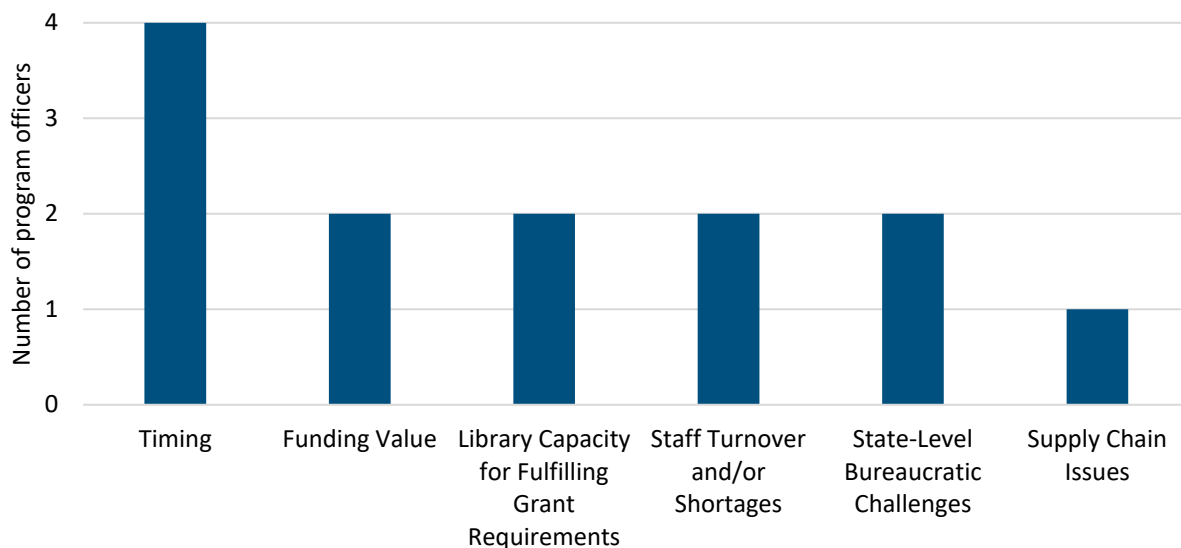
Other challenges included high staff turnover and shortages. SLAAs and local libraries needed additional capacity to administer and apply for emergency funding. A literature review revealed that a challenge for libraries and museums was limited staff capacity to support the CARES Act and ARPA activities.

Six SLAAs also noted challenges to grant allowances because the CARES Act and ARPA grants prohibited the use of funds for construction. For example, some libraries wanted to add

windows to their buildings for curbside pickup, and others wanted to build outdoor structures or make major changes to the heating, ventilation, and air-conditioning (HVAC) systems. Some SLAA representatives reported being confused about what constituted “construction.” An SLAA interviewee also stated having restrictions on purchasing certain equipment from foreign countries, which became a challenge.

Although IMLS made significant changes to grant programs to work with SLAAs and libraries to administer grant funds and respond to the pandemic within the constraints of the legislation, OLS-G2S program officers (Exhibit 12) and SLAA representatives still reported several challenges. With such an unprecedented emergency, these challenges were hard to mitigate.

**Exhibit 12. Number of OLS-G2S Program Officers Who Identified Challenges**



Note. OLS-G2S = Office of Library Services’ Grants to States. N = 4.

***What kinds of new practices, policies, or partnerships emerged to increase the capacity of SLAAs to support their libraries during the pandemic?***

This question relied on interview data with OLS-G2S program officers and SLAA representatives because administrative data did not provide much information about how grantees created or implemented new practices, policies, or partnerships. During interviews, OLS-G2S program officers and SLAA representatives shared many examples of practices, policies, and partnerships that SLAAs implemented to increase their capacity and support libraries within their State.

**Practices.** SLAAs noted that they formalized their communication process with their libraries to provide information quickly and efficiently. To promote communication and collaboration during such an unprecedented time, several SLAAs implemented weekly virtual meetings for

their libraries. For example, one State in New England implemented weekly calls with library leadership from across the State, leading to the development of locally focused, shared online training resources. During the pandemic, SLAAs found that online meetings allowed for increased engagement across the State. Initially, online meetings were necessary to address social distancing requirements. After the pandemic, online meetings remained a more efficient method to sustain frequent and ongoing communication for recurring regional and statewide meetings, removing the time and cost of travel for meeting participants. Several SLAAs implemented diversity, equity, and inclusion training for their staff, recognizing the importance of such practices amid many social happenings.

In addition, SLAA representatives noted innovative practices such as delivery, curbside pickup, device lending, or mobile services (e.g., bookmobiles, “techmobiles,” book machines) to continue and expand services, particularly to increase the community’s access to services. Other SLAAs created online summer reading programs or provided activity kits to community members. For example, the Whitman County Rural Library District in Washington used CARES Act funds to provide 400 youth activity bags, and the Cordova (Alaska) Public Library used ARPA funds to provide community members with foreign language and cultural kits and virtual educational programming (*Moscow-Pullman Daily News*, 2020; *The Cordova Times*, 2021). Beyond specific resources, an SLAA designed outdoor spaces to maximize patronage with social distancing. Others purchased modular furniture and meeting room enhancements to accommodate social distancing. Finally, at least one SLAA focused on encouraging librarians to promote and train teachers on new online education platforms to increase the platform’s utilization.

SLAAs supported the expansion of practices to diverse audiences, including implementing virtual story times (synchronous and asynchronous), creating virtual tutorials on library resources, and providing recordings of board meetings when in-person attendance was impossible or restricted due to occupancy limitations. Several States added “digital inclusion” or “connectivity” staff in their organizational charts, improved their hardware and software for internal use, and increased virtual and hybrid professional development opportunities for staff.

**Policies.** Some SLAAs made iterations implementing formula subgrants. For example, a Western SLAA with a history of subgranting removed some requirements to streamline the subgranting process. Other examples of policies implemented included creating a digital equity plan and increasing acceptance of electronic signatures. The use of subgrants was extensive within the CARES Act and ARPA formula programs, significantly more than previous LSTA formula funding cycles. In fact, as separate programs, the CARES Act and ARPA accounted for a significantly higher number of subawards than the entire LSTA formula cycle from 2019.

**Partnerships.** Many SLAAs developed partnerships to offer new programming to address specific community needs. For example, an SLAA in New England used 4% of its funds to connect with other State agencies to fund a standard eGMS, whereas an SLAA in the West



partnered with other State agencies to improve early childhood education and workforce development. Other partnerships promoted community outreach, such as an SLAA in the Midwest using outreach vehicles at festivals, senior centers, and schools to increase library presence in communities. At the same time, an SLAA in the West and another in New England formed partnerships with State park agencies to distribute park passes.

Another example is a multiorganizational partnership between Pima County (Arizona) Public Library, the Arizona State Library, the University of Arizona College of Nursing, the Arizona Telemedicine Program, and the Southwest Telehealth Resource Center. This partnership made telehealth supplies, services, and resources available to community members in the rural Arizona communities of Ajo and Arivaca. The project aimed to improve healthcare outcomes by increasing access and removing barriers to telehealth services at the library. ARPA funds were used to purchase laptops, stethoscopes, blood pressure monitors, pulse oximeters, and software to support using medical devices during telehealth visits. A community health day event was held with more than 120 attendees. During the event, the telehealth kits were demonstrated on a live teleconference call with a remote healthcare provider. In addition to the demonstration, students from the University of Arizona's College of Nursing provided health screenings for community members, (Zambos, 2022).

Partnerships also contributed to their State's physical health and safety. For example, an SLAA in the West worked with other State agencies to create health guidelines for public libraries; another SLAA increased community access to health information and other health-related resources.

Some partnerships focused on digital equity and general diversity, equity, and inclusion work. For example, an SLAA in New England and another in the Southeast worked with another State agency to co-create a map of public Wi-Fi locations, providing community members with several options of places to connect to the internet for school, work, or other purposes. Another SLAA supported the U.S. Department of Labor in processing unemployment benefits.

Every SLAA described how they worked with other State, local, and nonprofit agencies to provide unprecedented support for their States. These partnerships focused on unemployment, workforce, tax preparation, education, health, other library systems, and more, such as the following:

- Partnering with private academic libraries to share bibliographic data
- Procuring alcohol-based hand sanitizer from a local distillery
- Providing local courthouses with book machines
- Working with the Department of Commerce to develop an online high school program
- Establishing a Braille and talking book library
- Partnering with a substance-abuse nonprofit organization to donate books



The Southeastern New York Library Resources Council established a Library & Museum Partnerships Project, which resulted in subgrants to support collaborative initiatives such as community events and oral histories on immigrant experiences; community and school reading and science, technology, engineering, and mathematics programs; and a virtual walking tour based on historical accounts of one of the oldest Jewish Heritage sites in North America (Southeastern New York Library Resources Council, 2022).

Emergency funding significantly affected practices, policies, and partnerships. The funding improved collaboration among SLAAs, local libraries, and various State and local agencies and organizations. These collaborations enabled libraries to remain current and provide robust service to local communities. Virtual events and virtual access to library operations improved organizational operations. Libraries maintained a virtual presence, improved communication with SLAAs and other institutions, and identified and fostered partnerships across multiple disciplines, even unconventional ones (e.g., distilleries for hand sanitizer). With the influx of money from emergency funding, libraries were not constrained by a lack of funds to maintain their presence but grew their presence virtually and in partnership with other organizations.

### CARES Act and ARPA Funding

*How did SLAAs distribute funds within their respective locales? How did they introduce new practices or policies to better administer emergency funds (e.g., subgrants, hiring new staff, remote-work allowances)?*

SLAAs have the authority to distribute funding within their respective jurisdictions, including issuing subawards; purchasing equipment/supplies and funding travel; and hiring consultants.<sup>16</sup> IMLS significantly impacted SLAAs through the CARES Act and ARPA programs, reaching more than 40,000 libraries, 350 museums, and more than 80 Tribal organizations (see Exhibit 13). In addition, funding from both programs resulted in more than 9,000 subawards for the acquisition of 15,000 Wi-Fi hotspots, 26,000 other laptops/tablets, and 157 vehicles.

#### Exhibit 13. Summary Statistics of Grants to States Formula Funding

Grant impact	Total	Average	Standard deviation	Minimum	Maximum
<b>CARES Act</b>					
Total projects	476	8.07	15.52	1	71
Total funding	\$29,785,658.78	\$504,841.67	\$634,246.26	\$1,959.00	\$3,570,265.00
Subawards made	3,565	60.42	94.38	0	486

<sup>16</sup> Informal discussions with IMLS officials even said these consultants will sometimes support individual libraries in applying for other sources of funding, such as the Federal Communication Commission’s E-rate program.

Grant impact	Total	Average	Standard deviation	Minimum	Maximum
Hotspots purchased	7,863	271.14	443.84	1	2,164
Other technology purchased	7,758	221.66	408.85	1	1,894
Vehicles purchased	3	1	0	1	1
Libraries reached	13,640	231.19	383.49	1	2,088
Museums reached	113	10.27	11.07	1	35
Tribes reached	28	3.11	2.71	1	8
<b>ARPA</b>					
Total projects	1,629	28.09	66.56	1	406
Total funding	\$171,189,202.64	\$2,951,537.98	\$1,808,439.99	\$62,000.00	\$10,017,691.00
Subawards made	6,106	105.28	97.24	0	405
Hotspots purchased	7,943	203.67	537.51	0	3,000
Other technology purchased	19,141	368.1	696.58	2	3,213
Vehicles purchased	157	4.91	4.81	1	20
Libraries reached	27,337	471.33	804.55	1	5,292
Museums reached	261	20.08	43.43	1	160
Tribes reached	60	4	4.64	1	18
<b>Benchmark data</b>					
Total projects	1,400	25	29.08	1	183
Total funding	\$153,962,148.63	\$2,609,527.94	\$2,577,977.26	\$0.00	\$13,857,821.97
Subawards made	2,125	37.95	46.46	0	191
Hotspots purchased	—	—	—	—	—
Other technology purchased	—	—	—	—	—
Vehicles purchased	—	—	—	—	—
Libraries reached	64,615	1,153.84	1,546.96	1	9234
Museums reached	—	—	—	—	—
Tribes reached	—	—	—	—	—

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Data from interviews with SLAA representatives show similar patterns to administrative data, such as using subgrants to distribute funds. However, SLAAs expressed that the high number of subawards significantly increased the administrative workload for the CARES Act and ARPA funding. This meant that some SLAAs required additional staff, which became challenging with the transition to remote work.

The distribution process through subgrants varied between SLAAs. Some SLAAs reported using a formula system, whereas others relied on a purely competitive process or a combination. Several SLAAs noted that this process was easy because they had previously distributed funds through subgrants and could use their established system and formulas. Although SLAAs that had previously used this method had the necessary infrastructure to support the large-scale distribution, some SLAAs did not have such infrastructure and experienced some growing pains, requiring additional staff and creating the necessary infrastructure. Some SLAAs chose not to add staff but shifted some staff to cover these roles given the emergency nature of the funding. Although some SLAAs chose not to subgrant at all, they reported centrally purchasing materials for all affiliated libraries, subgranting through the procurement processes.

The influx of money from the CARES Act and ARPA significantly increased the administrative workload in some SLAAs. Specifically, six SLAAs reported using part of the funding to hire new positions. Four SLAAs reported their hires as permanent, whereas two reported them as temporary. In addition, four other SLAAs reported adjusting the job description of their current staff to support new or expanded administrative duties that arose based on CARES Act and ARPA funding requirements. However, although those SLAAs gained staff or duties, an SLAA in an independent territory noted that some staff were furloughed during the pandemic.

As with most companies and agencies in the country, SLAA leaders reported a quick transition to remote work when the pandemic started and continued. Nine SLAAs reported this transition during the pandemic, an SLAA in the Southeast region already could work remotely, and an SLAA in the Mountain Plains region did not make the transition. All 10 SLAAs that transitioned to or continued remote work during the pandemic reported providing remote or hybrid work options after the emergency abated. A Southeastern SLAA noted that their staff has returned to conducting in-person visits to libraries around the State, but another State in the Mountain Plains is still taking advantage of the ability to do remote work. Specifically, this SLAA reported remote work as being highly advantageous because the agency could now hire staff from across the State.

The administrative data and interview results reflect significant changes in SLAAs compared with before the pandemic. In the 2019 LSTA formula funding, SLAAs reached 64,000 libraries and issued only 2,100 subawards. The number of beneficiaries is significantly higher in a traditional cycle, but the number of subawards is dramatically smaller. Regarding subawards, the emergency funding alone accounted for three times more than the number of subawards from the benchmark data. On average, each SLAA provided fewer than 40 subawards in 2019 compared with 75 subawards in the CARES Act and 105 subawards in ARPA. This direct flow of IMLS funding to libraries allowed them to maintain and expand operations into virtual spaces and improve access to technology.

***What were key attributes of funds used for different health and safety purchases and methods (e.g., PPE, outdoor furniture, implementation of curbside pickup, installation of plexiglass dividers, ability to update library card online)?***

At the start of the pandemic, government agencies provided updates on information regarding protection from the virus. However, this information often was contradictory and continued to evolve over days, weeks, and months. Nevertheless, several common protective measures appeared across the United States, including installing plexiglass dividers between employees and customers, using contactless checkouts, implementing curbside pickup services, and moving renewals of various subscriptions and services online (see Exhibit 14).

In total, 91 individual CARES Act grant projects (totaling \$5,916,883) addressed various health and safety measures, such as purchasing personal protective equipment (PPE), acquiring outdoor furniture, implementing curbside pickup services, installing plexiglass dividers, and enabling online updates for library cards. Although this value is much lower than the totals in Exhibit 14, it reflects the unique number of projects. Some projects resulted in the purchase of multiple types of physical safety items. The funding used for health and safety purposes serviced 4,583 libraries.

**Exhibit 14. Counts and Percentages of Projects Using Physical Safety Items and Programs**

Physical safety item	CARES Act		ARPA		Benchmark 2019	
	Number of projects	Percentage of projects	Number of projects	Percentage of projects	Number of projects	Percentage of projects
PPE	34	7.14%	24	1.47%	5	0.36%
Masks	37	7.77%	129	7.92%	7	0.50%
Curbside services	24	5.04%	52	3.19%	44	3.14%
Hand sanitizer	23	4.83%	40	2.46%	2	0.14%
Plexiglass	19	3.99%	22	1.35%	6	0.43%
Self-check services	11	2.31%	51	3.13%	12	0.86%
Contactless services	9	1.89%	31	1.90%	3	0.21%
Lockers	7	1.47%	37	2.27%	4	0.29%
Bookmobiles	6	1.26%	40	2.46%	22	1.57%
Air purifiers	5	1.05%	32	1.96%	0	0%
Modular furniture	1	0.21%	3	0.18%	0	0%
HVAC	0	0.00%	5	0.31%	0	0%

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act; PPE = personal protective equipment; HVAC = heating, ventilation, and air conditioning.

### **Did funding improve the physical safety of buildings through updates such as HVAC systems?**

SLAAs used CARES Act and ARPA funding to institute various physical safety measures to allow patrons to continue using library facilities, such as physical distancing, strict cleaning protocols, and providing services outside the building.

Our team identified that none of the CARES Act projects purchased or improved HVAC systems versus three ARPA projects (0.3%) that did so. On the contrary, eight SLAA interview respondents reported that their agency or State libraries used the CARES Act or ARPA formula funding to improve physical safety through HVAC systems. Of the eight respondents, three stated that they purchased filters and/or HVAC supplies. It is possible that this information was not fully reflected in the quantitative data because either lower level distribution of funding through subgrants or physical safety was not the project's specific focus, so it did not appear within the administrative data.

Among CARES Act and ARPA projects, physical safety purchases were part of 19.54% of CARES Act projects and 16.14% of ARPA projects. Other common items, such as masks, curbside services, hand sanitizer, and plexiglass/plastic shielding, were purchased to improve the safety of facilities for patrons and employees. For example, the Colorado State Library distributed masks, shields, gloves, hand sanitizer, and disinfecting wipes to libraries, and the Arizona State Library delivered sanitation kits to more than 60 Arizona public school, community college, Tribal, and public libraries (IMLS, 2020c). Funds for these items remained consistent in both the CARES Act and ARPA programs. However, more funds from ARPA were used to increase the use of lockers, bookmobiles, and self-checkout services.

The 2019 benchmark data also indicated projects using a variety of safety measures. In most cases, the percentages of the total number of health and safety projects were less than the CARES Act or ARPA period projects. Bookmobiles comprised 1.57% (22) of the benchmark 1,400 projects and only 1.26% (six) of CARES Act projects. Bookmobiles allowed libraries to travel to patrons and provide them with library services and support in a more safe and socially distanced atmosphere that did not require patrons to travel to libraries. Other categories were more consistent across years, such as curbside services, comprising 3.14% of benchmark projects and 3.19% of ARPA projects.

The preeminent focus of SLAAs in relation to physical safety included day-to-day cleanliness and PPE. Although some States and projects focused on more robust measures such as HVAC systems and air filtration, many SLAA representatives noted that these measures were not applicable to IMLS funding. However, they ensured the protection of library and SLAA staff during normal operations, particularly as the restrictions loosened and in-person activities were reintegrated within library settings. As a result, there was a shift from the CARES Act to ARPA grant programs, reflecting the need for air purifiers, bookmobiles, lockers, and contactless/self-checkout services to better serve customers returning to libraries in person.

### **What were the distribution trends of the allocations of funds to projects at the national, State, and local levels (total and per capita)?**

Although G2S formula funding relied on a specific per capita mathematical formula to determine funding allocations for each SLAA based on population, each SLAA also received a base amount given significant population disparities between jurisdictions. Also, most LSTA awards require States to match a specific percentage of their State’s allocated IMLS funding.

Given their emergency nature, the CARES Act and ARPA grant programs operated differently from most LSTA awards.<sup>17</sup> The allocation of funding in the CARES Act was based on population, but ARPA established a \$2,000,000 minimum per State (plus the District of Columbia and Puerto Rico) and \$200,000 for all other locations.

Given the differences in the allocation methods and total funding between the CARES Act and ARPA grant programs, along with minimums present in ARPA but not in the CARES Act, it is important to make comparisons only within each grant program to understand how funds were distributed as an average across SLAAs and per capita, as shown in Exhibit 15. Also, many SLAAs did not provide a local-level report of the distribution of SLAA funding. For example, some States reported only the number of libraries the organization funded, whereas others provided the specific city and town. Therefore, this analysis remained at the State level because of disparities in SLAA reporting.

#### **Exhibit 15. Per Capita and Average Expenditure per Location**

<b>Expenditure category</b>	<b>CARES Act</b>	<b>ARPA</b>	<b>Benchmark</b>
Average expenditure per 100,000 persons	\$9,224.70	\$124,915.71	\$64,886.62
Average expenditure per project	\$200,598.16	\$674,637.75	\$139,225.53
Average expenditure per library	\$9,662.70	\$46,374.73	\$29,023.11
Average expenditure per museum	\$2,377.15	\$20,224.99	—
Average expenditure per Tribe	\$8,466.23	\$11,708.13	—

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

In the initial CARES Act grant program, each SLAA spent an average of \$0.09 per person, \$200,598.16 per project, \$9,662.70 per library, \$2,377.15 per museum, and \$8,466.23 per Tribe. In the ARPA grant program, each SLAA spent an average of \$1.24 per person,<sup>18</sup> \$674,637.75 per project, \$46,374.73 per library, \$20,224.99 per museum, and \$11,708.13 per Tribal organization.<sup>19</sup>

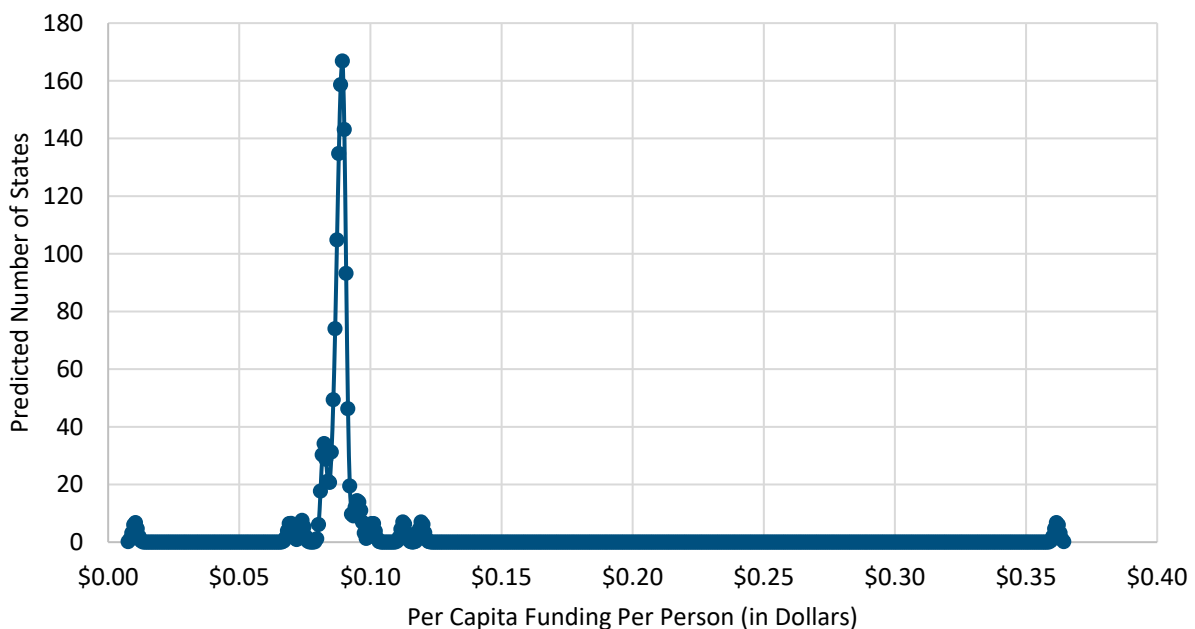
<sup>17</sup> However, some States chose to include matching funds from State, local, and other funding sources. Therefore, some States may report larger impacts as part of these matching funds rather than directly from IMLS funding.

<sup>18</sup> Per-person averages can be inflated due to legislatively based minimums that can lead to some locations receiving higher levels of funding per person.

<sup>19</sup> For both the CARES Act and ARPA, these values represent only those SLAAs that distributed money directly to libraries, museums, or Tribal organizations. The values ignore SLAAs that distributed \$0 to each category.

Some SLAAs chose to combine their emergency and LSTA funding or spent less than their allocated amount, so some of the per capita rates vary significantly. For example, an SLAA in the West spent the greatest amount in the CARES Act formula program at \$0.36 per person. In contrast, an SLAA in New England spent the least amount at \$0.01 per person, demonstrating a significant difference in per capita spending despite the population-based funding allocations. In addition, each SLAA varied in their distribution of funds to organizations. An SLAA in the Mountain Plains distributed the largest average amount per library (\$62,167.73), an SLAA in the West spent the largest average amount per museum (\$6,248), and an SLAA in the Midwest spent the largest average amount per Tribal organization (\$45,374.24). Exhibit 16 shows a density plot that visually represents the probability density function for the kernel density estimation. The probability density function is a mathematical equation that determines the probability that a location received the specified amount of funding (represented on the x-axis). The figure's height (the y-axis) represents the predicted percentage of States that fall at the x-axis value. The CARES Act formula funding program shows an extremely tight relationship average between \$0.08 to \$0.12 per person. There is only a minor increase in the distribution toward the far end at the maximum per capita value of \$0.36 per person, which stands as a singular outlier. There was no indication within the data why this outlier exists and, therefore, even though it is an outlier, the underlying reason is not readily accessible.

**Exhibit 16. Per Capita Distribution of CARES Act Formula Funding**

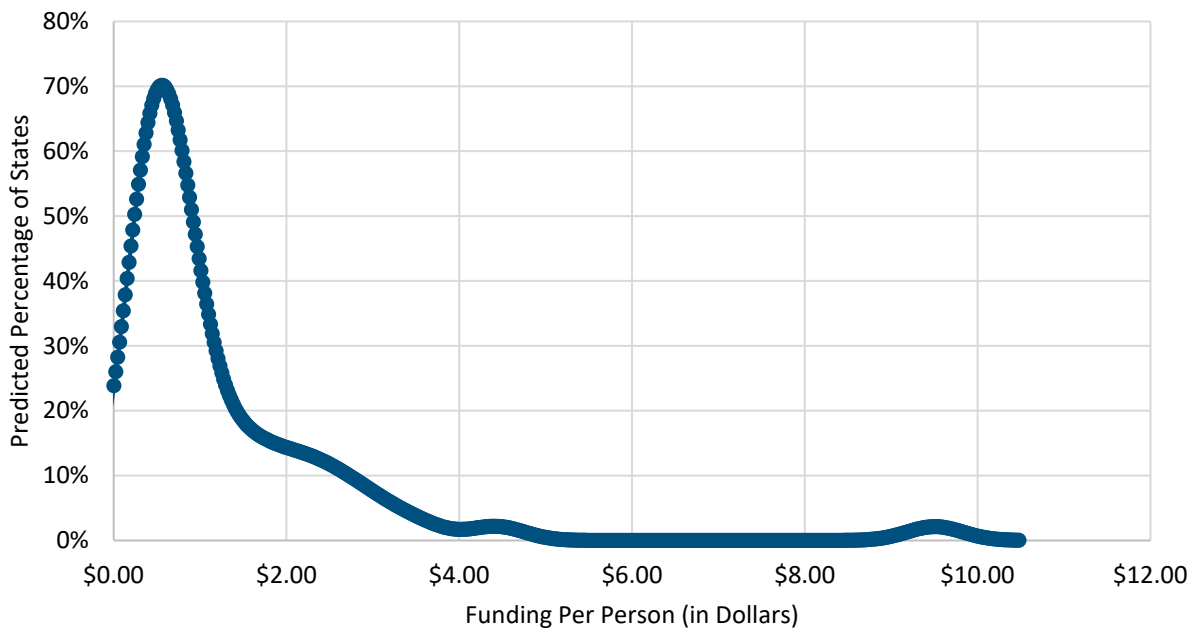


*Note.* The predicted values are higher than the total number of SLAAs. This is due to the predictive nature of the model. CARES Act = Coronavirus Aid, Relief, and Economic Security Act.



ARPA required minimums for each SLAA at \$2,000,000 for States, the District of Columbia, and Puerto Rico, or \$200,000 for territories and freely associated States, before adding funding according to a population-based formula, resulting in significant per capita differences between locations because of population differences. In addition, each SLAA varied in their distribution of funds to organizations. In the ARPA grant program, an SLAA in the West distributed the largest average amount per library (\$557,072), an SLAA in New England spent the largest average amount per museum (\$88,366), and an SLAA in the West spent the largest average amount per Tribal organization (\$34,615). Exhibit 17 displays the ARPA density plot, which is similar to the CARES Act formula program with the same interpretations for the x-axis and the y-axis. Compared with the CARES Act, ARPA formula funding distribution is much wider given the distribution of funding minimums per State and territory. The greatest percentage falls near \$0.50 per person with a positive skew toward \$5.00 per person, up to \$9.00 per person. This indicates that many locations were likely below \$0.75 per person, but at least a few locations had significantly higher per capita distributions.

**Exhibit 17. Per Capita Distribution of ARPA Formula Funding**



Note. ARPA = American Rescue Plan Act.

The funding from OLS-G2S is mathematically determined via legislation, so each State received a predetermined amount of funding based on population. However, given significant population-based disparities between States (because of population density and physical size), ARPA provided minimum allotments to each SLAA. In the CARES Act formula funding, the density plot in Exhibit 16 shows a high concentration of States within a small per capita value

according to the strictly population-based formula. The CARES Act density distribution reflects a parabolic shape representing a normal curve. However, the density distribution from the ARPA grant program is much wider, is positively skewed, and has a less parabolic shape given the minimum amounts provided per State and territory. However, these values also represent what each State spent rather than what IMLS allocated to them. Therefore, it is possible that some States that spent less were allocated more and those that spent more may be including other funding sources, including matched amounts from other sources or other regular cycle funding.

### ***How were funds used to improve libraries' infrastructure?***

**Did funding improve access to broadband or technologies, such as hotspots, parking lot Wi-Fi, or laptop checkouts for their community residents? Were these funds used for activities that may have otherwise been funded through other federal programs, such as E-rate?** SLAAs prioritized increasing access to broadband internet and internet-connected technologies. In alignment with this emphasis, libraries purchased laptops for community residents to check out, increasing access to education, employment, communication, health, legal, and recreation services. In addition, many libraries improved access to the internet through hotspots and parking lot Wi-Fi. Although IMLS tracked the distribution of funds toward broadband and technology, the administrative data did not address the addition of funds outside the scope of matching or local funding toward specific projects. Therefore, the administrative data did not contain indicators or the presence of funding for projects from other federal programs, such as E-rate.<sup>20</sup> However, anecdotal discussions suggest that some SLAAs may have hired consultants through LSTA funds to support local libraries applying for E-rate funding.

To address the immediate emergency needs at the pandemic's beginning, CARES Act program projects enhanced broadband access and systems and technological upgrades. In the category of internet upgrades and connectivity, SLAAs purchased 7,863 Wi-Fi hotspots and 7,758 other forms of technology (e.g., tablets, laptops). Many libraries lent these technology devices to the community, such as the Conner Prairie Library in Indiana, which distributed hands-on classroom kits to support digital learning and digital backpacks that included tablets, hotspots, and keyboards for classrooms lacking devices for students. Likewise, the Fairbanks North Star Borough Public Libraries in Alaska made 25 hotspots and laptops (equipped with instructional videos and software to assist with résumé creation; virtual education; links to local, State, and federal resources for assistance; and literacy software) available for library patrons to borrow (Harter, 2021; IMLS, 2021b).

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<sup>20</sup> E-rate is a program through the Federal Communications Commission that supports libraries and school districts in receiving affordable broadband access (American Library Association, 2021; Federal Communications Commission, 2024).

The Connecticut State Library used the funds to extend internet access, purchase internet accessible devices, and provide technical support to consumers to address digital inclusion efforts. The State Library issued 225 hotspots and 225 laptops to 15 libraries. On average per month, recipient libraries reported between two and 42 loans of their device and hotspot kits (most reported between seven and 12; LaValle, 2021). Finally, no specific purchases were identified in the connectivity category, but connectivity was a specific focus of 160 projects.<sup>21</sup>

As the pandemic continued to evolve, the categories of broadband access and internet upgrades remained prevalent in the ARPA grant program. SLAAs purchased 7,943 Wi-Fi hotspots and 19,141 other pieces of technology (e.g., laptops, tablets). Of the 34 interviewed SLAAs, 24 reported that CARES Act and/or ARPA funding was used to purchase devices (e.g., laptops, tablets) that individuals could check out or, in one case, use in the library only. The Idaho Commission for Libraries created the Connecting Communities Digital Inclusion Program with ARPA funds to address digital equity and inclusion. The program provided laptops to 10 public libraries. Participating libraries had to provide members of the public training in cybersecurity, internet use, laptop use, and basic technology use. This program addressed an increased need for digital access among Idahoans, partially because of a growing reliance on digital resources during the pandemic. Libraries that participated created or expanded partnerships with community organizations to reach Idahoans that would benefit from increased access digital literacy training and internet-enabled devices (Baker, 2022).

The 2019 benchmark data did not provide significant data related to broadband adoption and other upgrades and lack specific numbers of Wi-Fi hotspots or other device purchases. Among SLAAs, 165 projects related to broadband adoption and internet upgrades through the specific focal areas, intents, and project descriptions, totaling \$17,860,339.98 and a reach of 30,865 libraries.

SLAA representatives reported that their States used CARES Act and/or ARPA funding to purchase and pay for hotspot subscriptions. However, some SLAAs expressed supply chain challenges in receiving hotspots because of high demand nationwide. One New England SLAA limited the purchase of hotspots by libraries, noting that it was a temporary solution for the lack of high-speed internet access. At the same time, another SLAA avoided purchasing hotspots because of unsustainably high monthly costs. Beyond increasing the range of wireless internet accessibility, some libraries broadened the time frame of accessibility. Some libraries reported keeping Wi-Fi on even when the library was closed, whereas others purchased signal extenders to expand the boundaries of the Wi-Fi signal to include the parking lot and, in some

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<sup>21</sup> Some projects included both internet upgrades and connectivity identifiers. Although some projects identified themselves as broadband adoption and technological upgrades and infrastructure, they did not directly fall within the internet upgrades and connectivity categories.

places, nearby parks or municipal areas. An SLAA noted that funding for extending Wi-Fi signals came from other sources in their States.

In addition to hotspots and other internet upgrades, libraries commonly used CARES Act funding to expand connectivity options and ensure internet access across communities. For example, an SLAA in the Midwest directed 85% of its funds to enhance internet access across 69 locations, including parking lot Wi-Fi, outdoor Wi-Fi, and drive-in Wi-Fi. Specifically, this SLAA distributed \$7,650 for parking lot Wi-Fi at a city school, \$5,400 for outdoor Wi-Fi enhancements at a public library, and \$2,600 for drive-in Wi-Fi systems at a second public library.

Though not as prevalent as in the CARES Act grant program, SLAAs allocated ARPA funds to enhance connectivity and access to digital resources. However, during ARPA, the focus was on specific technological devices and improving physical access through modern technology rather than providing an internet access point.

Although the interviewers probed interviewees on whether some CARES Act and ARPA projects could have been funded through E-rate, 20 SLAAs said their projects could not have been funded; two said that they could have been funded through E-rate, and four were unsure. SLAAs described the E-rate application process as too lengthy and complicated, making CARES Act and ARPA funding preferable. One independent territory stated that it would have been too challenging to amend the current E-rate contract in time.

**Did funding for external services, such as bookmobiles or delivery, improve access to library assets?** As part of library operations during the pandemic, libraries had to change their structures to alleviate the need for physical locations or the ability to travel to specific locations given stay-at-home orders and other rules and regulations. With CARES Act funding, three SLAAs purchased vehicles for outreach, developed mobile libraries, and implemented vehicle-based wireless internet access.<sup>22</sup> However, vehicles were not a primary investment for SLAA projects at the start of the pandemic during the CARES Act grant program, particularly considering the physical safety equipment and technological upgrades at brick-and-mortar library locations. The CARES Act and 2019 benchmark data had similar vehicle purchase rates and underlying justifications for vehicle purchases. However, ARPA saw a significant increase in vehicle purchases.<sup>23</sup>

ARPA projects had more projects that purchased vehicles to expand library operations and recover from the pandemic than did CARES Act formula projects. ARPA funding across Oregon, for example, funded six vehicles (State Library of Oregon, 2024). In addition to Oregon, the Maryland State Library Agency used ARPA funds to purchase or refurbish vehicles that

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<sup>22</sup> This could be a result of low funding amounts under the CARES Act that required addressing immediate needs. However, under ARPA, States had a significant amount to spend and thus sought to spend it on larger ticket items, such as vehicles.

<sup>23</sup> A full list of the distribution of vehicles that SLAAs purchased is in [Appendix D](#).

supported mobile library services in 14 rural counties in Western Maryland (Appalachia), the Eastern Shore, and Southern Maryland. The overall result is that 17 counties now have mobile libraries. Before ARPA funding, 45% of Marylanders lived in counties with mobile libraries (2,719,412 people). After ARPA funding, 82% of Marylanders (4,956,919 people) lived in counties with mobile services, an increase of 182% (Sarnoff, 2022).

Even with significant variation in the detail of SLAA documentation regarding the purpose of specific purchases such as vehicles, 18 ARPA projects that involved purchasing a vehicle mentioned varying or multiple reasons for their purchase. Specifically, nine projects mentioned the purpose of outreach, eight projects stated that the purchase was for mobile libraries, seven projects stated the vehicle was to provide library access to vulnerable populations, two projects included access to community locations, two projects intended to provide mobile wireless internet access, and one vehicle was to access rural locations.<sup>24</sup>

In discussions with SLAAs, 24 reported using CARES Act and/or ARPA funding to purchase vehicles. Eight SLAAs reported that libraries purchased bookmobiles or mobile libraries, with the funding either in whole or part from CARES Act and/or ARPA. Six SLAAs noted that libraries in their State purchased book bikes, book bike trailers, or book golf carts. Six SLAAs reported that their libraries purchased vehicles smaller than bookmobiles, such as vans or other outreach vehicles, which are easier to maneuver and do not require a special driving license. Finally, five SLAAs noted that the existing statewide delivery service was funded or enhanced with CARES Act and/or ARPA funding. Exhibit 18 provides the specific justification of vehicle purchases by grant program.

**Exhibit 18. Vehicle Purchase Justification for Formula Funding**

Vehicle purchase purpose	Benchmark 2019		CARES Act		ARPA	
	Number of projects	Percentage of projects	Number of projects	Percentage of projects	Number of projects	Percentage of projects
Outreach	3	0.21%	1	0.21%	9	0.55%
Mobile library	3	0.21%	1	0.21%	8	0.49%
Vulnerable populations	0	0.00%	0	0.00%	7	0.43%
Mobile Wi-Fi	1	0.07%	1	0.21%	2	0.12%
Community locations	0	0.00%	0	0.00%	2	0.12%
Rural areas	3	0.21%	0	0.00%	1	0.16%

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>24</sup> Vulnerable populations were self-identified within the data without a specified definition available to the research team.

**How did in-person programs and services change with the use of CARES Act and ARPA funds? In transitioning partly or fully to virtual services, how did these benefits vary across different population groups?** SLAAs described a wide range of ways in which libraries connected with patrons virtually during the pandemic, including story time, bilingual story time, summer reading programs, and other prerecorded programs. However, although in-person programming has returned to many libraries now that the pandemic emergency has ended, 18 SLAA representatives confirmed the continued existence of virtual or hybrid programs, allowing people to choose between in-person and virtual programming. Specifically, despite the reintegration of in-person programming, many SLAAs shared the benefits of supporting virtual programs, such as hosting more prestigious speakers or recording programs to allow asynchronous access to patrons.

The benefits of hybrid or virtual programming were not limited to only library services. Instead, 12 of the 34 SLAA representatives interviewed described the successful transition to virtual professional development and training for librarians, with eight confirming the sustainment of virtual training options. An example of this found in the literature is the Library of Michigan’s creation of online learning modules for library staff to allow their required training to continue during the pandemic restrictions. The Library of Michigan also provides a range of online continuing education resources and stipends for librarians and trustees to allow library staff to learn new techniques and methods to reach underserved residents (Library of Michigan, 2020). Specifically, three SLAA representatives noted the increase in accessibility to these training courses; librarians in rural areas or from small libraries did not have to travel far distances or take extensive time off to attend. However, this did not apply to all libraries because an SLAA reported that rural librarians in their State enjoy the opportunity to travel for training. In addition, three SLAAs described the successful transition to virtual trustee meetings, allowing for a wider and more diverse pool of trustees.<sup>25</sup>

The benefits of virtual programming were mixed, with SLAAs reporting various populations as benefiting the most. Three SLAAs reported the greatest benefit for young children and students, whereas three other SLAAs noted that those from rural areas saw the greatest benefit because digital connectivity programs increased their access to the internet. However, it is important to note that this would be true only for those rural areas that were reaping the benefits of internet expansion programs. An SLAA noted those in rural areas did not benefit as much from virtual programming because of a lack of internet access.

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<sup>25</sup> An anecdotal point of reference: As a writer of this report was working on this section, they came across a live feed of a library board of trustees meeting being streamed on YouTube, which included both in-person participation and online synchronous engagement with community members.

In addition, two SLAAs each identified families, seniors, and people with disabilities as groups that benefitted greatly from virtual programming because families could take advantage of curbside pickup, seniors could engage with different programs and receive support on navigating digital resources, and programming became more accessible to individuals with disabilities. Libraries in one Western State also focused on serving traditionally underserved communities, which the SLAA representative noted received help from that outreach. However, it is important to note that these benefits are subjective because each person has a unique experience. For example, an SLAA reported believing that seniors could not access resources because of higher levels of digital illiteracy and therefore did not benefit from this programming; another SLAA representative noted that people with disabilities did not benefit from virtual programming because they had additional challenges to access digital resources. Another SLAA representative reported that virtual resources helped only those with existing digital access, excluding traditionally underserved communities.

## **Sustainability**

### ***What kinds of funded activities occurred only during the pandemic and have concluded because of the emergency and project award ending?***

OLS-G2S program officers noted that the distribution of PPE, such as masks, and health safety equipment, such as plexiglass and hand sanitizer, typically concluded as the emergency and project award period ended. One program officer noted that such activities would no longer be covered by IMLS funding because, although an activity such as the deep cleaning of air filters was an emergency need during the pandemic, it would be an operating cost outside the pandemic, which is not supported by IMLS funding.

SLAAs identified the purchase of PPE as an activity that occurred only during the pandemic and would cease because of a lack of emergency funding for this expense. However, this same group of SLAAs believed it was not a significant issue. The need for PPE concluded with the conclusion of emergency funding because of the pandemic's reduction and the loosening of government restrictions. Unfortunately, another common activity that ended because of a lack of funding was virtual, outdoor, and community-focused programming. As the pandemic began to subside and restrictions loosened, some libraries did not continue to support such programs because (a) funding was unavailable funding and (b) such programming was necessary only during the pandemic.

At least one SLAA noted that they did not keep scholarships for career-oriented online high schools because of a lack of available funding. A Mountain Plains SLAA noted that their young children's programming was negatively affected. They started a statewide program that included training in early literacy skills for all the libraries within the State and training in



storytelling skills by a well-known children’s storyteller. However, as emergency funding during the pandemic concluded, the organization did not have the funding to keep this program. This SLAA further said that they also reduced their professional development efforts given a lack of available funding and a need to redirect the pandemic expense into other areas.

Lastly, five interviewees stated that a reduction in Wi-Fi hotspot subscriptions and database subscriptions occurred with the ending of funding. The recurring cost of hotspots as existing data plans expire was the primary reason for the service ending. In addition, the recurring cost of database licenses was the rationale for curtailing access to database tools. The types of databases affected included a community-centered lifelong learning platform and a database partnership with two Mountain Plains States.

The emergency funding enabled significant advancements for SLAAs and libraries across the country. However, with the conclusion of the funding, many worthwhile programs concluded because of a lack of funding and ability within these organizations. The end of restocking of PPE was not a broad problem, but the impact went beyond specific emergency procedures to innovative programs and practices that emerged because of the pandemic.

Programming that targeted online and virtual audiences became less available with a lack of available funding. Furthermore, as operations returned to full strength, some locations reduced professional development because these options were secondary to the organization and no longer necessary to support staff engagement. Finally, the lack of funding to support subscription-based services that SLAAs believed essential during the pandemic began to slowly decline because the funding for these services was no longer available.

Although it is great to see that some programming and virtual events have sustained with the conclusion of emergency funding, many services that arose because of the emergency funding concluded when the funding ceased, resulting in a further lack of access to certain programming and events for specific populations.

***What kinds of funded activities during the pandemic will continue and are sustainable without additional funds from G2S funds and/or other federal programs? What kinds of activities should be continued but are not sustainable without additional funds from G2S and or other federal programs?***

OLS-G2S program officers agreed that hybrid programming and purchased equipment that did not require routine or subscription-based funding would continue without additional funds from IMLS or other federal programs. In most cases, the first purchase cost was the largest hurdle for libraries for programs and purchases that do not require maintenance costs. However, among SLAAs, this initial cost hurdle does not include additional funds to refresh,

repair, or replace technological devices; therefore, a program may remain in existence, but without further funding, it is unlikely that technology loan programs (e.g., tablets, laptops) will continue once a library exhausts the technology's lifespan.

However, OLS-G2S program officers mentioned that items such as hotspots and activities such as digital literacy training are beneficial to communities but would require more funds. Program officers explained that although hotspot equipment was bought with CARES Act/ARPA funding, additional funding is necessary to cover monthly expenses. SLAAs reported that providing broadband access would continue without the need for IMLS funding. However, this fulfills an ongoing need funded with other funding streams, either State or other federal funds.

Although some SLAA's could not secure additional funding to offer expanded Wi-Fi and hotspots as a sustainable service, they still felt there was a valid need to provide those services. The biggest barriers to this process were the recurring costs of hotspots as well as staffing. SLAAs expressed concerns about reducing access to hotspots and the effect such a reduction might have on a library's community. Although staffing was an area negatively affected by a lack of funding, staffing losses have affected the digital navigator program in only two SLAAs.

Digital literacy services, such as the digital navigator program, require more funding because they require additional staff to support digital inclusion efforts with specific populations (e.g., youth, people with low incomes, immigrants). An SLAA said the need for virtual access is being addressed by a broadband office—now funded with other federal and State funding—to create a new position dedicated to workforce development. Some SLAAs were able to identify additional funding for digital navigator programs, but some SLAAs noted that a lack of funding resulted in staffing losses and the discontinuation of these programs.

Some SLAAs reported being able to sustain certain community-based programs without further funding, but others stated that virtual programming, community-focused programming, and educational programs cannot be continued without added funds. Examples of community-focused programming that ended included a senior telehealth program and a digital literacy program.

Some SLAAs reported that community-based programming, which involves a specific partnership or no-cost maintenance, is the primary pandemic-related activity that can continue without additional funding. These partnerships do not require further funding but originated from the pandemic with CARES Act and ARPA funding. Some community-based programming identified by an SLAA that did not require further funding included partnerships with nonprofit organizations for fair housing, partnering with schools to support SLAAs in strategic initiatives, creating and sustaining a regional digital navigator program, and continuing summer reading programs.

With the upfront cost covered by the CARES Act and the ARPA formula funding, many libraries expanded offerings for people with disabilities and those who require literature in languages other than English. These programs required a singular expense that would not require an update or refresh soon. Some SLAAs described these purchases as audiobooks for the blind and expanded bilingual book offerings.

Overall, SLAAs reported finding additional funding sources for many programs that provided tangible benefits. However, this was not the case for all SLAAs. Many had to shut down programs because of a lack of available funding after IMLS supported the initial program costs. However, based on responses, programs with the greatest impact and heavily supported appeared to find the necessary funding to maintain their operations. Therefore, some SLAAs and libraries found that necessary programs (during the pandemic) are no longer needed, even if they benefited the community during that specific period. However, it does appear that if an organization wanted to maintain a program, they found the available funding.

## Equity

### ***What differentiating factors across States, such as policies or organizational structures, dictated the use of funds? How did the factors influence equitable distribution across communities?***

OLS-G2S program officers noted that many projects served historically less well-resourced communities. For example, some SLAAs, such as SLAA in the Midwest, directed funds toward communities with low internet connectivity and/or locations with higher poverty rates. The Oklahoma Department of Libraries awarded grants to 51 public libraries, Tribal libraries, museums, and literacy organizations that focused on poverty, unemployment, and broadband availability in rural areas (IMLS, 2024b). Other SLAAs, such as one in the Mid-Atlantic, delegated funds to regional library systems with greater knowledge of local community needs. Although some SLAAs believed that the distribution of CARES Act and ARPA funds was guided by an equity lens, program officers reported challenges and gaps in the agency's ability to measure an equitable distribution. Program officers highlighted that, despite IMLS's best efforts for equitable distribution, SLAAs strongly influenced the actual distribution of funds in States.

In addition, program officers noted a few differences between States that affected the equitable distribution and use of funds, including the size of the State, libraries' earlier experience applying for grants, the position of SLAAs within the State administration, and external factors such as the State's political climate. Specifically, program officers explained that larger States usually received more money before the pandemic and routinely granted subawards, giving them the advantage of existing systems and processes to grant subawards, including a grant management system and protocols for application review. Therefore, smaller States typically began with the disadvantage of investing time and resources to develop a grants management

system. They often had to upgrade their administrative capabilities to disburse the money. Nonetheless, some small States had previously used manually dependent business processes to subgrant funds and chose to implement grants management systems as in large States. Similarly, libraries' previous experience applying for grants also skewed the equitable distribution of funds; those libraries with experience (i.e., those with grant writers on staff, previous application experience, and/or established relationships with SLAAs) could complete applications faster and to a higher standard, giving them a great advantage in the application process. Finally, some program officers noted that a State's political climate may have limited the extent to which States could fund activities aimed at equity, citing that State governments decided not to use the word "equity" in activity names to avoid political and community pushback.<sup>26</sup>

SLAAs were hesitant to address the equity of IMLS's distribution and their organization's distribution of funds. There was significant variability in SLAAs' answers to this equity-related question. SLAAs that responded considered these characteristics for the distribution of funds:

- The community's needs
- The geographic distribution of funds
- The library's programmatic needs
- The need for PPE for public safety reasons
- Local and regional demographic statistics

Overall, the variability in responses proved challenging for a complete analysis. With ongoing debates about diversity, equity, and inclusion, many States felt compelled to remain balanced on this issue and not appear to make specific choices for reasons that may not align with local-, regional-, or State-level political opinions. However, one thing that became clear is that States with several large metropolitan areas surrounded by rural and suburban communities struggled to balance the diverse needs of libraries in these areas. Although States may have struggled with this issue, they were at least marginally successful in ensuring the overall representation of their State within the emergency funding programs.

## Lessons Learned

### ***What types of outcomes, such as those associated with literacy and information access, are attributable to the emergency funding?***

Libraries are vital community institutions for the public to access information and technology, consume literature, and participate in community events and functions. During the pandemic, libraries had to continue these services without any or limited access to physical spaces.

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<sup>26</sup> SLAAs are responsive to State governments but may experience political pressure because of constituent concerns in local jurisdictions.

Consequently, libraries had to establish or update infrastructure to support their online presence and remain central to improving literacy and information access. As the pandemic progressed, many people turned to libraries as a central aspect of community support (Ashiq et al., 2022; Bonner, 2021; Connaway, 2021).

Text analysis methods and binary indicators were applied to decide if a project included themes of literacy and/or information access. The keywords “literacy” and “reading” were searched in project descriptions, findings, and other textual fields. The analysis also integrated the specific focal area of “information access.” Analysis was split into three methods. First, the projects with a focal area of information access were identified. Second, projects with textual indicators for literacy and reading were identified. Finally, projects with the focal area of information access containing literacy or reading keywords were combined into a third category (see Exhibit 19).

In CARES Act funding, SLAAs funded 173 projects focusing on information access, reading, and/or literacy, which accounted for 36.34% of all CARES Act projects. Information access was listed as a focal area, accounting for 17.65% of all CARES Act projects (84 projects), whereas reading and literacy appeared in 11.76% (56 projects). Finally, 33 projects included the focal area of information access and references to reading and/or literacy, accounting for 6.93% of all CARES Act projects (see Exhibit 19).

**Exhibit 19. CARES Act, ARPA, and Benchmark Projects Related to Information Access and Reading or Literacy**

Project category	CARES Act		ARPA		Benchmark	
	Number of projects	Percentage of projects	Number of projects	Percentage of projects	Number of projects	Percentage of projects
Information access	84	17.65%	228	14.00%	317	22.59%
Reading and literacy	56	11.76%	445	27.32%	333	23.73%
Both literacy and information access	33	6.93%	82	5.03%	112	7.98%
<b>Total</b>	<b>173</b>	<b>36.34%</b>	<b>755</b>	<b>46.35%</b>	<b>762</b>	<b>54.3%</b>

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

The overall percentage of projects focusing on information access and reading or literacy increased from the CARES Act to ARPA. Information access as a focal area decreased by about 3% (197 projects), whereas references to reading or literacy increased by about 16% (423 projects). Finally, projects focusing on information access as a focal area and reading or literacy decreased by 2% (72 projects). Before the pandemic, the OLS-G2S formula funding program funded more than 1,400 projects, with approximately 54% of the projects focusing on

information access and/or reading or literacy (762 projects). Specifically, information access as a focal area comprised about 23% of the projects (317 projects), reading and literacy comprised about 24% of the projects (333 projects), and about 8% of the projects (112 projects) had focal areas of information access and included indicators for reading and literacy.

Traditional funding cycles focused more on reading, literacy, and information access than did emergency grant programs. The only category with a larger percentage of projects in the emergency programs compared with traditional cycles was the reading and literacy category under ARPA funding, which was 15% higher than the 2019 benchmark data. With the immense focus of emergency funding on sustaining and modifying operations, SLAAs and libraries' primary focus may not have been on improving literacy and reading. However, virtual programming still focused on literacy and reading implemented with the purchase of tablets.

A notable example of this is the Seminole County (Florida) Public Library (SCPL). SCPL sought CARES Act funding for 14 new tablets, equipping librarians to provide additional teleconference-based programs to serve a larger number of attendees. With the additional tablets, SCPL doubled its offering of teleconference-based "Mother Goose on the Loose" programs, teleconference-based toddler early literacy programs, and preschool early literacy programs, and quadrupled its offering of the elementary age "Library Explorers" program. From December 1, 2020, through January 31, 2021, the library made 130 presentations, each averaging approximately 24 attendees (White, 2021).

However, as the pandemic progressed, ARPA projects witnessed a greater focus on skills such as reading and literacy, perhaps with reduced emergency needs, loosening restrictions, and publications about how children lost literacy competency throughout the pandemic as a result of school closures (Chamberlain et al., 2020; National Literacy Trust, 2022; Sun et al., 2022).

### ***What impact did the constraints of a national emergency have on the ability of IMLS staff and SLAAs to distribute the money quickly to respond to emergency needs?***

OLS-G2S program officers agreed that IMLS distributed funding quickly within the constraints of a national emergency, specifically pointing out the quick transition to remote work for program officers already equipped with laptops. Even though IMLS was able to distribute money quickly, the ability of SLAAs to do so depended on their State administrative structure and the associated processes of allocating and approving funds. For example, some States declared emergencies, thus allowing federal funds to move quickly to address emergency needs; some had to obtain approval from legislatures to disburse funds; and some were not ready to transition to remote work quickly, delaying the disbursement of funds.<sup>27</sup> For example, several

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<sup>27</sup> This is a common requirement among local, county, and State governments. Although most grants and unrestricted funds are unanimously approved, they must pass through administrative hurdles before disbursement.



SLAAs reported procurement delays related to ineffective State procurement procedures and policies rather than supply chain issues. Relatedly, a few SLAAs reported that the transition from paper to a fully digital grant distribution process posed some challenges, particularly when working with smaller libraries with limited technological skills or infrastructure.

During the ARPA grant program, program officers explained that SLAAs faced challenges in spending the money within the grant timeline, sometimes caused by staffing shortages, further complicating procurement issues. Specifically, most SLAAs reported that the doubling or even quadrupling of their usual funding allotments during the CARES Act and ARPA funding programs doubled or quadrupled their workload. SLAAs and local libraries did not have sufficient staff to cope with these increased workloads, suggesting that having more time would have mitigated the overall burden on staff and assisted in better informed decision making. As a result of these challenges, most SLAAs asked for extensions for their projects, delaying the reporting for fiscal year 2021. In addition, program officers noted that some State legislatures experienced backlash over how emergency funds were spent, slowing the disbursement process during Year 2.

However, even though they experienced some challenges, SLAA representatives reported that the constraints of the national emergency did not impact their ability to distribute the funds promptly. A handful of SLAAs attributed this success to their preexisting grant management infrastructure, whereas others attributed it to streamlined distribution processes. For example, SLAAs avoided competitive grants for simple formula-based allocations. Others used a simpler reporting structure, allowing local libraries to delegate the distribution, and others purchased equipment and supplies through regional library systems instead of individual libraries.

Overall, SLAAs experienced many challenges in spending the emergency allocation, particularly during the ARPA grant program, with strict timelines leading some institutions to not spend their full allocation. The overwhelming amount of money also led to staffing issues. Staff were dealing with personal pandemic-related issues while simultaneously managing massive increases in their workloads. However, most SLAAs reported shifts in operations to allow for the quick and fair disbursement of funds to libraries across their jurisdictions. For example, SLAAs such as the Vermont Department of Libraries, which purchased bulk PPE to distribute to Vermont public and academic libraries, chose to focus on formula-based subgrants and worked to procure supplies and equipment in bulk instead of delegating the responsibility to smaller libraries and individual institutions (“Libraries Dept Awarded over \$2M in ARPA Funds by the Institute of Museum and Library Services,” 2021). Therefore, challenges seemed to improve on specific aspects of SLAA operations when competitive grants became formula based and supported a broad range of libraries and regional purchases, resulting in cheaper procurement with more extensive impacts.



### ***How did the funds help SLAAs maintain economic stability throughout the pandemic?***

According to program officers, although SLAAs initially feared economic issues at their agencies and individual libraries, the challenges that SLAAs faced in distributing funds and procuring equipment and supplies did not result in significant economic impacts on their organizations. Instead, the funding helped maintain economic stability because they could provide services such as internet access, digital literacy training, and workforce and skills development training. For example, a West Coast library created a collaborative workforce, connecting youth from low-income backgrounds who were unemployed or in low-wage jobs to career development resources. In addition, a Mid-Atlantic State provided continuing education services to support libraries in keeping librarians employed while the pandemic restrictions kept the libraries closed in local communities. These efforts, further emphasized by the digital resources related to professional development and access, ensured continuity of services and employment until restrictions lessened so that library staff could support local communities.

Program officers also noted that SLAAs feared their State's ability to match the funding from the formula grant programs (a requirement of the traditional cycle) given budget shortfalls across the United States. However, because the CARES Act did not require matching funds, SLAAs continued to support libraries through emergency funding that did not require matching funding from other sources. SLAAs further emphasized relying on consortia contracts and group-based procurement, saving States and libraries millions annually. For example, one program officer explained that libraries in one State in the Southeast saved their State approximately \$2,000,000 per year in discounts for broadband internet.

Most SLAA representatives reported that their agency was economically stable during the pandemic, even though many reported not using CARES Act or ARPA funds for internal purposes, instead distributing 100% of the funds to libraries. Some SLAAs reported that a small amount of the grant (a percentage in the single digits) was used to cover administrative costs of increased grant distribution, which an SLAA included as the cost to procure grant management software. Only an SLAA representing a small territory reported using the CARES Act and ARPA funds for maintaining the economic stability of their agency.<sup>28</sup>

All other SLAA representatives reported that, although their agency was financially stable, that stability would have allowed them to support libraries only at normal levels, prior to the pandemic, not the unprecedented level of support that libraries needed during the pandemic period. However, with the CARES Act and ARPA funds, SLAA representatives indicated that they could increase the amount of support provided to libraries through direct grant funds; services such as professional development; and necessary purchases such as PPE, hotspots, and laptops.

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<sup>28</sup> Given the specificity of this SLAA's response, the report cannot explain this instability because it would deductively identify the respondent.

### ***How well were SLAAs able to distribute funds to libraries for them to address pandemic-related needs?***

Program officers noted that the ability of SLAAs to distribute funds to libraries was affected by operational challenges associated with the pandemic, such as the closure of State buildings and the lack of infrastructure for remote work. Furthermore, their ability to distribute funds was further hampered by complicated federal government processes, which program officers described as problematic from an equity point of view. For example, the federal government requires that any entity receiving federal funding register for a federal identification number. However, many small or rural organizations receiving federal funding had difficulties navigating the regulatory system. Moreover, SLAAs faced some constraints in allocating and approving funds depending on their position within their State's administrative infrastructure. This situation was especially true in the second year of funding when some States faced more scrutiny by legislators as the pandemic abated.

SLAA representatives reported using several innovative strategies to distribute funds quickly and equitably to libraries across their State. Most commonly, SLAAs used a formula-based approach to determine funding amounts for each library location, which considered several different socioeconomic variables, such as rates of unemployment and poverty and access to broadband. One Western State reported that to achieve its goal of equitable distribution, it used U.S. Census data, State-specific demographic data, and statewide broadband access maps. The final formula more heavily weighted variables related to inequity and approximated how much should be awarded to each library across the State. Other innovative distribution methods reported by SLAA representatives included moving grant management and distribution processes to a fully digital format, restructuring staff responsibilities to meet the increased administrative duties related to the substantial increase in subgranted funds, and allocating some administrative and purchasing responsibilities to regional library cooperatives. These shifts in responsibility and operations enabled SLAAs to provide funding quickly and equitably to libraries and institutions to alleviate pandemic-related needs.

### ***Did CARES Act and ARPA funds increase awareness of the IMLS brand and its LSTA grant program at the library and community level? How important was this?***

Some OLS-G2S program officers agreed that the CARES Act and ARPA funds increased awareness of the IMLS brand and LSTA programs at the library level. Specifically, program officers noted that IMLS was already well-known in the library community through the OLS-G2S program, and the emergency funding particularly extended its visibility to organizations in rural areas that had not previously heard about or received funding from IMLS. At the same time, other program officers noted that IMLS was not yet a "household name" as with other well-known agencies such as the National Endowment for the Arts (NEA) and the National Endowment for the Humanities (NEH). However, there are dozens if not hundreds of articles, press releases, and other publications generated from a library itself (e.g., Arizona State Library,

2021; Idaho Commission for Libraries, 2021; New Hampshire State Library, 2021) or library professional organizations (e.g., American Library Association, 2021; Kromer, 2021).

At the community level, program officers suggested that video and press releases of CARES Act and ARPA work may have helped garner more visibility for IMLS and the LSTA programs within the communities served. In contrast, other program officers were not sure if IMLS was known in the general community. One program officer noted that very few States were consistent with IMLS branding guidelines, including adding the IMLS logo on every LSTA-funded flyer, laptop, and so forth, which may have generated greater visibility.

OLS-G2S program officers had mixed opinions on the importance of IMLS brand awareness. Some program officers stated that correct and consistent branding by SLAAs and subgrantees was important to guide other libraries toward funds or provide examples or inspiration for projects. Others noted that IMLS has a smaller communication budget than other agencies and believe it is not the recipients' responsibility to raise IMLS's profile.

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“COVID has affected American schools, hospitals and businesses. But libraries—which often serve people who have nowhere else to turn—have responded in unprecedented ways. Like many of us, they’ve had to pivot, going from providing extensive in-person services and programming onsite in branches to quickly establishing virtual lectures and classes, and contact-less material pickup, as well as services that were strictly COVID-related.” (Bonner, 2021)

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Overall, most SLAA representatives interviewed for this evaluation believed that CARES Act and ARPA funds increased awareness of the IMLS brand, particularly because they alleviated some needs for libraries during a challenging time. Some SLAA representatives discussed reinforcing the need for local libraries to brand IMLS-funded products with the IMLS logo. However, the same sentiment was not present concerning community awareness of the IMLS brand. Slightly less than half of the respondents felt that the public was more aware of IMLS and its services after the CARES Act and ARPA funding, and more than half indicated that they either did not know if the branding had made any impact or stated that they did not think that the public developed a greater awareness. Most SLAA representatives felt that increasing awareness of the IMLS brand was valuable and important for the purposes of advocacy.

### ***How did IMLS's structure compare with other arts- and humanities-focused federally administered formula grant programs designed to support State and local organizational-level operations during the pandemic?***

The SLAA representatives interviewed primarily dealt with IMLS- and LSTA-related funding. Therefore, they could not speak to differences between the IMLS grant structure and other arts- and humanities-focused grant programs during the pandemic because they had no basis for comparison.

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SLAA representatives made it clear that librarians and the public need to know how their tax dollars are being spent and how programs and services they value are funded so that they know who to contact when that funding is at risk.

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Although most interviewees stated that they could not make direct comparisons, they did point out two areas in which other arts- and humanities-focused federally administered grant programs were better situated than the IMLS program. First, they discussed how most offered longer time frames to spend the funds, giving grantees more flexibility to make decisions and determine long-term impacts. Second, other federal agencies offered simpler reporting requirements than IMLS.

Although SLAAs expressed some issues, they noted that these comparable grants were not as professionally managed as those offered by IMLS. As such, SLAAs did not express reservations regarding IMLS or its grant programs. They felt that the increased reporting requirements and shorter time frames were not a detriment because of the thoughtfulness and structure that IMLS puts into its grant programs, which make them an asset to SLAAs and the library community.

## Discretionary

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IMLS issued two discretionary NOFOs, one for the CARES Act discretionary grant program and one for the ARPA discretionary grant program. Discretionary applications were reviewed with respect to eligibility, peer reviewed for quality and alignment to program goals, and then reviewed by the director for a final decision based on agency and program priorities. The specific dates, award range, and anticipated award values for each program’s NOFO are in Exhibit 20. For the CARES Act, the goal was to support museums and libraries in responding to the pandemic, whereas ARPA was to enable these same institutions to recover from the effects of the pandemic.

### Exhibit 20. NOFO Information for CARES Act and ARPA Awards

Grant program	Fiscal year	Application release date	Application due date	Anticipated award amount	Minimum award value	Maximum award value
CARES Act	2020	5/8/2020	6/12/2020	\$150,000	\$25,000	\$500,000
ARPA	2021	5/26/2021	6/28/2021	— <sup>a</sup>	\$10,000	\$50,000

*Note.* NOFO = Notice of Funding Opportunity; CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>a</sup> The ARPA NOFO did not include an anticipated award amount.

In the CARES Act NOFO, IMLS outlined specific factors to help guide the award decision making based on the original CARES Act legislation. Specifically, the CARES Act NOFO identified projects

on expanding digital network access (broadband), purchasing and deploying internet access devices, and providing supportive services to communities for these devices. IMLS further encouraged grantees to prioritize services for high-need communities. The NOFO defined high-need communities based on data such as poverty rates, Supplemental Nutrition Assistance Program (SNAP) participation, unemployment rates, and broadband availability and adoption. IMLS specifically referred applicants to the U.S. Census Bureau to use these indicators to justify their application to support marginalized communities. IMLS also developed an internal tool or workbook that provided these data to program officers and grantees at the county level.

Alternatively, the ARPA NOFO identified the application's alignment with the ARPA legislation's goals as a high priority in the award decision making. The ARPA NOFO identified two goals:

- Strengthen the institutional capacity of museums, libraries, and related organizations to respond to community needs quickly, effectively, efficiently, and responsibly.
- Increase the ability of museums, libraries, and related organizations to deliver programs and services that contribute to the well-being of families, groups, and individuals of all cultural and socioeconomic backgrounds.

IMLS considered other factors, including the specific justification and need of the award, the specific beneficiaries of the project, and how the project would support recovery from the pandemic. In addition, the ARPA NOFO required that the applicant provide a dollar-to-dollar cost match to the requested award from a nonfederal source of money.

## **Findings for Discretionary Funding**

Discretionary awards had clear patterns across the administrative data analysis, program officer interviews, and discretionary grantee interviews.

- Discretionary fund grantees developed new partnerships across institutions to improve outcomes.
- Discretionary fund grantees increased accessibility by expanding community-focused programming and creating new programming.
- IMLS funding allowed discretionary grantees to transition to a virtual environment and remain operational.
- The emergency discretionary funding prevented further job losses within the museum and library sector and even increased the number of part-time employees becoming full-time employees. However, the interviews and data did not provide information regarding the status of these employees. The data did include whether they maintained this full-time status or returned to part-time status after the award cycles.

- IMLS discretionary program staff took on a more comprehensive role in supporting discretionary fund grantees.
- IMLS improved the review and award process for discretionary fund grants between the CARES Act and ARPA funding cycles by implementing efficiencies and bringing on contracted staff to help with the added workload.
- Museums showed that it is possible to distribute funding through a formula funding style system. However, none of the available data indicated the feasibility of widespread application of formula grants for museums.
- IMLS developed a data-driven decision-making tool to assist in grantmaking decisions during the CARES Act, but incomplete integration between offices resulted in less use than originally intended.

### ***Creation of New Partnerships***

Although IMLS representatives and discretionary grantees noted the challenges of remote work, institutions described a greater-than-normal level of coordination with similar institutions and other organizations. These relationships expanded on previous partnerships and created new partnerships to address community needs and expand the collective reach of institutions. Some created partnerships targeting vulnerable populations, such as partnerships to improve broadband access and close the digital divide. Other partnerships included some grantees allowing government agencies to use library and museum space to maintain government operations. Other grantees ensured and expanded access to broadband so that community members could maintain access to necessary systems during mandated closures. Furthermore, many interviewees discussed working collaboratively with other organizations (even those with similar foci and clientele) to share grant opportunities, support one another in writing grants, and work together to survive the government lockdowns. Not all grantees reported on their plans to sustain these partnerships; some emphasized their success with such partnerships in reaching populations they could not previously reach, and they are excited to continue these partnerships after the pandemic.

### ***Increased Focus on Accessibility for Community-Focused Services***

In such an unprecedented time, discretionary grantees went beyond their routine efforts to create more accessible programs through outreach to local communities. Grantees conducted arts and entrepreneurship meetings, community open houses, persons of advanced age fairs, teen fairs, and other meetings to illicit ideas for programming focused on community-wide and specific populations. Through these activities, grantees became more acutely aware of current needs, enabling them to create programs and services specifically for the community in response to the changing environment during the pandemic. These activities supported



grantees to ensure that their communities received the support necessary, and programs remained accessible to specific populations that were at greater risk throughout the pandemic, including persons of advanced age, persons with disabilities, and other demographic groups at greater risk given the loss of in-person events and programs. Program officers reiterated that although libraries and museums relied on community engagement for programming guidance, these organizations expanded their already existing community-focused services using emergency funding throughout the pandemic to ensure broad accessibility.

### ***Transitioning to a Virtual Environment Allowed Discretionary Grantees to Remain Operational***

Discretionary grant interviewees stated that the transition to fully remote work often was smooth, allowing them to continue operations and quickly identify new programming methods during the pandemic. Some grantees already had digital programming, and many grantees created programs or expanded existing ones. Program officers reiterated the vitality of transitioning to virtual modalities to (a) continue engaging communities, (b) remain operational, and (c) serve as a promising practice for future emergencies. Overall, interview respondents emphasized the need to remain flexible in changing environments, and the pandemic prepared them to respond quickly.

### ***Emergency Funding Maintained and Created Jobs for Grantees***

Many organizations used emergency funding to continue, expand, or create new programming, which allowed them to sustain staff salaries, convert some part-time staff to full-time status, and sometimes create new positions. Grantees reiterated that these activities were possible because the emergency funds allowed them to focus on funding programs without having to use existing budget funds, which they could use to pay staff salaries. The maintenance and expansion of the workforce were essential because many institutions within and outside the museum and library sectors had to lay off or furlough staff during the pandemic. However, it is important to note that grantees did not mention the sustainment of these positions after the pandemic, whether they remained full time or converted back to part time.

### ***Expansion of Program Officer and Program Specialist Roles***

The rapid program implementation and CARES Act funding distribution required a significant increase in grants management responsibilities. IMLS staffing levels were optimized to support non-emergency situations and the rapid distribution of CARES Act funds required creative solutions to manage the large increase in applications. Due to the emergency, the timeline to make awards was abbreviated relative to a normal IMLS grant cycle, and IMLS received more than the total number of usual annual applications for all its grant programs combined. Program officers and support staff successfully processed, reviewed, and made awards for over



1,600 CARES Act proposals; however, this rapid distribution did take a toll on staff. The CARES Act experience offered many lessons learned that were applied to ARPA. IMLS hired two term employees and engaged contractors to assist with monitoring CARES Act awards and to assist with processing and monitoring ARPA awards. As a result, IMLS program officers were relieved of the substantially increased burden of managing the emergency-funded awards and were able to refocus their attention on the needs being expressed by grant recipients of the non-emergency programs. The pandemic impacted grant recipients from every program, requiring special attention from IMLS program officers in responding to a variety of issues that grant recipients faced. Change requests increased during the pandemic, resulting in increased workload to process and approve requests. Having contractors to assist with the management of both the CARES Act and ARPA programs enabled IMLS program officers to manage the increases in their workload for their regular, non-emergency grant programs.

### ***Efficiency in Fund Distribution Improved***

After distributing an unprecedented amount of funding from the CARES Act, IMLS reviewed the distribution process to create a more efficient and equitable process for the distribution of ARPA funding and reduce the immense burden on IMLS staff. During this transition, IMLS increased its staffing and contractor support and increased the rate at which IMLS processed applications and issued awards to be faster under ARPA than the CARES Act, even with a significant increase in the number of awards. IMLS improved its efficiency and operational speed between the CARES Act and ARPA funding programs.

### ***Lack of Institutional Coordination for a CARES Act Data-Driven Decision-Making Tool***

According to interviews with IMLS staff, one of the goals of senior leadership was to more effectively integrate data-driven decision making into its CARES Act discretionary grant decisions. In the CARES Act Notice of Funding Opportunity (NOFO), the legislation sought to push funding toward those institutions with the greatest need in the museum and library field. As a result, IMLS developed a tool to assist program offices in using county-level measures of sociodemographic factors to aid in their decision making. However, there was not enough engagement between the operations staff who developed the tool (the “workbook” as it came to be known) and the program offices who would operationalize its use. As a result, the tool only partially used, primarily as a public workbook for applicants to reference as support for their CARES Act applications.

## COVID-19 Needs, Goals, and Impacts

### *What were the immediate emergency needs for museums and libraries? What other emergency needs emerged across time?*

Using discretionary award data, each strategic goal from the 2018–2022 plan aligned to each strategic goal from the 2022–2026 IMLS strategic plan.<sup>29</sup> With the transition in strategic plan in 2022, the specific goals changed. However, most were similar to one another; therefore, the goals were combined into four categories: (a) lifelong learning; (b) capacity, stewardship, and access; (c) public and community engagement; and (d) multiple goals selected.<sup>30</sup> Exhibit 21 shows the combination of the 2018–2022 strategic plan and the 2022–2026 strategic plan. Exhibit 22 identifies the allocation of awards by strategic goal, program office, and discretionary grant program. Appendix B includes a full description of each strategic plan and associated strategic goal.

#### Exhibit 21. Combination of Strategic Goals for Discretionary Grants

Goal category	2018–2022 strategic plan	2022–2026 strategic plan
Lifelong learning	Promote lifelong learning	Champion lifelong learning
Capacity, stewardship, and access	Build capacity	Advance collections stewardship and access
Public and community engagement	Increase public access	Strengthen community engagement
Multiple goals selected	Multiple goals selected	—

Patterns were evident when examining the emergency grant programs across the institution types. OLS-funded institutions in the CARES Act discretionary grant program leaned heavily toward public and community engagement awards, with slightly less than 80% of all discretionary awards to libraries going to projects within this goal, and the remainder split evenly between lifelong learning and capacity, stewardship, and access.<sup>31</sup> Alternatively, OMS-funded institutions primarily focused on lifelong learning projects within the CARES Act discretionary grant program, with the remainder split equally between capacity, stewardship, and access and public and community engagement. Finally, a third type of institution referred to a combined application between museums and libraries. The collaboration-funded institutions have a similar pattern to the OLS-funded institutions, with a greater percentage of capacity, stewardship, and access (18%) projects than lifelong learning projects (9%).

<sup>29</sup> Because of the quick turnaround on CARES Act funding, only awarded applications indicated an overall strategic goal. Therefore, the research team limited all grant programs to awarded applications.

<sup>30</sup> Before the 2022–2026 strategic plan, IMLS allowed applicants to select multiple goals. Therefore, this category exists only for non-emergency funding prior to CARES Act and ARPA funding.

<sup>31</sup> Although many grantees expressed a desire to reopen during the CARES grant program, their focus was to maintain connection to local communities, even when they did not have the ability to use physical spaces.

In the ARPA discretionary grant program, the distribution of goals narrows but still shows a differential pattern between programmatic offices. Among the OLS-funded institutions, the goal distribution declines across lifelong learning (45%); public and community engagement (35%); and capacity, stewardship, and access (21%). Alternatively, under OMS-funded institutions, the goal distribution declines from public and community engagement (51%) to lifelong learning (35%) to capacity, stewardship, and access (14%).

**Exhibit 22. Distribution of Strategic Goals by Discretionary Award and Program Office**

Strategic goals	CARES Act		ARPA		Non-emergency funding (2018–2023)	
	Count	Percentage	Count	Percentage	Count	Percentage
<b>Office of Library Services</b>						
Public and community engagement	23	79.31%	35	34.65%	513	22.27%
Lifelong learning	3	10.34%	45	44.55%	699	30.34%
Capacity, stewardship, and access	3	10.34%	21	20.79%	607	26.35%
Multiple goals selected	0	0.00%	0	0.00%	485	21.05%
Total	29	100.00%	101	100.00%	2,304	100.00%
<b>Offices of Museum and Library Services (collaborations)</b>						
Public and community engagement	8	72.73%	0	0.00%	33	32.67%
Capacity, stewardship, and access	2	18.18%	0	0.00%	39	38.61%
Lifelong learning	1	9.09%	0	0.00%	29	28.71%
Total	11	100.00%	0	0.00%	101	100.00%
<b>Office of Museum Services</b>						
Lifelong learning	27	55.10%	91	35.14%	695	35.86%
Public and community engagement	11	22.45%	132	50.97%	651	33.59%
Capacity, stewardship, and access	11	22.45%	36	13.90%	592	30.55%
Total	49	100.00%	259	100.00%	1,938	100.00%
<b>Grand total</b>	<b>89</b>	<b>100.00%</b>	<b>360</b>	<b>100.00%</b>	<b>4,343</b>	<b>100.00%</b>

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

The IMLS strategic goals provide a broad understanding of each award. However, the results can be further refined by including some textual analysis of the project descriptions to identify the underlying project's focus.

Across the two grant programs, museums and libraries shifted their focus during the pandemic. Exhibit 23 shows the 10 most common bigrams within each strategic goal across the discretionary grant programs and program offices.<sup>32</sup> The bigram distribution provides a better analysis of the overall focus of each project than the strategic goals. Among the CARES Act projects in capacity, stewardship, and access, libraries had a diverse focus on a variety of phrases, including accessing digital content, increasing library capacity, and supporting learning resources and training programs, which all appeared across one third of library awards under the CARES Act within the strategic goal. However, museums aligned to this goal more heavily focused on improving access to locations, specifically referring to “beyond walls,” in slightly less than 20% of the awards. Their goal was to ensure that their collections remained accessible to the community for people with low income (27% of awards). One focus in almost 20% of the awards was on historic sites (leveraging outdoor spaces).

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<sup>32</sup> During the analysis, the team originally viewed the bigrams by program office and grant program. We included these as [Appendix H](#).

**Exhibit 23. Distribution of Bigrams by Strategic Goal, Program Office, and Discretionary Grant Program**

CARES Act				ARPA			
Office of Library Services		Office of Museum Services		Office of Library Services		Office of Museum Services	
Bigram	Percentage of awards	Bigram	Percentage of awards	Bigram	Percentage of awards	Bigram	Percentage of awards
<b>Capacity, stewardship, and access</b>							
access community	33.33%	low income	27.27%	oral histories	19.05%	access collection	27.78%
access digital	33.33%	social media	27.27%	digital collections	14.29%	collections management	16.67%
access virtual	33.33%	beyond walls	18.18%	digital content	14.29%	collections care	13.89%
adults access	33.33%	coalition sites	18.18%	digital resources	14.29%	digital access	13.89%
allotted constrained	33.33%	communities across	18.18%	ebook audiobook	14.29%	digital inclusion	13.89%
allow expand	33.33%	community based	18.18%	lending program	14.29%	general public	13.89%
allow programs	33.33%	community listening	18.18%	oral history	14.29%	african american	11.11%
allows presentation	33.33%	historic sites	18.18%	social media	14.29%	digital resources	11.11%
also integrate	33.33%	income families	18.18%	wide variety	14.29%	diverse audiences	11.11%
amid face	33.33%	international coalition	18.18%	access collection	9.52%	expand access	11.11%
<b>Lifelong learning</b>							
digital skills	66.67%	digital learning	18.52%	digital literacy	31.11%	field trip	18.68%
mental health	66.67%	field trip	18.52%	digital inclusion	26.67%	public schools	13.19%
skills training	66.67%	school districts	18.52%	community needs	15.56%	community needs	12.09%
access challenges	33.33%	digital divide	14.81%	low income	15.56%	learning opportunities	12.09%
access mental	33.33%	community members	11.11%	access technology	13.33%	professional development	12.09%
access needs	33.33%	education programs	11.11%	advance digital	13.33%	school district	12.09%

CARES Act				ARPA			
Office of Library Services		Office of Museum Services		Office of Library Services		Office of Museum Services	
Bigram	Percentage of awards	Bigram	Percentage of awards	Bigram	Percentage of awards	Bigram	Percentage of awards
access technology	33.33%	educational programs	11.11%	capacity respond	13.33%	social emotional	12.09%
accessible time	33.33%	learning opportunities	11.11%	community members	13.33%	institutional capacity	10.99%
accessing digital	33.33%	learning resources	11.11%	internet access	13.33%	low income	10.99%
acquire digital	33.33%	public health	11.11%	programs service	13.33%	mental health	8.79%
<b>Public and community engagement</b>							
digital divide	30.43%	permanent collection	27.27%	community engagement	20%	community partners	12.88%
access internet	21.74%	public access	27.27%	community members	20%	community engagement	12.12%
lending program	21.74%	access collection	18.18%	community partners	14.29%	low income	12.12%
social distancing	21.74%	access resources	18.18%	community groups	11.43%	community members	9.85%
without access	21.74%	art public	18.18%	digital divide	11.43%	field trip	9.85%
digital literacy	17.39%	collections african	18.18%	resources service	11.43%	school district	7.58%
unemployment rate	17.39%	create new	18.18%	access technology	8.57%	community based	6.82%
wifi hotspot	17.39%	digital assets	18.18%	community based	8.57%	education programs	6.82%
access home	13.04%	digital engagement	18.18%	digital literacy	8.57%	historical society	6.82%
access information	13.04%	digital learning	18.18%	effectively efficiently	8.57%	learning opportunities	6.82%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Projects within the CARES Act that focused on public and community engagement also showed differences between the needs and foci of libraries and museums. Within this strategic goal, libraries targeted the digital divide (30% of the awards), followed by internet access (21% of the awards), and lending programs (21% of the awards). However, many bigrams showed similar type of activities, including accessing information, Wi-Fi, and broadband access and ensuring continued access to library services. Contrastingly, museums relied on funding within this goal to increase and enable public access to permanent collections (27%). Museums further identified a need to maintain public access to collections and resources (approximately 27% of the awards). After ensuring continued access, museums heavily leveraged creating and deploying digital assets, engagement, and learning (18% of the awards).

Finally, CARES Act discretionary awards with the lifelong learning goal had an interesting focus among libraries with digital skills, mental health implications, and skills training (66% of the awards), followed by various other factors, including accessing technology, accessing digital resources, and improving mental health support during the pandemic (33% of the awards). However, among museums, the focus was much broader, encompassing digital learning (18% of the awards), virtual field trips (18% of the awards), and working with school districts (18% of the awards). The focus in this area centered on making collections accessible for educational purposes through local districts and virtual field trips to museums.

Awards in the ARPA discretionary grant program were spread across all three strategic goals. Among the capacity, stewardship, and access categories, libraries focused on sharing oral histories (20% of the awards) and improving digital collections, content, resources, and access to eBooks and audiobooks (14% of the awards). Museums maintained a focus on digitization of collections and access but included diversification of audiences and expanding access to a variety of sociodemographic groups, specifically referencing African Americans in 11% of the awards.

ARPA awards in the lifelong learning category were similar to those under the CARES Act. Libraries focused on digital literacy (31% of the awards) and digital inclusion (27% of the awards). However, they sought to expand and address specific community needs related to technological access and internet access and provide programs that meet this need (13%–15% of the awards). Alternatively, museums continued engaging with public schools and local districts to promote virtual and in-person field trips as the pandemic abated (18% of the awards). Although mental health and social-emotional issues were present within libraries during the CARES Act, museums began to pick up these local community needs, even if they appeared in only approximately 10% of the awards.

As the pandemic began to decline under the discretionary ARPA awards, libraries and museums appeared to have similar needs to encourage in-person engagement, particularly through public and community engagement. The top two bigrams were community engagement (20%



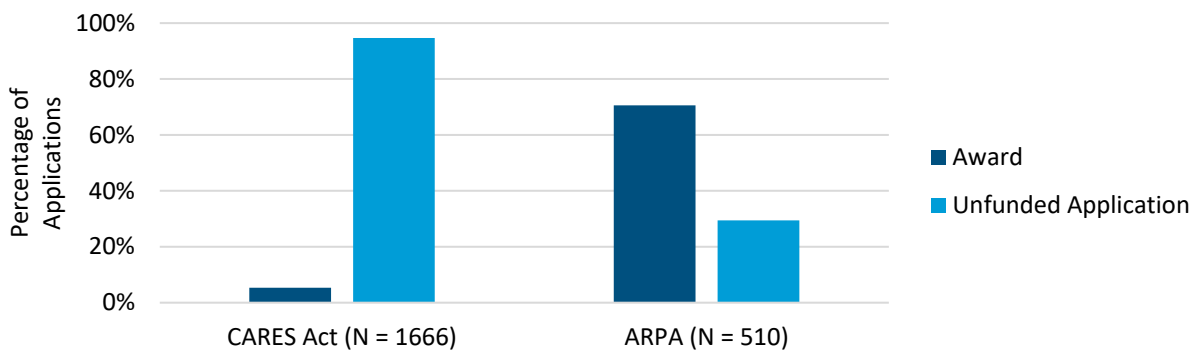
of the awards) and community members (20% of the awards) for libraries and community partners (13% of the awards) and community engagement (12% of the awards) for museums. The low proportion of bigrams appearing within awards indicates the wide diversity of needs among libraries and museums. However, activities center on improving community engagement, digital literacy, and the use of and access to museums and libraries.

The textual analysis supports the overall alignment of strategic goals by the program office. At the start, libraries sought to engage with communities and support them but shifted to creating learning opportunities as the pandemic progressed. However, museums sought to maintain their ability to share culture, history, and other learning opportunities with the community at the start of the pandemic. Then they shifted to engaging with communities as the pandemic continued. This shift represents how these institutions view themselves within local communities with both institutions wanting to reopen their doors as soon as possible. Libraries believed their obligation was with their local community, whereas museums saw their obligation as continuing to share their resources and exhibits. As the pandemic shifted, libraries and museums sought to reestablish learning opportunities and encourage the community to attend these institutions through engagement efforts.

***To what extent did the CARES Act and ARPA NOFO design align with the needs of museums and libraries and the communities they serve?***

IMLS developed the CARES Act NOFO early in the pandemic, shortly after transitioning to remote work. The CARES Act discretionary NOFO created a program designed to support large awards; however, this limited IMLS in the number of awards it could make. The response was overwhelming, but the application-to-award ratio was extremely small (see Exhibit 24). To create the ARPA NOFO, IMLS applied lessons from the CARES Act to better meet the needs of the library and museum communities. Specifically, the ARPA NOFO decreased the narrative pages required for the grant submission and decreased the award value. According to program officers, they believe this led to an increased number of applications from smaller, less-resourced institutions that previously experienced issues responding to federal grants.

**Exhibit 24. Unawarded Applications to Awarded Applications for CARES Act and ARPA**



Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Although program officers believed that the federal application process is difficult to navigate for applicants, library and museum grantees mentioned that the granting process was easy and met their needs well. Program officers viewed the process as including both the application and the award process. However, grantees focused on the award's administration when answering this question. Libraries and museums stated that they could maintain their staffing needs with their funding and expand or create digital resources. Specifically, a museum reported using the grant for virtual staff training courses and skills development to ensure that staff remained employed because the pandemic shifted many public-facing roles into other needed areas. A library used the grant to purchase a digital literacy tool that provides resources for patrons to improve digital skills for work and life. These types of purchases enabled libraries and museums to maintain relevancy and continue to address patron needs during the stay-at-home orders and national restrictions on public gatherings. Of note, because only grantees were interviewed, institutions that did not receive funding might have a different opinion, especially related to the small number of awards under the CARES Act discretionary grant program.

The experience of museums and libraries differed with the acquisition and use of funds. Specifically, museums wished they could use discretionary grant funding to cover operational expenses because they experienced a significant drop in income during the mandated business closures at the beginning of the pandemic. Unlike some libraries, museums were not essential businesses. Therefore, many felt that legislation and the emergency funds significantly favored libraries, specifically with the additional OLS-G2S funding.

Museums and libraries both stated that they felt the discretionary grant programs supported their operations and enabled them to continue operating effectively in a changing environment. However, because only grantees were interviewed, applicants that did not receive an award would have a unique perspective. As shown in Exhibit 24, at the start of the pandemic, IMLS received more than 1,600 applications but could only issue fewer than 90 awards, resulting in a success percentage of only 5% (only one of 50 applications received an award). However, in the ARPA discretionary grant program, this value changed significantly, with 71% of applications receiving awards (and 29% of applications going unawarded).

There were significant differences between the CARES Act and ARPA discretionary grant programs. The CARES Act issued a much smaller number of awards with an overall higher monetary value. Smaller institutions may not have been able to justify the large value of awards. In fact, one grantee talked about how they created a collaborative of museums to apply for a large amount of funding that would be split to support a variety of projects. However, under the ARPA discretionary grant program, award values were significantly lower, resulting in IMLS being able to issue a larger number of smaller awards that were beneficial to all types and sizes of institutions, particularly to fund new programs and operational changes

(such as the digitization of collections and online/virtual programming). However, comparing raw application totals, there were 1,666 applications for the CARES Act discretionary grant program and only 510 applications for the ARPA discretionary grant program. It is possible that higher award values were more appealing to libraries and museums because there were more than three times as many CARES Act applications as there were ARPA applications. Nevertheless, all the institutions interviewed believed that both programs—regardless of the award value—met their needs.

***What new opportunities presented themselves with CARES Act and ARPA funding as the emergency stabilized and abated during the pandemic?***

Discretionary program officers described numerous ways in which museum and library grantees used the CARES Act and ARPA funding. For example, museums and libraries expanded public internet access by acquiring hotspots; enhancing physical safety by procuring PPE; and maintaining access to library collections using curbside checkout, contactless 24/7 book lockers, and other self-checkout stations. In addition, many libraries used funding to create a digital navigator role, designating one staff member to provide patrons with digital literacy training, including successfully accessing materials and resources online. Finally, both program officers and discretionary grantees emphasized the use of funding to expand their digital programming by digitizing collections and/or hiring staff to create new digital programming.

Importantly, many institutions partnered with other organizations or agencies in the community to expand and raise awareness of the impact of funding. For example, one museum partnered with their local schools to create a documentary on how food service workers fed students during the pandemic, further contextualizing the range of essential professions during the pandemic. The qualitative interviews initially observed this result; however, the quantitative data, as shown in Exhibit 25, indicate that approximately half of all grantees from both the CARES Act and ARPA included external partnerships with outside organizations. Given the unprecedented impact of the pandemic, organizations sought to pull together groups to provide services they never provided in the past.

**Exhibit 25. Discretionary Grant Awards That Reference Partnerships**

Project and partnership status	Office of Library Services		Office of Museum Services	
	Number of awards	Percentage of awards	Number of awards	Percentage of awards
<b>CARES Act</b>				
Partnership	15	51.72%	25	51.02%
No partnership	14	48.28%	24	48.98%
Total	29	100%	49	100%

Project and partnership status	Office of Library Services		Office of Museum Services	
	Number of awards	Percentage of awards	Number of awards	Percentage of awards
<b>ARPA</b>				
Partnership	45	44.55%	151	58.30%
No partnership	56	55.45%	56	41.70%
Total	101	100%	259	100%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Libraries and museums also created several other new services, such as the following:

- Some discretionary grantees hired information technology staff to teach patrons to use digital services.
- Some discretionary grantees procured and deployed mobile services such as bookmobiles and automated book distribution machines.
- Some discretionary grantees deployed new and expanded adult education and career development classes that permitted patrons to earn digital literacy certificates.
- Some discretionary grantees created virtual programming, including virtual versions of in-person programming.
- A discretionary grantee worked with linguistic experts to translate their website for broader accessibility.

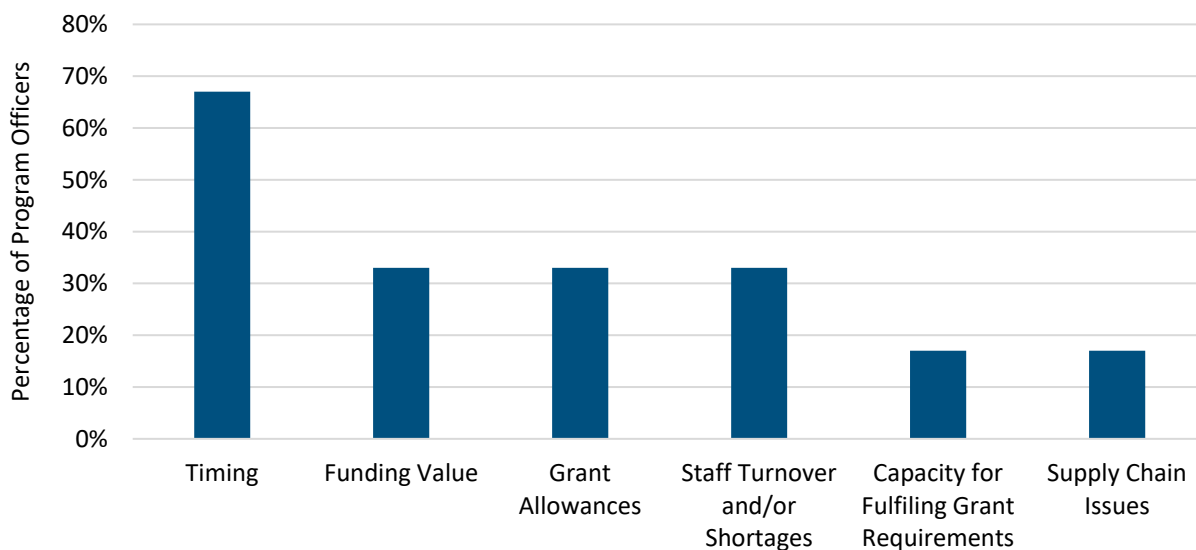
These examples emphasize that discretionary grantees performed many of the same activities as SLAAs and local libraries that received formula funding subawards. Specifically, both discretionary and formula funding grantees maintained a commitment to community connection by ensuring the continuity of operations and the creation of new services throughout the pandemic. Even though museums declined in the use of partnerships, the rate remained similar. Therefore, partnerships and expanding access were the initial focus at the start of the pandemic. However, this focus did not change as the pandemic abated, indicating the utility of these services during both stages of the pandemic.

***What were the greatest challenges for museums and libraries administering CARES Act and ARPA funding, including amounts, timing, and allowances/restrictions? How did museums and libraries address those challenges?***

Similar to the formula funding program, program officers discussed various challenges for both museums and libraries in the administration of CARES Act and ARPA discretionary funding,

including timing, funding amount, grant allowances, staff turnover or shortages, capacity for fulfilling grant requirements, and supply chain issues (Exhibit 26).

### Exhibit 26. Challenges Shared by Discretionary Program Officers



The most common challenge, mentioned by two thirds of program officers, was the timing of the grant program. This timing was split into a few areas. The first was the short time frame of the application time period (which was less than 40 days for both the CARES Act and ARPA). Specifically, smaller locations found it difficult to apply quickly and efficiently, particularly given the high dollar value of the CARES Act awards, the small number of awards available, and the complicated application process. Because some organizations were applying for the first time or had never applied for such large awards, they found the process difficult and time-consuming, particularly given competing priorities and stresses of a national emergency.

A second timing-related challenge reflected the time frame for which organizations had to expend the money from the CARES Act and ARPA. Four museums and two library discretionary grantees reiterated the timing challenge, specifying the struggle to spend the funding within the period with the constraints on how they could spend it. However, one program officer noted that IMLS and grantees used timeline extensions advantageously, which improved the overall success of grant administration.

The challenges concerning timing are in Exhibit 27, in which the average number of weeks from award issuance to award closeout is 126 weeks in the CARES Act discretionary grant program, 128 weeks and 2 days in non-emergency discretionary grant programs, and only 90 weeks and 1 day in the ARPA discretionary grant program. CARES Act mimicked that of a traditional non-emergency grant program. However, under ARPA, the program occurred much quicker, with

most awards closing 30% faster than under the CARES Act and non-emergency programs. However, this timing also could provide other conclusions that the CARES Act operated with similar staff capacity as non-emergency programs and the addition of contractors resulted in quicker administration of the award. Nevertheless, grantees mentioned that the initial timeline was extremely difficult for them to administer and spend the award.

### Exhibit 27. Descriptive Statistics of Time Duration Between Application Submission, Award Issuance, and Award Close Out

Descriptive statistic	CARES Act	ARPA	Non-emergency
<b>Submit to award</b>			
Average	25 weeks, 1 day	16 weeks, 4 days	20 weeks, 5 days
Median	13 weeks, 6 days	16 weeks, 3 days	18 weeks, 5 days
Minimum	13 weeks, 6 days	16 weeks, 2 days	1 day
Maximum	62 weeks, 3 days	18 weeks, 3 days	156 weeks, 1 day
<b>Award to close out</b>			
Average	126 weeks, 1 day	90 weeks, 1 day	128 weeks, 2 days
Median	126 weeks, 5 days	80 weeks, 1 day	121 weeks, 4 days
Minimum	67 weeks, 6 days	26 weeks, 1 day	<1 day
Maximum	176 weeks 1 day	127 weeks, 6 days	811 weeks, 1 day
<b>Submit to close out</b>			
Average	148 weeks	106 weeks, 6 days	146 weeks
Median	151 weeks, 4 days	96 weeks, 4 days	126 weeks, 1 day
Minimum	84 weeks, 4 days	42 weeks, 4 days	42 weeks, 3 days
Maximum	198 weeks, 5 days	144 weeks, 5 days	299 weeks, 6 days

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

Additional challenges included the overall funding value of the award, high rates of staff turnover and/or shortages, and grant allowances (or the types of approved expenses). One third of the program officers reported these challenges, identifying that the large size of the funding posed a challenge because it limited the number of awards made. In addition, during the pandemic, staff turnover and/or shortages created challenges for the institutions to successfully administer and satisfy the grant requirements. A further challenge involved how grantees could spend the funding and whether it properly aligned with their needs. Finally, one program officer identified library capacity and supply chain issues as additional challenges.

Unlike IMLS program officers, most museum and library administrators did not report as many challenges. Still, one library noted the challenge of taking on tasks that were not usually in their job description. Specifically, as the pandemic evolved, staff saw aspects of their roles disappear and gained additional responsibilities to supplement their prior workloads. One museum also stated that they could have used more funding, especially later in the pandemic during the ARPA grant program. Many museums stated that although the funding was useful, it was difficult to operate on small funding amounts, particularly considering the significant gap between the discretionary funding program and the formula-based funding programs. Furthermore, a significant challenge for grantees was the inability to use funds for operational expenses. At the same time, the museums interviewed felt that the guidelines from IMLS on acceptable expenses were not well defined and confusing.

Program officers and discretionary grantees agreed that the short timeline was a significant challenge, especially for small institutions that had to spend substantial amounts of money in an abbreviated time period. Further, some challenges discussed in this section parallel those discussed with SLAAs, including the fact that, during the pandemic, staff saw dramatic shifts in their roles, forcing them to adapt to the emergency. As time progressed and emergency funding ceased, interviewees stated that these new roles transferred back to their State prior to the pandemic. However, the variation in tasks could be a positive experience for staff, giving them an opportunity to learn new skills, such as small institutions gaining skills for grant management.

### ***What kinds of new practices, policies, or partnerships emerged to increase the capacity of museums and libraries to support their communities during the pandemic?***

Discretionary program officers shared numerous examples of new practices, policies, and partnerships implemented during the pandemic that increased the capacity of museums and libraries to support their communities.

**Practices.** Some libraries extended their hours to allow community members to access space at convenient times, and both libraries and museums increased digital accessibility by creating parking lot Wi-Fi and lending out computers. Other grants created a digital navigator role, helping patrons use the connectivity to access digital materials available at the library.

Discretionary grantees also shared several examples of new practices implemented during the pandemic that were specifically directed at the community. One library offered several new services, such as a maker space, an arts and entrepreneurship meeting, a community open house, and a senior fair and a teen fair to illicit ideas for programming to these demographics. One Midwest museum created rolling protective barriers for staff and patrons to walk through the museum safely. Finally, one Southwest museum used regional newspapers to promote the distribution and use of home learning kits once their typical in-person programming had been suspended.



**Policies.** Program officers noted that some libraries and museums implemented new policies within their institutions, such as training for staff on topics related to diversity, equity, and inclusion; culturally responsive programming; and innovative technology. Another policy change, which enabled cross training and resulted in ensuring staff continuity during the pandemic, involved shifting staff from public-facing roles to roles focused on digitizing materials. For example, staff in one museum shifted to supporting the transcription of letters and journals for digital archives. With the immense focus on digitization and digital access, a common shift involved staff taking on roles that were outside their traditional job descriptions.

As with grantees, IMLS program officers and program specialists took on new and expanded responsibilities. The rapid implementation of programs and the distribution of CARES Act funds required a significant increase in grants management responsibilities. Staffing levels for program offices are optimized to support non-emergency situations and in the early months of the pandemic, incorporating CARES Act distribution required creative solutions to manage the increases IMLS experienced in applications received. Due to the obvious need for expediency, the timeline to make awards was abbreviated relative to a normal IMLS grant cycle. In that abbreviated moment, the agency received a larger number of CARES Act applications than it usually receives in a normal year for all its grant programs combined. Program officers and support staff were successful in processing, reviewing, and making awards for over 1,600 CARES Act proposals however it did take a toll on the teams. The CARES Act experience offered many lessons learned that were applied to ARPA, when it came along the following year. IMLS hired two term employees and engaged contractors to assist with monitoring CARES Act awards, as well as to assist with processing new awards through ARPA and assist in monitoring for the new awards. As a result, IMLS program officers were relieved of the substantially increased burden of managing the emergency-funded awards and were able to refocus their attention on the needs being expressed by grant recipients of the non-emergency programs. The pandemic had broad impact, which included grant recipients from every program, requiring special attention from IMLS program officers in responding to a variety of issues that grant recipients were facing. Due to the widespread closures, grant work was not taking place as originally planned, and this created the need to rework schedules and make requests to program officers for additional time to complete projects. Change requests increased during the pandemic, which meant that IMLS program officers had more of these requests to process and approve. Having contracted support to assist in managing both CARES and ARPA made it feasible for IMLS program officers to manage the increases in the time required to manage the regular, non-emergency grant programs.

**Partnerships.** Both museums and libraries formed new partnerships during the pandemic to expand their reach to diverse communities. Three museums created partnerships with local education departments, collaborating on digital programming, educational lesson planning, and

other special projects such as a documentary about how food service workers fed students during the pandemic. Further, some museums discussed directly working with local Native American Tribes to support continued recovery from the pandemic, whereas other museums partnered with their local municipalities to get input on virtual programming and create an inclusive celebration of the town. At least two other museums developed collaborative networks with other museums, performing arts centers, and libraries to work collaboratively on grants and provide one another with outdoor space for programming that certain partners did not have access to within the community. Half of all grant awards involved some partnership for both libraries and museums in discretionary grant programs.

Other partnerships included partnerships with the following:

- A local hospital used three-dimensional technology to print PPE (clear masks).
- A local HeadStart program provided activities for families with low-incomes.
- A local homeless society supported persons experiencing housing crises and risks resulting from the pandemic.
- A local university identified and recruited college graduates for open positions at the museum.
- A literacy council improved literacy education and maintained student educational gains.
- An economic development department in the Southwest supported economic recovery and community development.
- A library partnership with a historical society in the Southwest helped create a local history archive.
- A museum partnered with a local library to disseminate materials for activity kits.

Overall, discretionary grantees relied on emergency funding to develop new policies, procedures, and partnerships to support their organizations and the broader library, museum, and arts and humanities community. They relied on the ability to continue to operate via IMLS funding to share information, partner with organizations to support further grant writing and vetting, and improve community skills and organizational professional development. Previous sections presented significant challenges, but the funding supported organizations in making strides to survive and recover from the heaviest of the restrictions during the pandemic.

## CARES Act and ARPA Funding

### *How did museums and libraries use funds within their respective locales? How did they introduce new practices or policies to better administer the emergency moneys (e.g., subgrants, hiring new staff, remote-work allowances)?*

Discretionary program officers discussed how museums and libraries introduced new practices or policies to administer the grant funding better. For example, some libraries partnered with schools or civic entities (e.g., faith-based organizations) to address the digital divide, shifting the work and funding between various teams within those organizations. One museum association used funding to create a program that they shared with museums across the State.

In interviews with 14 discretionary grantees, one library noted receiving a subgrant from an SLAA, additional funding from their State, and a discretionary award from IMLS. One museum discretionary grantee shared that they subgranted to 10 sites that were part of a coalition to serve their communities. The museum coalition chose a diverse portfolio that was geographically diverse and in their museum's focus. The subgrantees to this specific discretionary grant included the following:

- A museum of industry in a city in the Mid-Atlantic created an exhibit on school food service workers during the pandemic.
- An art museum in a city in the Mid-Atlantic created gardens with students, primarily students of color.
- A museum in New England worked with immigrant communities from the Caribbean.
- A museum in New England focused on LGBTQ+ history.
- A museum in a city in the Mountain Plains worked with Black communities.
- A museum in the West focused on inclusivity for Indigenous and immigrant communities.
- A museum in the Southeast region focused on abolitionism and the disproportionate incarceration of people of color.

In addition, one program officer noted that several libraries hired new short-term and long-term staff to aid in implementing the CARES Act and ARPA projects. Of the 14 interviewees, five discretionary grantees (two libraries and three museums) reported using the funding to hire new staff, four museum grantees used the funding to keep existing staff, and one library used it to rehire staff who had been let go at the beginning of the pandemic (LaValle, 2021). Beyond hiring staff, two museum grantees described using funding for staff education and training, including diversity, equity, and inclusion efforts. Finally, at the start of the pandemic, remote work became a common outcome for many institutions when possible. Governmental

regulations prevented nonessential personnel from remaining within physical workspaces. During the interviews, three discretionary grantees reported that their organizations transitioned to remote work during the pandemic. However, one library noted that the city manager considered library workers essential, allowing them to continue working in person with safety precautions during most of the pandemic.

These anecdotal stories among program officers and interviewed grantees provide an overview of the impact of funding on hiring and rehiring of staff, but the analysis can examine the prevalence of institutions mentioning these activities within project descriptions (Exhibit 28). Only about 14% of libraries and museums under the CARES Act referred to hiring or retaining staff. However, this number increased to 19% of libraries and 31% of museums under ARPA.

**Exhibit 28. Number of Discretionary Projects That Mentioned Retaining Staff, Hiring Staff, or Converting Staff**

Hiring or staff modification	Office of Library Services		Office of Museum Services	
	Number of awards	Percentage of awards	Number of awards	Percentage of awards
<b>CARES Act</b>				
Adding or retaining staff	4	13.79%	7	14.29%
No mention of adding or retaining staff	25	86.21%	42	85.71%
Total	29	100.00%	49	100.00%
<b>ARPA</b>				
Adding or retaining staff	19	18.81%	79	30.50%
No mention of adding or retaining staff	82	81.19%	180	69.50%
Total	101	100.00%	259	100.00%

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

The use of funding varied widely between museums and libraries, with some using the funds for internal purposes such as adding or rehiring staff and others applying as a collaborative group to affect larger sections of the country through joint applications and subgranting from discretionary grant awards. Remote work also was variable and depended on the jurisdiction; many institutions transferred to fully remote work, whereas others classified workers as essential and remained working on-site with safety precautions.

**What were the distribution trends of the allocations of funds to projects at the national, State, and local levels (total and per capita)?**

An overview of the summary statistics of the per capita State-level distribution of CARES Act and ARPA funding is in Exhibit 29.

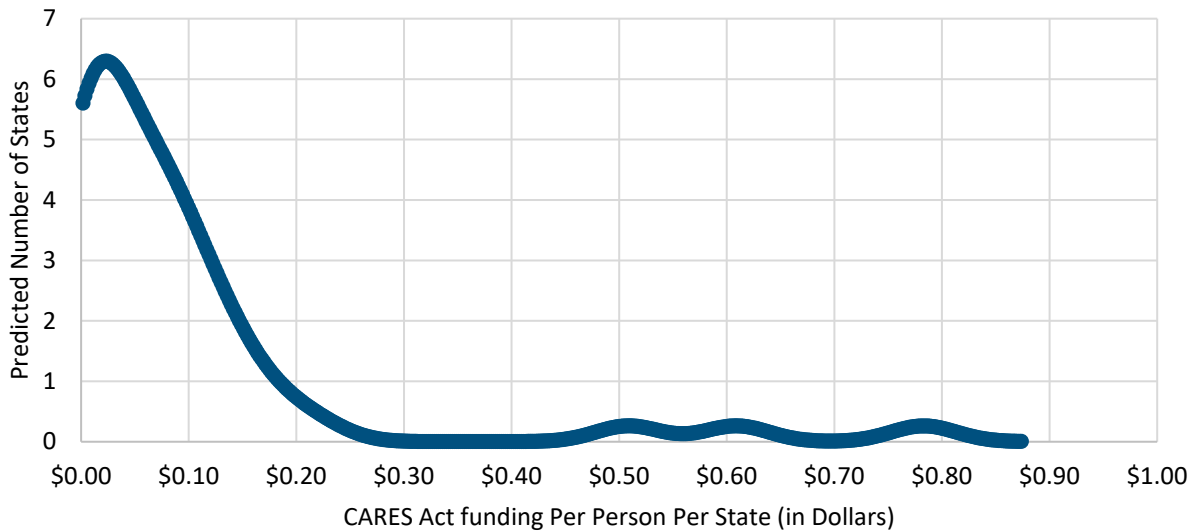
**Exhibit 29. State-Level Per Capita Summary Statistics of Discretionary Awards**

Descriptive statistics	CARES Act	ARPA
Average	\$0.09	\$0.06
Median	\$0.05	\$0.04
Standard deviation	\$0.15	\$0.05
Minimum	\$0.00	\$0.00
Maximum	\$0.78	\$0.25

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

In the CARES Act, the average per capita distribution per State was \$0.09 per person, with a median of \$0.05 per person and a standard deviation of \$0.15 per person. The density plot in Exhibit 30 shows a clear pattern: Most States had per capita funding between \$0.05 and \$0.10 per person, with some States having values as high as approximately \$0.78 per person.

**Exhibit 30. State-Level Density Plot of CARES Act Funding per Person**

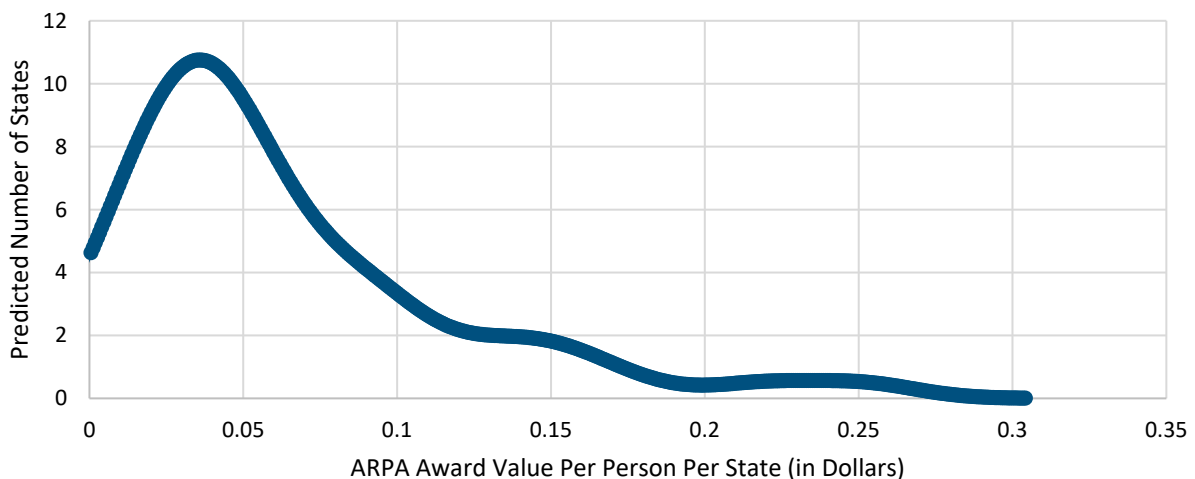


Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act.

Alaska (\$0.78 per person) and Wyoming (\$0.61 per person) had the highest rates of per capita funding from the CARES Act discretionary grant program, followed by the District of Columbia (\$0.51 per person) and Minnesota (\$0.21 per person). No other State received more than \$0.20 per person. However, Connecticut (\$0.18 per person), Oregon (\$0.17 per person), Maryland (\$0.14 per person), Iowa (\$0.14 per person), New Mexico (\$0.13 per person), Mississippi (\$0.12 per person), New Hampshire (\$0.11 per person), Oklahoma (\$0.11 per person), and Tennessee (\$0.10 per person) received greater than \$0.10 per person of per capita funding. In the initial phase of emergency funding, no institutions within 13 States applied for CARES Act funding from IMLS.<sup>33</sup>

The ARPA program witnessed a broader source of applications, with only two States (Hawaii and New Hampshire) having no institutions that applied for funding. It is important to note that no institutions within Hawaii applied for the CARES Act or ARPA discretionary grant programs.<sup>34</sup> Although the CARES Act had higher thresholds for funding—resulting in fewer awards than the ARPA program—the ARPA program issued more awards with a lower overall funding range. On average, each State received \$0.07 per person, with a median of \$0.06 and a standard deviation of \$0.05. Unlike the CARES Act, ARPA appears to have a more normal distribution with similar per capita rates for the average and median (see Exhibit 31). The majority of ARPA per capita funding was primarily between approximately \$0.03 and \$0.08 per person. However, several States received more per person, with a positive skew up to approximately \$0.20 per person.

**Exhibit 31. State-Level ARPA Funding per 100,000 Persons**



Note. ARPA = American Rescue Plan Act.

<sup>33</sup> No institutions within Delaware, Hawaii, Idaho, Kansas, Kentucky, Massachusetts, Montana, North Dakota, South Carolina, South Dakota, Utah, Vermont, and West Virginia applied for discretionary CARES Act funding.

<sup>34</sup> Hawaii had several institutions apply for the Native American and Native Hawaiian grant programs for the CARES Act and ARPA. However, those applications fall outside the scope of this evaluation.

Vermont and New Mexico had the largest per capita discretionary ARPA funding, with \$0.25 per person and \$0.23 per person, respectively. Several other States received per capita discretionary funding greater than \$0.10 per person, including Wyoming (\$0.17), Alaska (\$0.15), Montana (\$0.15), Nebraska (\$0.14), Colorado (\$0.13), the District of Columbia (\$0.12), Delaware (\$0.10), and South Dakota (\$0.10). West Virginia, Utah, South Carolina, and New Jersey received less than \$0.01 per person, representing the exact requested value from the grantees.

Large differences appeared in the per capita distribution between the emergency discretionary grant programs, with the CARES Act having significantly higher funding amounts and fewer awards compared with ARPA. As a result, specific patterns emerged in the national distribution of the CARES Act and ARPA discretionary grant programs. In both programs, much of the funding was centralized in the Mountain Plains and Southwestern States. ARPA had a clearer pattern than the CARES Act because of the more widespread funding allotments. The ARPA distribution showed similar patterns, with most States in the middle of the country receiving a significant amount greater than coastal States, except Vermont and Alaska as outliers.

### ***How were funds used to improve museum and library operations (physical and programmatic)?***

**Did funding improve access to broadband or technologies, such as providing hotspots, parking lot Wi-Fi, or laptop checkouts for their community residents? Were these funds used for activities that may have otherwise been funded through other federal programs, such as E-rate?** Most discretionary program officers acknowledged the need for museum and library operations to be mobile during the pandemic, specifically focusing on community accessibility, availability, affordability, and adaptability. To respond to these needs, program officers reported that funds were spent to purchase and lend devices (laptops, tablets, hotspots), create library self-checkouts, and extend Wi-Fi access to the parking lot and outdoor spaces. Similarly, discretionary grantees emphasized this need and mentioned using funds to expand Wi-Fi access and purchase hotspots and/or devices. One library reported providing these services (expanded Wi-Fi, hotspots, and devices). Still, it noted that the funding came from sources other than IMLS. Similarly, another museum created campuswide Wi-Fi access but was unsure whether the funding came from IMLS directly. Discretionary program officers also reported that some libraries used funds to purchase mobile libraries with Wi-Fi capabilities, further expanding internet access in communities, whereas museums provided students with devices to access their programming. Of the 14 discretionary grantees interviewed, one library reported bringing Wi-Fi-equipped vehicles into the community, and one museum mentioned that museum staff brought hotspots with them when conducting community outreach.



Many awards helped support internet and broadband access across museums and libraries (Exhibit 32). Museums consistently included broadband and internet access as a principal component in 76% of the CARES Act awards and 71% of the ARPA awards. Libraries had a higher focus, with 83% of the CARES Act awards and 72% of the ARPA awards.

**Exhibit 32. Distribution of Discretionary Awards by Program Office, Grant Program, and Focus on Broadband and Internet**

Program office	CARES Act		ARPA	
	Internet and broadband awards	Awards without internet and broadband mentions	Internet and broadband awards	Awards without internet and broadband mentions
Office of Library Services	24 (82.76%)	5 (17.24%)	73 (72.28%)	28 (27.72%)
Office of Museum Services	38 (77.55%)	11 (22.45%)	185 (71.43%)	74 (28.57%)
Offices of Museum and Library Services (collaborations)	11 (100%)	0 (0.00%)	—	—

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

It is important to note that many program officers highlighted a wide lack of capacity from institutions to shift to E-rate during the pandemic. E-rate is a program through the Federal Communications Commission that supports libraries and school districts in receiving affordable broadband access (American Library Association, 2021; Federal Communications Commission, 2024). Grantees reported that given the immediate needs of libraries, they would not be able to apply for E-rate funding because the process would take too long to provide a useful service that would provide broadband access to specific communities. However, those that were already using it continued to do so and used emergency funding for other purposes beyond broadband accessibility. One program officer specifically mentioned that E-rate is not relevant to museums. During the qualitative interviews with grantees, this sentiment was confirmed by the general unawareness of museum grantees of the E-rate program. Similarly, discretionary library grantees agreed with program officers, noting they did not use E-rate because of its restrictions and complicated nature or were unaware of what could be covered by the program. However, one library noted that they were using E-rate to fund their project for Wi-Fi expansion.

A few discretionary grantees were not certain about the origin of some funds because emergency grant funding was combined to make larger purchases in some instances. However, although E-rate may have applied to some libraries, it was not used frequently because of its complicated application and the immediacy of library needs during the pandemic. Nevertheless, the funding, either whole or partly from IMLS, yielded significant increases in technological expansion and greater broadband access within communities.

**Did funding improve the physical safety of buildings through updates such as cleaning protocols or increased accessibility?** Programs using CARES Act funds addressed a variety of safety improvements, including HVAC systems; lockers; contactless services; self-checkout and curbside services; and specific protective equipment, such as masks, PPE, and plexiglass dividers. Among all CARES Act projects, these safety projects accounted for less than 17% of all discretionary awards (30 awards). In the transition to ARPA, discretionary grant recipients focused less on overall safety equipment: Safety equipment appeared in only 11% of the awards (38 awards). Even though less safety equipment was purchased, the acquisition of PPE increased by a factor of two relative to the overall percentage of all projects. Therefore, although a variety of activities such as curbside services were not as essential, the uptick in PPE may indicate changes throughout the pandemic (e.g., an increase in reopening requiring specific personal safety measures to operate). See Exhibit 33 for the full breakdown of the physical safety purchases by discretionary grant program.

Most CARES Act awards with a physical safety component were from libraries with a focus on PPE, bookmobile and mobile libraries, and general cleaning and sanitation. For museums, masks and general cleaning and sanitation were the only focus of physical safety measures. Among the collaboration category, museums and libraries focused on contactless lockers and PPE (two awards and one award, respectively).

In contrast, a larger percentage of awards included PPE components under the ARPA discretionary grant program (13% of libraries and 6% of museums) than under the CARES Act. However, overall discretionary grantees in ARPA used discretionary funding less to procure sanitation services. After the general protective equipment, the next most common expenditure was mobile library supplies for libraries (two awards) and masks and face coverings for museums (two awards).

Overall, museums and libraries within the discretionary grant programs did not rely on the funding for protective safety measures or physical upgrades. Although some did use the funding for these purposes, it is likely that discretionary grantees relied on IMLS funding for specific programming and used other sources of funding to procure safety equipment and other pandemic-related necessities.

**Exhibit 33. Distribution of CARES Act and ARPA Awards Focused on Physical Safety**

Physical safety purchase	CARES Act						ARPA			
	Office of Library Services		Office of Museum Services		Offices of Museum and Library Services (collaborations)		Office of Library Services		Office of Museum Services	
	Number of awards	Percentage of awards	Number of awards	Percentage of awards	Number of awards	Percentage of awards	Number of awards	Percentage of awards	Number of awards	Percentage of awards
PPE	3	10.34%	0	0.00%	1	9.09%	13	12.87%	15	5.79%
Contactless lockers	1	3.45%	0	0.00%	2	18.18%	1	0.99%	0	0.00%
Sanitization wipes	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Bookmobile/mobile library	2	6.90%	0	0.00%	0	0.00%	3	2.97%	0	0.00%
Contactless checkout/ purchasing	0	0.00%	0	0.00%	0	0.00%	1	0.99%	0	0.00%
Self-checkout/ purchasing	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Curbside checkout/ pickup	1	3.45%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Masks/face coverings	0	0.00%	1	2.04%	0	0.00%	1	0.99%	2	0.77%
HVAC	1	3.45%	0	0.00%	0	0.00%	1	0.99%	0	0.00%
Plexiglass/safety dividers	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Modular furniture	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Air purifier	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Hand sanitizer	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
General cleaning and sanitization	2	6.90%	2	4.08%	0	0.00%	0	0.00%	1	0.39%
Nonphysical safety	19	65.52%	46	93.88%	8	72.73%	81	80.20%	241	93.05%
<b>Total</b>	<b>29</b>	<b>100%</b>	<b>49</b>	<b>100%</b>	<b>11</b>	<b>100%</b>	<b>101</b>	<b>100%</b>	<b>259</b>	<b>100%</b>

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act; PPE = personal protective equipment; HVAC = heating, ventilation, and air conditioning.

**Did funding for external services, such as mobile museums, bookmobiles, or delivery, improve access to museums, libraries, and their assets?** Discretionary program officers reported that grantees used funding to expand their reach to communities beyond physical spaces, particularly through mobile libraries or bookmobiles, curbside service, book delivery, and outdoor programming. However, vehicle purchase was not common for discretionary grantees, given their other operational needs and major delays in acquisition because of supply chain issues for vehicle manufacturers. Only two vehicles were purchased for outreach and access to vulnerable populations under the CARES Act, and only one vehicle was purchased under ARPA.

Of the discretionary grantees interviewed, only one library purchased a vehicle equipped with Wi-Fi<sup>35</sup> and traveled to parks and other public areas to provide community members with internet access and a space to check out internet devices. Another library receiving discretionary funds noted that they provided book delivery during the early days of the pandemic using these funds but did not specify if they used IMLS funding to purchase the vehicle, if it was purchased with another source, or if the library already owned the vehicle. Vehicles were not a common discretionary expense because of the long-term expenses of the vehicles.

As a more efficient way to reach more communities, libraries and museums allocated funds to digitize resources, making them accessible online from anywhere in the world. Many libraries purchased Wi-Fi hotspots to allow more community members to connect to library catalogs and other resources. At the same time, some museums made mobile museums and provided outdoor spaces for community-focused programming. Overall, digitization and internet access remained the highest attributes of discretionary expenditures, with vehicles not being a significant purchase (Exhibit 34).

#### Exhibit 34. Vehicle Purchase Purposes for Discretionary Grantees

Vehicle purchase purpose	CARES Act		ARPA	
	Count of projects	Percentage of projects	Count of projects	Percentage of projects
Outreach	1	1.16%	1	0.28%
Rural areas	0	0.00%	0	0.00%
Community locations	0	0.00%	0	0.00%
Mobile library	0	0.00%	0	0.00%
Vulnerable populations	1	1.16%	0	0.00%
Mobile Wi-Fi	0	0.00%	0	0.00%
No vehicle purchase	87	97.68%	359	99.72%
<b>Total</b>	<b>89</b>	<b>100%</b>	<b>360</b>	<b>100%</b>

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>35</sup> One discretionary grantee mentioned purchasing a vehicle for Wi-Fi, but this was not expressly stated in the grant reports. The vehicle's primary purpose may not have been for Wi-Fi expansion but for another purpose that also included Wi-Fi.

***How did collections management, practices, and policies change with CARES Act and ARPA funds? Did access expand or shrink permanently or temporarily with a given audience because of digitization efforts?***

All discretionary program officers noted that the pandemic increased awareness of and the need for digital materials at libraries, such as eBooks and audiobooks, and digital programming at both libraries and museums. Often, these digitization projects were in addition to other services. One program officer discussed the importance of patrons' awareness of those materials, whereas another noted that increased internet connectivity was essential to provide access. Digital resources and programming were especially important; one program officer recalled that early in the pandemic, people worried that the COVID-19 virus could be spread through materials and on surfaces, limiting the feasibility of loaning physical books.

Two of the eight museum grantees interviewed said that their awards focused on digitizing their collections. The other six reported focusing more on programming, with some stating that they were noncollecting museums and, therefore, did not have specific collections that would necessitate digitization. Of the six library grantees interviewed, three reported purchasing eBooks, two mentioned purchasing physical books, and one stated that their collections management process did not change. One of the library grantees was a regional library that purchased eBook access for all libraries in their region. However, that access did not continue beyond the end of the grant funding.

Overall, discretionary grantees expanded various programming and digitization efforts during the pandemic. Most of the digitization efforts, when these did not involve a subscription, changed the policies and practices of the organization. However, additional digitized collections that involved a subscription-based model, such as access to eBooks, did not continue. Although the interviews did not contain specific evidence, it is possible that institutions found that either they did not have the funding to cover the subscriptions or they did not want to spend funding on these new programs.

***How did in-person programs and services change with the use of CARES Act and ARPA funds? In transitioning partly or fully to virtual services, how did these benefits vary across different population groups?***

Discretionary program officers discussed the importance of and priority for virtual programming for museums and libraries at the beginning of the pandemic. Because patrons could not congregate indoors given government regulations, virtual programming allowed them to safely engage with museums, libraries, and other community members. For example, program officers shared the popularity of transitioning story time to a virtual format for children and families. In addition, program officers supporting museums noted the successful

and well-received transition to virtual programming for schools and families. Furthermore, six of the eight museum discretionary grantees interviewed described using funding to expand virtual programming during the pandemic, in some cases requiring the hiring of staff with associated expertise.

In addition to virtual programming, one museum and one library grantee discussed implementing socially distanced activities to allow for and foster connection with their constituents during the pandemic. For example, the library offered grab-and-go art kits for families, and the museum shared activities that did not require many resources or digital access via postcards and newspaper advertisements.

One discretionary program officer noted that the CARES Act and ARPA funding for increasing access to internet connectivity and devices specifically benefited historically underserved communities. Even though many patrons took advantage of these opportunities, one program officer highlighted people of advanced age as being particularly affected because they had difficulties accessing and using virtual programming and digital devices. Although this issue might have been a challenge for some locations, one library grantee reported that their funded digital literacy training and other virtual options, which included those from an older generation, were well attended. Another museum grantee noted the positive survey feedback from older patrons who appreciated the opportunity to learn and engage virtually.

In contrast, two library discretionary grantees noted that their libraries returned to in-person programming as quickly as possible and primarily maintained this type of programming. Some people prefer in-person programming, but one museum discretionary grantee stated that all their in-person programs remain paired with virtual programs, allowing patrons to choose how and when to participate and engage with content. The hybrid model permanently increased access for populations with mobility or health-related issues and allowed them to participate in events without physical presence.

## **Sustainability**

### ***What kinds of funded activities occurred only during the pandemic and concluded with the end of the emergency and project awards?***

Discretionary program officers stated that many funded activities occurring during the pandemic ceased after funding, particularly those associated with pandemic-related measures. For example, enhanced sanitization procedures, crisis-related training, and loaning of laptops ceased at the conclusion of funding or when the technology was no longer available because of a lack of funding to sustain these operations. In addition, some museums created digital field trips, which are unlikely to continue without supplemental funding. Finally, some museums and

libraries created community manager positions with the additional funds, but it is unclear whether that role will be sustained.

Other one-off purchase technologies (e.g., Wi-Fi hotspots) continue to benefit grantees and their communities. For example, a crisis and trauma management toolkit developed by a historical commission will continue to be used and disseminated because it does not require funds for its maintenance. Nevertheless, a lack of funding may not allow for regular updates to the toolkit to remain culturally responsive and reflect current circumstances.

Of the activities that ceased with the end of emergency funding, three discretionary library grantees reported staffing as the most common, followed by the procurement of eBooks. In addition, library grantees mentioned the conclusion of one nonspecific program, one virtual program, a digital literacy program, and a community-focused program. One library mentioned that staffing reduction was the reason for activity cessation.

Similarly, museum discretionary grantees reported reducing or concluding certain programs, such as transcription services. Although one grantee stated that they were continuing to digitize museum collections, they would not continue to pay for the transcription of written museum collections. Other museums stopped purchasing PPE, and one museum reported concluding a consulting services agreement for evaluating the museum's services, which was funded with discretionary award money.

Overall, many discretionary grantees reported the conclusion of programming upon the full expenditure of funds and ending of funding cycles created by a lack of available funding and a reduction in the need related to pandemic restrictions. For example, many discretionary grantees mentioned the reduction or cessation of virtual programming and/or programming created to meet specific pandemic-related needs.

### ***What kinds of funded activities occurred during the pandemic that will continue without additional funds from IMLS?***

Discretionary program officers suggested that funded activities have continued. For example, they specifically discussed the digitization of collections, some virtual programming, and the expansion of the digital navigator program. Further, most grantees have continued to use new technological equipment, such as lockers and hotspots, because it was a one-time cost. Unlike program officers who supported OLS-G2S, discretionary program officers did not mention the monthly costs of subscription to hotspots as a barrier to sustainability.

Specifically, nine discretionary grantees stated that certain programming would continue without additional funds, with two stating that all programming would continue. Library



grantees mentioned continuing an awards program, community-oriented events and programming, school- and education-focused programming,<sup>36</sup> funding for daycares, and funding to sustain vehicles. Grantees described additional funding sources for certain services from the State and other forms of grant funding. In addition, one museum grantee stated that they would continue to archive information on their website about exhibitions and collections (i.e., gallery guides) to serve as a resource for those researching art history, a project IMLS initially funded. Another museum mentioned that a separate foundation would provide funding to continue previously grant-funded programming that the institution would otherwise not fund.

The contrasting answers between discretionary grantees of certain programs continuing or concluding represent the broad nature of discretionary grantees and their use of funding.

***What kinds of funded activities emerged during the pandemic that advanced promising practices, policies, and activities as museums, libraries, and IMLS transitioned out of an emergency and resumed normal operations or that can inform the next emergency plan and response?***

Program officers cited a variety of activities that advanced promising practices, including an increased focus on equity and cultural competency, virtual reality spaces for teens, a growing understanding of the use of recorded versus live programming, and the development of online curriculum/pedagogy. Specifically related to equity and cultural competency, program officers witnessed an increase in conducting community needs assessments and designing programs with those needs in mind, such as planning for the barriers of online learning for some children.

In addition, program officers mentioned several practices as important to inform future emergency response, such as expanded library services for patrons' differing levels of comfort (e.g., offering masks to staff but making them optional) and libraries serving as hubs for resources to help disseminate information to communities (e.g., health information). Another program officer mentioned that the education enterprise—whether online or hybrid—is an ongoing project of IMLS learning, and the ability to shift to a virtual model as needed is necessary. In their responses, program officers also noted research and training gaps that need addressing to improve the readiness of libraries and museums to respond to future emergencies. One program officer specifically mentioned a need for more research and evaluation within IMLS to understand whether digital collections and programming are accessible to high-need communities. This research would improve IMLS's ability to fund projects that have shown a direct impact. Another program officer mentioned a need for more

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<sup>36</sup> Discretionary grantees differentiated school as coming directly from a local district, such that "education focused" referred to educational activities that were separate from formal education.

project management training for grantees to allow libraries and museums to apply to other funding sources and be more efficient with programming.

Discretionary grantees provided limited responses to this question: three museums and libraries reported the implementation of remote work that allowed them to continue operations and identify new methods of programming during the pandemic. One museum and one library also reported the transition to digital content as the most promising for future emergencies.

Other key shifts in practices or policies to prepare for the next emergency included the following:

- A changed mindset and the creation and maintenance of new relationships developed during the pandemic (museum)
- A focus on the digital delivery of content and the transition to virtual programming (museum)
- The development and operationalization of a diversity, equity, and inclusion plan (library)
- The ability to plan and prepare for a pandemic's unpredictable outcome (museum)
- The expansion of virtual programming and the translation of all program materials and exhibition labels into Spanish (museum)

Discretionary grantees described several significant shifts in operations and policies while experiencing significant challenges during the lockdown. However, each institution innovated solutions to overcome these challenges and continue their work beyond a physical location, commonly highlighting virtual programming, online engagement, and the digitization of collections and resources.

## Equity

### ***What was the distribution of CARES Act and ARPA funds across economic indicators, broadband access/adoption, and alignment to the requirements of each NOFO?***

The CARES Act Notice of Funding Opportunity (NOFO) identified specific demographic criteria as critical to the success of the CARES Act discretionary grant program, including county-level poverty, broadband access and utilization, unemployment, and SNAP qualification and utilization. Specifically, the NOFO requested that applicants justify their project needs based on these characteristics and referred them to the U.S. Census Bureau for community data and statistics.

Internally, IMLS leadership instructed the ORE to develop a workbook for IMLS discretionary program officers that contained these metrics at the county level. IMLS intended the workbook to improve data-driven decision making and operational procedures for its CARES Act

discretionary grants. During interviews with IMLS staff related to this workbook, several notable discussions existed concerning its development. Staff suggested that the mandate to create the workbook or tool came directly from the Office of the Director to combine data-driven decision making with the subject matter expertise of program officers.<sup>37</sup> During staff interviews, the interviewer asked about the level of integration and collaboration between the staff creating the workbook and the program officers who would use the workbook. Interviewees stated that they believed the director was working directly with program offices. As a result, the staff developing the workbook had little direct contact with program officers who would use the tool for decision making. Instead, the engagement occurred only after launching the tool, including training and informational sessions with program officers. At least one respondent wished they had more time to engage program officers. However, due to the emergency nature of the CARES Act and ARPA grant programs, IMLS had to prioritize established procedures and thus did not have the opportunity to experiment with the new tools.

Once the workbook was completed, respondents who created the tool stated that it was originally intended to be an internal tool, not a resource for applicants to support their applications. However, several factors prevented its full implementation in the grant-making process:

- Program officers did not know how to use it to support decision making. For example, was it strictly designed for IMLS staff, panelists, and reviewers in judging submitted applications, or were applicants supposed to use the data too?
- Some program officers felt it was intended to remove discretionary decision making for purely demographic factors that would not directly equate to an organization’s clientele. This factor was especially true for museums that attract more than local guests. For example, a National World War 2 Museum based in New Orleans, Louisiana, is not only for residents in that community but attracts visitors from across the United States. Therefore, localized, county-level measures may not reflect the organization’s status or level of need.

As a result, the tool was released to the public as an Excel workbook to support applicants in justifying their applications based on specific sociodemographic characteristics from their communities related to the requirements in the CARES Act NOFO. In assessing the alignment of applicant characteristics to county-level poverty, broadband access and utilization, unemployment, and SNAP qualification and utilization, no statistical relationship existed between any of the four variables for awarded and not-awarded applications (see Exhibit 35).

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<sup>37</sup> There was some disagreement about the terminology of “tool” or “workbook.” Each respondent understood the item differently, and, thus, the interviewers used the two terms interchangeably during interviews. As such, the term is used interchangeably to refer to the product ORE created to support program officer decision making.

Across awarded and not-awarded applicants, rates did not vary significantly. The average and median poverty level was between 13.0% and 14.0%, with approximately 83.0% of the population with broadband access and utilization, 3.5% of the population unemployed, and 11% of the population on SNAP or other public assistance. Therefore, these factors do not appear to significantly impact IMLS decision making when awarding applications in the CARES Act discretionary grant program. However, these values are so similar across applicant types that it is unlikely any data-driven metric may have yielded sufficiently different results to create a statistical relationship with sufficient strength to be reliable.

Because there was no statistical relationship, a further analysis looked to see if the CARES Act received different applicants compared with other grant programs. A similar analysis occurred on non-emergency funding. The results were similar, with no numeric difference between awarded and unawarded applications (in fact, the numbers were similar to the CARES Act as well). However, the non-emergency funding programs were statistically significant given the high number of awards and applications relative to the CARES Act. Although the non-emergency awards and applications are statistically significant, an analysis of the results may show that such a relationship has little strength and is caused by the large number of cases and the slight differences between the two groups.

IMLS attempted to integrate data-driven decision making through the workbook/tool, but there appears to be no statistically significant effect on award rates in the CARES Act discretionary grant program. Further, it does not appear that CARES Act applicants were statistically different from “traditional applicants” (i.e., those who applied for non-emergency funding). From interview data and anecdotal discussions, this tool was developed with the correct intentions but lacked sufficient operational engagement, decreasing its use in a meaningful way.

**Exhibit 35. Demographic Characteristics of Counties of Applicants From CARES Act Discretionary Grant Program**

Characteristic	CARES Act			Non-Emergency		
	Awarded, N = 84	Not awarded, N = 1,556	p-value <sup>a</sup>	Awarded, N = 3,299	Not awarded, N = 4,540	p-value <sup>a</sup>
<b>County-level poverty percentage</b>			<b>0.49</b>			<b>&lt;0.001</b>
Mean (Range)	0.15 (0.05–0.41)	0.14 (0.03–0.54)		0.15 (0.05–0.54)	0.14 (0.03–0.54)	
Median (IQR)	0.14 (0.11–0.18)	0.14 (0.10–0.17)		0.14 (0.10–0.18)	0.14 (0.10–0.17)	
<b>County-level percentage of population with broadband internet</b>			<b>0.77</b>			<b>&lt;0.001</b>
Mean (Range)	0.82 (0.55–0.94)	0.83 (0.43–0.95)		0.82 (0.43–0.95)	0.83 (0.43–0.96)	
Median (IQR)	0.84 (0.78–0.88)	0.84 (0.80–0.87)		0.84 (0.78–0.87)	0.84 (0.81–0.88)	
<b>County-level unemployment percentage</b>			<b>0.069</b>			<b>0.008</b>
Mean (Range)	0.037 (0.019–0.111)	0.035 (0.008–0.111)		0.036 (0.008–0.143)	0.035 (0.011–0.114)	
Median (IQR)	0.035 (0.029–0.042)	0.033 (0.028–0.039)		0.034 (0.028–0.040)	0.033 (0.028–0.040)	
<b>County-level SNAP/assistance use percentage</b>			<b>0.30</b>			<b>&lt;0.001</b>
Mean (Range)	0.13 (0.02–0.34)	0.12 (0.02–0.49)		0.12 (0.01–0.49)	0.12 (0.01–0.53)	
Median (IQR)	0.12 (0.08–0.15)	0.11 (0.08–0.15)		0.12 (0.08–0.15)	0.11 (0.08–0.14)	

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; IQR = interquartile range; SNAP = Supplementary Nutrition Assistance Program.

<sup>a</sup> Wilcoxon rank sum test.

Because the results did not include a direct relationship between awarded and unawarded applications based on local (county-level) demographics, the analysis included further analyses to determine how the awarded applications and unawarded applications aligned to other aspects of the CARES Act NOFO. This analysis relied on identifying bigrams—or pairs of two consecutive words—within the project descriptions.<sup>38</sup> These relationships displayed the most common phrases within the description across projects, identifying the focus of each application.

Across the CARES Act awards, several patterns emerged in common phrases, including mental health (used 24.8 percentage points [pp] more in awarded than unawarded applications), digital literacy (used 12.7 pp more in awarded than unawarded applications), social distancing (used 14.1 pp more in awarded than unawarded applications), digital resources (used 13 pp more in awarded than unawarded applications), and lending program (used 16.7 pp more in awarded than unawarded applications).

Among OMS-funded applications, the most common phrases included digital divide (used in 10.2 pp of awarded applications), community members (used in 10.2 pp of awarded applications), and digital resources (used in 8.2 pp of awarded applications). Although the percentages are significantly smaller related to overall award percentages, there is still a focus on the digital divide (used 6.2 pp more in awarded than unawarded applications) and digital resources (used 1.2 pp more in awarded than unawarded applications). This significant differential indicates the perspective of how museums and libraries sought to use the funding.

Overall, IMLS focused its award process on the specific goals of the CARES Act NOFO, improving broadband access, closing the digital divide, and improving outcomes for people throughout the pandemic. Although these goals did not correlate with targeting locations based on socioeconomic factors, they did target the activities most beneficial to the NOFO (Exhibit 36).

**Exhibit 36. Bigrams of Discretionary CARES Act Awards and Unawarded Applications**

Two-word grouping	Office of Library Services			Office of Museum Services		
	Unawarded	Awarded	Percentage point difference	Unawarded	Awarded	Percentage point difference
internet access	26.5%	44.8%	18.4	4.7%	6.1%	1.4
digital divide	15.8%	41.4%	25.5	4%	10.2%	6.2
mental health	2.8%	27.6%	24.8	2%	2%	0
digital literacy	14.9%	27.6%	12.7	2.9%	0%	-2.9

<sup>38</sup> Initial models included looking at word counts (single words), trigrams (three-word series), and quadgrams (four-word series). The bigrams led to the most descriptive information that did not appear to overlap multiple sentences or were not intelligible with the removal of specific stop words (or filler words in the English language, such as “the,” “of,” and “then”).

Two-word grouping	Office of Library Services			Office of Museum Services		
	Unawarded	Awarded	Percentage point difference	Unawarded	Awarded	Percentage point difference
social distancing	10%	24.1%	14.1	9.3%	4.1%	-5.2
digital resources	7.7%	20.7%	13	6.5%	8.2%	1.6
lending program	4%	20.7%	16.7	0.1%	0%	-0.1
digital access	5.1%	13.8%	8.7	5.7%	0%	-5.7
workforce development	3.4%	13.8%	10.4	0.2%	0%	-0.2
hotspot lending	1.4%	10.3%	9	0.1%	0%	-0.1
community members	13.9%	3.4%	-10.4	5.8%	10.2%	4.4
remote learning	6.5%	3.4%	-3	4.8%	8.2%	3.4
digital inclusion	2.8%	3.4%	0.7	1.8%	4.1%	2.2
internet service	3.2%	3.4%	0.2	0.7%	2%	1.3
patron needs	0.1%	0%	-0.1	0%	2%	2
digital service	2.3%	0%	-2.3	0.2%	0%	-0.2
internet providers	0.1%	0%	-0.1	0.1%	0%	-0.1
adult education	0.5%	0%	-0.5	0.3%	0%	-0.3
access reliable	0.9%	0%	-0.9	0.3%	0%	-0.3
term solution	0.3%	0%	-0.3	0%	0%	0
without devices	0.3%	0%	-0.3	0.1%	0%	-0.1
access literacy	0.8%	0%	-0.8	0.1%	0%	-0.1
current service	0%	0%	0	0%	0%	0
service unit	0%	0%	0	0%	0%	0

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act.

## Lessons Learned

### ***What types of outcomes, such as those associated with information access, information literacy, and civic discourse, are attributable to the emergency discretionary grant funding for museums and libraries?***

Throughout the pandemic, museums and libraries focused on disseminating and providing access to information and opportunities for communities to connect. The first analytical method tried to examine how emergency discretionary grant programs aligned to topics of information access, information literacy, and civic discourse using a keyword-based search.



However, this analysis did not yield sufficient information to provide enough information to classify the awards properly. Therefore, the research team turned to a machine learning model called zero-shot classification—a machine learning and natural language process that leverages pretrained models that otherwise do not appear within the data and the model relies on preexisting training data (Hugging Face, 2023; Yin et al., 2019). However, the textual data may or may not contain this information, thus relying on user input providing the model with information about what to find within the text.

Our analysis specifically used the BART machine learning model. BART is a “denoising autoencoder for pretraining sequence-to-sequence models” (Lewis et al., 2019). The machine learning model takes training data (e.g., definitions for terms), analyzes textual data (e.g., project abstracts, descriptions), and determines the probability that such text aligns to the learning criteria the user provides to the model (Hugging Face, 2022; Papers with Code, n.d.). After feeding the project descriptions and information into the model, the model outputs a probability value from zero to one, indicating the likelihood that a project includes outcomes for information access, information literacy, and civic discourse by comparing these terms with the text. For the analysis, a binary indicator determined whether each award aligned to these categories when the machine learning model had a 75% likelihood that the description aligns to the specific outcome. Exhibit 37 displays the outcome of this model.

**Exhibit 37. Discretionary Award Outcomes for Civic Discourse, Information Access, and Information Literacy**

Emergency grant program	Civic discourse awards		Information access awards		Information literacy awards	
	Number of awards <sup>a</sup>	Percentage of awards <sup>a</sup>	Number of awards	Percentage of awards	Number of awards	Percentage of awards
<b>Office of Museum Services</b>						
CARES Act	20	40.82%	41	83.67%	34	69.39%
ARPA	150	57.92%	195	75.29%	138	53.28%
<b>Office of Library Services</b>						
CARES Act	10	34.48%	29	100.00%	22	75.86%
ARPA	36	35.64%	84	83.17%	50	49.50%
<b>Offices of Museum and Library Services (collaborations)</b>						
CARES Act	2	18.18%	11	100.00%	11	100.00%

*Note.* CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>a</sup>The machine learning model overclassified civic discourse because the model could not distinguish between things that happened in the community and things intended to engage the community collectively.

For the CARES Act and ARPA discretionary grant programs, as shown in Exhibit 37, museums had a higher proportion of awards that focused on civic discourse (approximately 40% in the CARES Act and 58% in ARPA). In comparison, the percentage of awards that focused on civic discourse was approximately 35% in the CARES Act and in ARPA for libraries and less than 20% in the CARES Act for the collaboration category.

One interesting factor is that, although civic discourse has some unique differences between libraries and museums, information access remained a top priority among both libraries and museums. For museums, 84% of CARES Act awards and 75% of ARPA awards were classified as information access. For libraries, this number increased to 100% of CARES Act awards and 83% of ARPA awards. The collaboration category also is 100% represented in the CARES Act.

The last outcome was information literacy. There is still a high representation for museums in this category, with 65% of CARES Act awards and 53% of ARPA awards. However, libraries are much different in that 75% of CARES Act awards focused on information literacy, whereas only 50% of ARPA awards focused on this category. This shift is caused by ongoing changes in the pandemic and the needs of individual institutions as the pandemic progressed.

***What impact did the constraints of a national emergency have on the ability of IMLS staff to distribute the money quickly to help respond to the emergency needs of museums and libraries?***

Given the emergency nature of CARES Act and ARPA grant funding, IMLS had to quickly respond to the legislation in addition to its active grant portfolio. Therefore, it is important to consider the impact that these two grant programs had on IMLS operations. When the NOFO for the CARES Act was first announced, the application period lasted 35 days, whereas ARPA's application period was 33 days, a reduction of 5.71%. However, on average, CARES Act applicants submitted their applications only 9 hours prior to the deadline, whereas ARPA applicants submitted their applications 26 hours prior to the deadline, an increase of 189.64%. Thus, although ARPA applicants had less time, they were significantly more prepared to submit the application than during the CARES Act. From the time of NOFO release to issuing an award, IMLS took an average of 210 days for the CARES Act grant program and an average of 148 days for the ARPA grant program, a reduction of 29.73%. Overall, IMLS significantly reduced its time to process applications and issue awards, resulting in a time savings of 34.04% from the CARES Act to ARPA. It is important to note that this reduction in time may be a result of IMLS and applicants becoming accustomed to the emergency and its related regulations. However, it also is possible that the decreased number of applications for ARPA allowed IMLS to act more quickly, as shown in Exhibit 38.

### Exhibit 38. Average Time Between NOFO Release, Submission, Due Date, and Award

Grant program	Available submission time <sup>a</sup>	Time from NOFO release to award <sup>a</sup>	Time from NOFO release to submission <sup>a</sup>	Time from application to award	Time from submission to due date
<b>CARES Act and ARPA</b>					
CARES	35 days	210 days	34 days, 14 hours	176 days	9 hours
ARPA	33 days	148 days	31 days, 21 hours	116 days	26 hours
Percentage change	-5.71%	-29.73%	-7.85%	-34.04%	189.64%
<b>Comparison table</b>					
Non-emergency funding	—	—	—	106 days	71 hours
CARES Act and ARPA combined	34 days	179 days	33 days, 6 hours	146 days	17 hours
Percentage change	—	—	—	37.73%	-76.06%

*Note.* All values represent averages across all time frames. NOFO = Notice of Funding Opportunity; CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>a</sup> This information is not listed within the Electronic Grants Management System (eGMS) and would require manual scraping of all NOFOs from 2018 forward, which falls outside the scope and available time for this evaluation.

Discretionary program officers emphasized the immense burden that the CARES Act discretionary grant program put on IMLS staff, describing IMLS as a small agency with nimble staff already playing multiple roles. Specifically, IMLS staff had to manage the existing timeline for discretionary programs plus the urgent timeline of the CARES Act grant program without hiring additional staff. As one program officer explained, reviewing applications for the CARES Act had to be completed in 7 weeks instead of the usual 7 months for other discretionary funding.

Even though the process occurred much faster, according to eGMS, the timelines paint a slightly different picture. On average, CARES Act and ARPA awards took 146 days from submission to award, whereas all other grant programs took 106 days. Therefore, IMLS spent 37% more time to make a decision in CARES Act and ARPA than other grant programs. In addition, emergency funding was much slower in terms of applicant submission. Applicants for non-emergency funding, on average, submitted applications 71 hours prior to the closing deadline, whereas emergency funding applicants submitted, on average, only 17 hours prior to the deadline. Non-emergency funding applicants were 305.13% faster, on average, than emergency funding applicants.

With a faster timeline and insufficient capacity, program officers noted that IMLS did not have enough staff to review the many applications received, resulting in many staff members

working overtime. Although program officers said they had support from leadership in obtaining contractor assistance, the CARES Act grant process was already advanced when the contractors were contracted and trained. Nonetheless, some program officers noted that contractors helped make the process of CARES Act administration smoother. A few program officers also argued that the lack of time to review grant applications and budgets closely and the push to distribute funds quickly led to some rushed decisions in the CARES Act distribution process.

Discretionary program officers agreed that IMLS learned from their experience with the CARES Act grant program and applied lessons to improve ARPA funds distribution. However, although ARPA had fewer applicants because of the program's structure, IMLS brought in a temporary project manager and dedicated ARPA program officers to oversee it. It is important to note that IMLS staff still played a significant role in reviewing ARPA applications and providing training and quality assurance to contractors.

### ***How did the funds help museums and libraries maintain economic stability throughout the pandemic?***

Most discretionary grantees and program officers reported that the CARES Act and ARPA funding supported institutions' economic stability throughout the pandemic, by allowing them to retain staff to avoid furloughs. Several grantees even used the opportunity to transition part-time staff to full-time staff or, in another instance, to hire staff to support the transition to virtual programming. Several others reported that the funds sustained their economic stability by allowing them to make important pandemic-related purchases, such as Wi-Fi infrastructure, expenditures that would normally come from the recipient's existing budget.

Overall, the ability to continue paying existing staff and to hire staff in some instances was imperative for grantees because many other institutions and the rest of the country experienced furloughs or layoffs. Specifically, the CARES Act and ARPA funding allowed organizations to continue conducting programs and community outreach while paying their staff instead of prioritizing one over the other.

### ***How well were museums and libraries able to use funds to address pandemic-related needs?***

In general, program officers believed that grantees well used funds to meet pandemic-related needs. Program officers highlighted using funds to increase remote access to collections, which is now a stable part of library and museum services. Program officers also noted that the flexibility of IMLS funding allowed libraries and museums to develop creative solutions unique

to communities and their needs. In addition, several grantees used funds to invest in their staff through professional development and diversity, equity, and inclusion training. However, some program officers believe IMLS is still a few years away from knowing what is most impactful for libraries and museums. They argue that they should devote more resources to evaluating the impact of the awards.

Similarly, discretionary grantees reported that they could easily use CARES Act and ARPA funds to improve their library or museum and to specifically pursue innovative programming to address pandemic-related needs in their communities, particularly for vulnerable populations. For example, several museums used funding to create educational programming for children and families without internet access, such as mailing activities tailored to a specific population.

In conclusion, both museums and libraries used the funds to adapt quickly to meet the pandemic-related needs of both their institutions and their communities through innovative programming.

***Did CARES Act and ARPA funds increase awareness of the IMLS brand and its discretionary grant programs for museums and libraries at the fieldwide and community level? How important was this?***

IMLS has a long history of grantmaking in the library and museum fields, awarding grants to both institutions regularly. Therefore, IMLS is a well-known entity within the library and museum field that distributes grant funding. In determining the overall awareness of the IMLS brand for discretionary grants, a few different methodologies were used, including reviewing the applicant's status at the time of application (new or returning), qualitative interviews with program officers, and qualitative interviews with grantees.

In fiscal year 2018 (October 1, 2018, to September 30, 2019), as shown in Exhibit 39, 25% of all applicants applied for discretionary grant funds for the first time before the distribution of emergency funding. During the first wave of discretionary emergency funding (CARES Act), of the 2,096 applicants, 35% were applying for the first time. Shortly thereafter, only 24% of the applicants were new to the ARPA grant program. During the same time frame as the CARES Act and ARPA grant programs, all other discretionary programs saw a new applicant rate of only 22%. Although the new applicant rate increased dramatically from fiscal year 2018 to CARES Act funding and dipped during ARPA funding, the new applicant rate for other programs was 3% lower than the levels prior to the pandemic.

In examining the transition of applicants from the CARES Act to ARPA, 44 applicants that applied for the first time in the CARES Act also applied for the ARPA grant program, totaling approximately

7% of the total number of ARPA applicants. As of November 2023, seven of those 44 applicants have applied for more funding through IMLS beyond the CARES Act and ARPA funding.

After the emergency grant programs, the new applicant rate for fiscal years 2022 and 2023 was 22%, lower than the rate of 25% prior to the pandemic and 6% lower than the overall new applicant rate of 26% (fiscal years 2018 through 2023).

### Exhibit 39. Application Retention and Status

Characteristic	Other (FY 2018–19) N = 2,076 <sup>a</sup>	CARES Act N = 2,096 <sup>a</sup>	ARPA N = 630 <sup>a</sup>	Other (FY 2020–21) N = 2,262 <sup>a</sup>	Other (FY 2022–23) N = 2,087 <sup>a</sup>	p-value <sup>b</sup>	Overall N = 9,151 <sup>a</sup>
<b>Applicant status</b>						<b>&lt;0.001</b>	
New applicant	516 (25%)	724 (35%)	150 (24%)	498 (22%)	463 (22%)		2,351 (26%)
Returning applicant	1,560 (75%)	1,372 (65%)	480 (76%)	1,764 (78%)	1,624 (78%)		6,800 (74%)

Note. FY = fiscal year; CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

<sup>a</sup> n (%). <sup>b</sup> Pearson’s chi-squared tests.

Discretionary program officers believed that CARES Act and ARPA funding increased awareness of the IMLS brand at the field level, particularly among small and rural libraries. Specifically, they noted that a few first-time IMLS grantees obtained funding through the CARES Act and ARPA, which is usually difficult for smaller institutions because of the staff capacity to write grants. Program officers emphasized that being awarded CARES Act or ARPA funding may have increased the confidence of smaller institutions to apply for other IMLS funding because they noticed that some recent applicants to the discretionary program were earlier CARES Act and/or ARPA applicants who had not previously applied for any other IMLS funding.

On the other hand, both discretionary and formula funding program officers stated that ARPA funding flowed through many different agencies, which may have created confusion and tainted the IMLS brand. Specifically, because ARPA funding had a shorter timeline and greater restrictions, some libraries were afraid to apply, fearing that it would jeopardize their ability to get ARPA funding from different agencies with longer timelines and fewer requirements.

Discretionary grantees agreed that because of the ARPA and CARES Act funds, awareness of the IMLS brand increased for themselves and other fund recipients, helping them view IMLS as a supportive entity and “on their side” during a challenging period. However, in agreement with program officers, grantees did not think that the funds and resultant services, programs, and purchases increased awareness of the IMLS brand for the public, even though discretionary

recipients added considerable signage, labels, and verbiage clearly outlining the federal agency responsible for the funding.

Program officers expressed IMLS brand awareness as important because the agency is not as well-known as others involved in cultural government programs, such as NEA, NEH, the National Institutes of Health, and the National Science Foundation, even though IMLS distributes more money to libraries and museums than to these agencies.

### ***How did discretionary grants for museums compare with formula funding for libraries and other State-based grant distribution programs? What were the internal differences?***

According to program officers, the library and museum sectors of IMLS are extremely siloed. Specifically, discretionary funding requires that individual institutions apply to IMLS with a project that meets their community's needs. Given the competitive nature of these awards, IMLS has a higher level of work administering these awards than formula funding programs. For example, the IMLS's OLS has discretionary funding in addition to formula funding, but individual libraries do not have easy access to discretionary funds. Rather, mostly large or university libraries and associations receive IMLS library discretionary grants. In addition, program officers noted that discretionary funding was more challenging for museums to navigate because the grant application process is long, complex, and difficult for smaller institutions to complete.

Program officers noted that libraries had access to funds through formula funded programming from OLS-G2S, which was less labor intensive for IMLS but extremely burdensome and overwhelming for SLAAs to receive that volume of funding in such a short time frame. In addition, some program officers thought there was a lack of evaluation and assessment of programs granted as subawards through SLAAs. Some program officers also expressed dissatisfaction that museums were excluded from a significant share of CARES Act and ARPA funding because most of it was distributed through the formula system.

## **Findings and Recommendations**

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From November 2023 to May 2024, the research team gathered and analyzed administrative grant data. Further, this report draws on interviews with current and former IMLS staff, former IMLS contractors, SLAA staff, and discretionary grantees (museums and libraries). Based on these data points, this report provided answers to a series of research questions split into five sections; COVID-19 needs, goals and impacts, sustainability, equity, and lessons learned. The research team synthesized the results from each question to provide IMLS with recommendations regarding administrative data systems, grants management, and emergency funding programs.



## Findings for Formula Funding

The research team based the findings on analyzing administrative data, program officer interviews, and SLAA interviews. First, although SLAAs used different methods to distribute funds, they prioritized the equal distribution of funding. These efforts included reducing administrative hurdles to receiving subgrants and increasing collaboration with local library organizations. Second, libraries modified existing programming and created new programming to meet community needs with the emergency funding. Libraries worked to bridge the digital divide exacerbated by the COVID-19 pandemic. Third, SLAAs took advantage of the transition to the virtual environment to expand library access to SLAA meetings through digital teleconferencing platforms and virtual professional development opportunities. Finally, although many libraries initially viewed new programming as a temporary response to the COVID-19 pandemic, many reported that they would continue offering programs and services that resulted because of the pandemic based on increased attendance at these programs and the public's desire for hybrid and virtual programming.

### *Findings Related to SLAAs*

**SLAAs improved efficiency to prioritize equitable distribution of funding.** Although some SLAAs reported feeling as if they were mere conduits for providing funding to libraries, IMLS and SLAAs worked quickly to distribute the funding to those with the greatest need. As a result, the emergency formula funding had an extensive impact. For example, the CARES Act and ARPA formula programs funded more than 40,000 libraries, 350 museums, and more than 80 Tribal institutions. In addition, they made more than 9,000 subawards. With each allocation, SLAAs and IMLS made strides to ensure that funding reached those with the greatest needs within specific jurisdictions. However, as with traditional formula funding, SLAAs have significant decision-making authority for distributing funding. As a result, there was substantial variability

## The Reach of Formula Funding

### CARES Act Formula Funding

- 476 unique projects
- 3,565 subawards
- 7,863 Wi-Fi hotspots purchased
- 7,758 other technological devices purchased
- 3 vehicles purchased
- 13,640 libraries received support
- 113 museums received support
- 28 Tribal organizations received support
- SLAAs spent a combined \$29,785,658.78 in 59 jurisdictions

### ARPA Formula Funding

- 1,629 unique projects
- 6,106 subawards
- 7,943 Wi-Fi hotspots purchased
- 19,141 other technological devices purchased
- 157 vehicles purchased
- 27,337 libraries received support
- 261 museums received support
- 60 Tribal organizations received support
- SLAAs spent a combined \$171,189,202.64 in 58 jurisdictions

in the method used to distribute funding. Some SLAAs relied on specific data-driven metrics to determine the locations that needed funding; others relied on input from regional library systems that were more in tune with the local community's needs to make funding decisions. In addition, although IMLS used the existing infrastructure for formula funding, the ability of SLAAs to distribute money varied based on several factors, including the State administrative structure of SLAAs, their ability to transition to remote work quickly, and the current processes and administrative rules to follow for allocating and approving funds. The transition from CARES Act funding to ARPA funding resulted in SLAAs receiving almost six times more funding than they had under the CARES Act. This increase in funding slowed the dispersal of funds, primarily related to the challenges that SLAAs and their libraries encountered in establishing adequate administrative structures to distribute the increased level of funds. At the same time, State- and local level officials began to question the distribution of federal ARPA funding across the board. As a result, the dispersal of funds slowed as SLAAs and local libraries found themselves under greater scrutiny, even when the funding was directed toward pandemic-specific operations.

**Libraries expanded programming to meet evolving community needs.** During the pandemic, communities across the country shut down because of restrictions imposed by State and local governments. As a result, libraries relied on funding from SLAAs to shift their services and programming to comply with regulations and meet the evolving needs of their communities. Specifically, many libraries used funding from SLAAs to help them transition their regular programming to a virtual environment. Such virtual programming allowed patrons to stay engaged with their communities through virtual story times, online summer reading programs, and synchronous and asynchronous programs, among other offerings. Many libraries also used this funding to implement contactless services—self-checkout machines, curbside pickup enabled, and other delivery methods—which enabled libraries to continue allowing access to library materials. In addition, libraries expanded their mobile services so that they could bring library services to vulnerable populations across their communities. Many of these mobile services included Wi-Fi hotspots to help bridge the digital divide exacerbated by the pandemic.

**SLAAs transitioned structures to meet the needs of libraries.** Before the pandemic, SLAAs provided administrative support to the libraries in their State. However, they did not need to maintain frequent and continuous communication to enable these libraries to function. As the pandemic evolved and because COVID-19 safety-related information was changing rapidly and became fragmented (e.g., multiple sources providing differing information), frequent and constant communication became essential for libraries to function effectively. Although SLAAs typically held in-person statewide meetings, regional meetings, and professional development workshops before the pandemic, these meetings could have been more feasible. During the pandemic, SLAAs relied on virtual meetings more often, which allowed them to share changing rules and regulations related to COVID-19 with their libraries.

After the COVID-19 pandemic, SLAAs continued using virtual communication methods, which allowed some libraries to overcome barriers to participation. For example, many librarians could not attend meetings or workshops because they had limited library staff capacity and small transportation budgets. However, with the necessity and wide acceptance of virtual communications during the pandemic, more librarians and SLAAs could participate in these meetings and workshops. This helped expand their access to professional training and development opportunities.

**Initially, some libraries perceived the new virtual programs or other service modifications as a temporary requirement of the pandemic.** However, even as the pandemic subsided, many of these institutions witnessed continued active engagement with and the desire for such programs and services. Several institutions noted that the emergency funding served as a springboard for permanently integrating virtual services when the initial setup costs were beyond a library's available funding. These services included curbside pickup, touchless checkout, and other virtual programming. The relaxation and removal of some State and local library COVID-19-related operating restrictions directly resulted in some programs ceasing.

### Findings Related to Discretionary Funding

The funding and use of discretionary awards had clear patterns across the administrative data analysis, program officer interviews, and discretionary grantee interviews.

- Discretionary fund grantees developed new partnerships across institutions within and outside their specific field.
- Discretionary fund grantees increased accessibility to programming by expanding community-focused programming and creating new programming.
- IMLS funding allowed discretionary grantees to transition to a virtual environment and remain operational.
- The emergency discretionary funding prevented further job losses within the museum and library sectors. It also increased the number of part-time employees who became full-time employees. However, the interviews and data did not provide information about the status of these employees. The data did not indicate whether employees maintained this full-time status or returned to part-time status after the award cycles.
- IMLS discretionary program staff took on a more comprehensive role in supporting discretionary fund grantees.
- IMLS improved the review and award process for discretionary fund grants between the CARES Act and ARPA funding cycles. Specifically, they implemented efficiencies, hired two term employees, and engaged contractors to help with the added workload.
- IMLS developed a data-driven decision-making tool to assist in grantmaking decisions during the CARES Act, but incomplete integration between offices resulted in less use than originally intended.

## Internal IMLS-Related Findings

### Program officer and program specialist roles expanded.

The rapid program implementation and CARES Act funding distribution required a significant increase in grants management responsibilities. IMLS staffing levels were optimized to support non-emergency situations and the rapid distribution of CARES Act funds required creative solutions to manage the large increase in applications. Due to the emergency, the timeline to make awards was abbreviated relative to a normal IMLS grant cycle, and IMLS received more than the total number of usual annual applications for all its grant programs combined. Program officers and support staff successfully processed, reviewed, and made awards for over 1,600 CARES Act proposals; however, this rapid distribution did take a toll on staff. The CARES Act experience offered many lessons learned that were applied to ARPA. IMLS hired two term employees and engaged contractors to assist with monitoring CARES Act awards and to assist with processing and monitoring ARPA awards. As a result, IMLS program officers were relieved of the substantially increased burden of managing the emergency-funded awards and were able to refocus their attention on the needs being expressed by grant recipients of the non-emergency programs. The pandemic impacted grant recipients from every program, requiring special attention from IMLS program officers in responding to a variety of issues that grant recipients faced. Change requests increased during the pandemic, resulting in increased workload to process and approve requests. Having contractors to assist in the management of both the CARES Act and ARPA programs enabled IMLS program officers to manage the increases in their workload for their regular, non-emergency grant programs.

**Fund distribution efficiency improved.** After distributing an unprecedented amount of funding from the CARES Act, IMLS assessed the distribution process. IMLS wanted to create a more

## The Reach of Discretionary Funding

### CARES Act Discretionary Grant Program

- 1,666 applications
  - 650 libraries
  - 1,060 museums
  - 11 collaborative applications
- 89 awards
  - 29 libraries
  - 49 museums
  - 11 collaborative awards
- \$16,537,854.42 spent
  - \$4,038,966.06 by libraries
  - \$10,016,601.75 by museums

### ARPA Discretionary Grant Program

- 510 applications
  - 161 libraries
  - 392 museums
- 360 awards
  - 101 libraries
  - 259 museums
- \$13,747,366.13 spent
  - \$3,426,705.79 by libraries
  - \$10,320,660.34 by museums

efficient and equitable process for distributing ARPA funding and to reduce the immense burden on IMLS staff. During this transition, IMLS increased its support by hiring two term employees and engaging contractors. It also increased the rate at which it processed applications and issued awards under ARPA compared with the CARES Act, even though there was a significant increase in the number of awards. IMLS improved its efficiency and operational speed in response to the second round of emergency funding.

**IMLS lacked integration for a data-driven decision-making tool it developed for its CARES Act discretionary grantmaking.** According to interviews with IMLS staff, one of the goals of IMLS senior leadership was to more effectively integrate data-driven decision making for its CARES Act discretionary grant decisions. In the CARES Act NOFO, the legislation sought to push funding toward those institutions with the greatest need in the museum and library field. As a result, IMLS developed a tool to assist program offices in using county-level measures of sociodemographic factors to aid in their decision making. However, there was little engagement between the operations staff who developed the tool (the “workbook” as it came to be known) and the program offices who would operationalize its use. As a result, the tool was only partially used, primarily as a public workbook for applicants to support their CARES Act applications.

### ***Findings Related to Grantees***

**Grantees created new partnerships.** Although IMLS representatives and discretionary grantees noted challenges related to remote work, institutions described a higher level of coordination with similar institutions and other organizations than was normal. Grantees built these relationships on previous partnerships and created new partnerships to address community needs and expand the collective reach of institutions. Some institutions created partnerships that were intended to help vulnerable populations. For example, some partnerships were created to improve broadband access and close the digital divide. Other partnerships involved grantees allowing government agencies to use library and museum space to maintain government operations. Some grantees ensured and expanded access to broadband so that community members could maintain access to necessary systems during mandated closures. Many interviewees also reported working collaboratively with other organizations (even those with similar foci and clientele) to share grant opportunities, support one another in writing grants, and work together to survive the government lockdowns. Not all grantees reported on their plans to sustain these partnerships. However, some grantees emphasized the success of such partnerships in reaching populations that they could not reach previously. They also shared their excitement to continue these partnerships after the pandemic.

**There was increased focus on accessibility for community-focused services.** In such an unprecedented time, discretionary grantees went beyond their routine efforts to create more accessible programs through outreach to local communities. Grantees conducted virtual arts

and entrepreneurship meetings, community open houses, fairs for older people, fairs for teens, and other gatherings to get community input for virtual and hybrid programming. Through these activities, grantees became more acutely aware of current needs related to the pandemic. This information enabled grantees to expand or create programs and services specifically for the community in response to the changing environment during the pandemic. Grantees used these programs to ensure that their communities received the support they needed so that programs were accessible to specific populations. Specifically, grantees noted that these programs sought to meet the needs of the populations at greater risk throughout the pandemic. These populations included older people, people with disabilities, and other demographic groups that were at greater risk of isolation with the loss of in-person events. Program officers reiterated that even though libraries and museums relied on community engagement for programming guidance, these organizations used emergency funding to expand their community-focused services during the pandemic to ensure broad accessibility.

**Transitioning to a virtual environment allowed discretionary grantees to remain operational.**

Discretionary grant interviewees stated that the transition to remote work allowed them to continue operating during the pandemic. Although some grantees already had digital programming, many created new programs or expanded existing ones to meet the current demand and community needs. Program officers reiterated that it was critical to transition to virtual modalities to continue engaging communities, remain operational, and serve as a promising practice for future emergencies. Overall, interview respondents emphasized the need to remain flexible in changing environments. They also highlighted how the pandemic prepared them to respond quickly.

**Emergency funding maintained and created jobs for grantees.** Many organizations used the emergency funding to continue, expand, or create new programming. Because the funding supported programmatic activities, it freed up other funding to sustain staff salaries, convert part-time staff to full-time status, and even create new positions. Grantees reiterated that the emergency funds allowed them to focus on funding programs without having to use funds from their existing budgets, which they could instead use to pay staff salaries. Maintaining and expanding the workforce was essential because many institutions within and outside the museum and library sectors had to lay off or furlough staff during the pandemic. However, it is important to note that grantees did not mention whether these positions were sustained after the pandemic. In addition, they did not mention whether staff kept their full-time status or returned to part-time status.



## Recommendations Based on Findings

### *Agency-Wide Administrative Recommendations*

**Develop a formal business continuity plan (BCP) to be activated when IMLS receives an identified level of emergency funding or an otherwise unanticipated funding allocation.** BCPs are prevention and recovery systems for potential threats or unexpected circumstances, such as the COVID-19 pandemic. They help protect personnel and assets and ensure that organizations can function properly during such times. In this instance, IMLS could develop a formal BCP for receiving emergency or otherwise unanticipated funding allocations. Developing a BCP would require meeting with IMLS staff and managers to identify detailed information regarding changes that streamlined internal administrative processes, staffing changes (additions and/or modifications of duties during the emergency), and short-term internal policy changes that would facilitate the distribution of funds effectively and equitably. The BCP should be tested, analyzed, and consistently revised to address any weaknesses.

**Develop an emergency staffing plan triggered by emergency funding.** During interviews, IMLS program officers identified staffing capacity as a limiting parameter in both the CARES Act and ARPA programs. AIR recommends that IMLS review the additional staffing and contractors brought on during ARPA to determine if the numbers were adequate, if they were in the right roles, if the onboarding timeline was appropriate, and if the training plan would be appropriate if faced with a similar situation. If IMLS receives a similar level of emergency funding again, it is necessary to develop an emergency funding staffing plan that incorporates the additional federal staffing needs, the additional contracted staffing needs, a plan to train contractors, and a training plan to onboard federal staff and contractors effectively and timely.

**Create and operationalize a road map for developing and integrating data-driven tools, such as the CARES Act workbook.** This road map should provide a step-by-step playbook to integrate program officers, data experts, domain/context experts, and internal administrative data into the decision-making process. Developing this playbook should begin by determining the roles and responsibilities of IMLS staff situated in different offices who bring diverse skills and experiences. The Office of Research and Evaluation (ORE) is the best equipped office within IMLS to lead this process and develop the initial tool launch road map. The development of any new tool should result in IMLS piloting it to ensure its feasibility and applicability to various grant programs. This process can work out any issues relevant to development to improve efficiency for implementation when a grant program requires integrating data such as socioeconomic factors.

**Perform a lessons-learned debriefing shortly after the end of each grant program, for both formula and discretionary funding.** A lessons-learned debriefing uses five steps to review a project and develop recommendations for future projects. Recommendations are based on a



postmortem examination or debriefing of prior projects, which identifies successes and failures for future projects. These recommendations, driven by the debriefing, should inform future project design.

During interviews with IMLS staff, managers, and contractors, respondents attempted to recall information and stories from 4 years ago. Many respondents mentioned that their memories of specific details could have been clearer and easier to recall if they reviewed old notes. However, by performing a lessons-learned debriefing shortly after the conclusion of each phase of the grant cycle, after grant award, at the conclusion of the grant administration period, and after grant closeout, IMLS can promptly identify shifts in operations, policies, and procedures that align to a significant event. IMLS could create a repository of these reviews to refine its grant process, improve operational efficiency, and quickly build capacity for new or emergency grant programs.

Topics that should be reviewed during this process include project management, staffing, grant requirements that may result in organizational or office changes (such as specific requirements), communication, business processes, specific issues with implementation, and external stakeholders that affected the process. IMLS could develop a project survey that includes specific questions for each topic. A facilitator could use the survey during the lessons-learned session to guide the discussion. Three key areas should be part of the survey: (a) what went right, (b) what went wrong, and (c) what IMLS could improve. Prior to the lessons-learned session, the facilitator should review the key project documents, review the project survey results, and prepare a list of questions specific to the project.

### ***Future Considerations for Data Analysis—Formula and Discretionary Funding***

**Formalize the quantitative fields of OLS-G2S hand codes into the SPR system and integrate any standard text fields from grant applications and reports into the eGMS.** At the start of the project, the research team exported data from the SPR program for analysis. However, the data proved difficult to quantify because the data contained (a) duplicative rows from SLAA-related iterations when the SPR retained those rows, (b) duplicated data from SLAAs entering information for multiple activities for a single project, and (d) an overabundance of textual fields relative to numeric fields. As a result, OLS-G2S offered to provide the research team with hand-coded data that quantified the textual fields, removed duplication, and cleaned the data. IMLS should remove this manual effort to allow program officers to focus on more substantial tasks by automating and fully integrating data cleaning into the SPR program to optimize the system.

Further, the research team had to request digital copies of the standardized application and grant forms from IMLS because these data were not available within eGMS. Yet, many of these forms are standard grant applications that contain information regarding project descriptions, abstracts, and so forth. IMLS should consider integrating these standardized text fields into

eGMS to improve analytical outcomes. IMLS also should develop other quantitative outcomes from these fields through textual analysis methods, including regular expression matching.

### ***Future Considerations for Data Analysis—Formula Funding***

**For more efficient data analysis, the IMLS data warehouse should include a “final” holding area for all the SPR reports that SLAAs submit and that IMLS approves as final, closing out the formula program for that SLAA.** As with a prior recommendation, the research team determined that the SPR contained duplicative rows, indicating instances when (a) the system retained the same information twice, (b) IMLS returned reports to SLAAs for corrections, (c) draft reports that SLAAs had yet to submit to IMLS, and (d) a final version of each report. The duplication and multiple drafts resulted in a significant hurdle to accessing and analyzing these data. After completion and acceptance of a report, its row in the SPR should automatically transfer to a final holding area. This would reduce the effort for OLS-G2S and other offices and reduce confusion for individuals unfamiliar with the data. However, after the initial findings of this report, IMLS stated they were in discussions with the developers of SPR to reduce these occurrences and improve the analyzation capabilities of the system.

### ***Future Considerations for Data Analysis—Discretionary Funding***

**IMLS should add socioeconomic factors to eGMS to provide easy access for program officers to make data-based decisions.** The ORE within IMLS developed an Excel-based workbook to provide program officers with socioeconomic characteristics from the CARES Act NOFO at the county level. However, with the emergency nature of the grant program and a lack of coordination between the operations and program offices, program offices never operationalized the workbook. Therefore, the workbook transitioned to a public workbook to support applicants in justifying their CARES Act discretionary grant program applications.

Within eGMS, each institution is identified automatically according to its city, county, and State. IMLS could integrate socioeconomic data from the U.S. Census Bureau into eGMS for each application based on the anticipated audience of each NOFO. Program officers would not be required to consider only these factors. However, having this information would reduce the burden of them toggling to a separate document or manually finding the information (as the CARES Act workbook required). If a grant program includes a specific reference to a socioeconomic factor, integrating such information about the award’s anticipated audience into eGMS would enable program officers to see the information for that institution and match that information with median values for each metric across the United States. This would support data-driven efficiencies and reduce the burden on program officers in having to manually review institutional location-based data.

## Conclusions

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With its resulting statewide lockdowns, stay-at-home orders, mandatory business closures, increasing unemployment, and heightened medical needs, the COVID-19 pandemic turned the entire world upside down. During the first year of the pandemic, Congress authorized the CARES Act to provide funding to States and certain local governments, the District of Columbia, U.S. territories, and Tribal governments to help organizations survive the pandemic. This resulted in a significant increase in grant funding for IMLS, both formula and discretionary. During the initial wave of funding, IMLS was not fully prepared to take on additional grant programs and, therefore, acted reactively to accommodate the emergency funding. Although some challenges existed with the disbursement of CARES Act funds, the program allowed IMLS to fully prepare for the ARPA funding that came just a year later.

Both CARES and ARPA funding had an immense impact on libraries and museums nationwide. Specifically, the funding enabled them to provide PPE, implement necessary infrastructure upgrades, and provide support for their communities while most institutions remained locked out of physical spaces. Throughout the pandemic, libraries and museums innovated to maintain their status as institutions on which their communities could rely during emergencies. From acquiring outreach vehicles to implementing parking lot Wi-Fi, HVAC system upgrades, and virtual and hybrid programming, libraries and museums excelled at responding to the pandemic and achieving their operational goals.

Despite success, however, IMLS, SLAAs, libraries, and museums all reported encountering significant challenges during the pandemic. From staffing challenges, productivity hurdles related to remote work, supply chain issues, and procurement delays, each institution had a unique story about survival, recovery, and expansion. Although many institutions and organizations lacked adequate staffing—particularly those in the service industry—librarians and museum professionals remained steadfast. They sought to continue to provide services to the public, even going as far as hiring additional staff when an influx of emergency funding demanded greater attention. In addition, they moved physical collections online; developed and managed virtual programming; and supported various groups with partnerships across education, human services, and the workforce.

IMLS stood as a beacon for SLAAs, museums, and libraries, providing the necessary funding to support operations. Although IMLS is not a household name, it was instrumental in ensuring the recovery of libraries and museums nationwide during and after the pandemic.

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## Appendix A. Definitions of Grants to States Focal Areas

- Institutional capacity
  - Improve the library workforce.
  - Improve the library’s physical and technological infrastructure.
  - Improve library operations.
- Information access
  - Improve users’ ability to discover information resources.
  - Improve users’ ability to obtain and/or use information resources.
- Lifelong learning
  - Improve users’ formal education.
  - Improve users’ general knowledge and skills.
- Employment and economic development
  - Improve users’ ability to use resources and apply information for employment support.
  - Improve users’ ability to use and apply business resources.
- Human services
  - Improve users’ ability to apply information that furthers their personal, family, or household finances.
  - Improve users’ ability to apply information that furthers their personal or family health and wellness.
  - Improve users’ ability to apply information that furthers their parenting and family skills.
- Civic engagement
  - Improve users’ ability to participate in their community.
  - Improve users’ ability to participate in community conversations around topics of concern.

## Appendix B. IMLS Strategic Plan Goal Description

### IMLS Strategic Plan Fiscal Year 2018–2022

#### ***Goal 1: Promote Lifelong Learning***

##### Objectives

1. Enhance library and museum resources that foster early, digital, information, health, financial, media, civic, and other types of literacies.
2. Support cross-disciplinary and inquiry-based methods of learning within museums and libraries.
3. Invest in library and museum programs that focus on continuous learning for families and individuals of diverse cultural and socio-economic backgrounds and needs.
4. Leverage the distinct role of museums and libraries as trusted sources of information.

#### ***Goal 2: Build Capacity***

##### Objectives

1. Support the recruitment, training, and development of library and museum staff, boards, and volunteers, helping to grow a skilled, professional workforce.
2. Encourage library and museum professionals and institutions to share and adopt best practices and innovations.
3. Identify trends in the museum and library fields to help organizations make informed decisions.
4. Promote the ability of museums and libraries to serve as trusted spaces for community engagement and dialogue.

#### ***Goal 3: Increase Public Access***

##### Objectives

1. Support the stewardship of museum and library collections at institutions of all types and sizes.
2. Invest in tools, technology, and training that enable people of all backgrounds and abilities to discover and use museum and library collections and resources.
3. Invest in policies and partnerships that address barriers to accessing museum and library collections, programs, and information.
4. Increase access to IMLS, museum, library, and community knowledge through effective communications.

## **IMLS Strategic Plan Fiscal Year 2022–2026**

### ***Goal 1: Champion Lifelong Learning***

#### Objectives

1. Advance shared knowledge and learning opportunities for all.
2. Support the training and professional development of the museum and library workforce.

### ***Goal 2: Strengthen Community Engagement***

#### Objectives

1. Promote inclusive engagement across diverse audiences.
2. Support community collaboration and foster civic discourse.

### ***Goal 3: Advance Collections Stewardship and Access***

#### Objectives

1. Support collections care and management.
2. Promote access to museum and library collections.

## Appendix C. Number of Wi-Fi Hotspots SLAAs Reported Under CARES Act and ARPA Funding

State or territory	CARES Act		ARPA	
	Number of Wi-Fi hotspots	Percentage of all Wi-Fi hotspots	Number of Wi-Fi hotspots	Percentage of all Wi-Fi hotspots
Alabama	0	0.00%	144	1.81%
Alaska	0	0.00%	24	0.30%
American Samoa	0	0.00%	1	0.01%
Arizona	231	2.94%	230	2.90%
Arkansas	0	0.00%	0	0.00%
California	2,164	27.52%	1,457	18.34%
Colorado	292	3.71%	40	0.50%
Connecticut	225	2.86%	95	1.20%
Delaware	0	0.00%	0	0.00%
District of Columbia	0	0.00%	0	0.00%
Federated States of Micronesia	0	0.00%	0	0.00%
Florida	410	5.21%	260	3.27%
Georgia	0	0.00%	0	0.00%
Guam	7	0.09%	0	0.00%
Hawaii	0	0.00%	0	0.00%
Idaho	30	0.38%	2	0.03%
Illinois	0	0.00%	418	5.26%
Indiana	300	3.82%	10	0.13%
Iowa	0	0.00%	9	0.11%
Kansas	0	0.00%	10	0.13%
Kentucky	0	0.00%	4	0.05%
Louisiana	61	0.78%	4	0.05%
Maine	0	0.00%	0	0.00%
Marshall Islands	0	0.00%	0	0.00%
Maryland	1	0.01%	1	0.01%
Massachusetts	0	0.00%	3,000	37.77%
Michigan	1	0.01%	53	0.67%
Minnesota	1	0.01%	8	0.10%
Mississippi	0	0.00%	0	0.00%

State or territory	CARES Act		ARPA	
	Number of Wi-Fi hotspots	Percentage of all Wi-Fi hotspots	Number of Wi-Fi hotspots	Percentage of all Wi-Fi hotspots
Missouri	369	4.69%	258	3.25%
Montana	918	11.67%	912	11.48%
Nebraska	34	0.43%	1	0.01%
Nevada	449	5.71%	0	0.00%
New Hampshire	0	0.00%	0	0.00%
New Jersey	5	0.06%	2	0.03%
New Mexico	0	0.00%	2	0.03%
New York	0	0.00%	2	0.03%
North Carolina	814	10.35%	287	3.61%
North Dakota	0	0.00%	0	0.00%
Northern Mariana Islands	0	0.00%	1	0.01%
Ohio	0	0.00%	0	0.00%
Oklahoma	214	2.72%	0	0.00%
Oregon	1	0.01%	9	0.11%
Palau	0	0.00%	0	0.00%
Pennsylvania	1	0.01%	2	0.03%
Puerto Rico	0	0.00%	0	0.00%
Rhode Island	0	0.00%	13	0.16%
South Carolina	520	6.61%	269	3.39%
South Dakota	0	0.00%	2	0.03%
Tennessee	259	3.29%	1	0.01%
Texas	534	6.79%	270	3.40%
Utah	1	0.01%	131	1.65%
Vermont	0	0.00%	0	0.00%
Virgin Islands	0	0.00%	0	0.00%
Virginia	1	0.01%	2	0.03%
Washington	1	0.01%	0	0.00%
West Virginia	11	0.14%	0	0.00%
Wisconsin	8	0.10%	9	0.11%
Wyoming	0	0.00%	0	0.00%
<b>Total</b>	<b>7,863</b>	<b>100%</b>	<b>7,943</b>	<b>100%</b>

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act; Wi-Fi = wireless fidelity.



## Appendix D. SLAA Emergency Vehicle Purchases per State in CARES Act and ARPA Funding

State or territory	CARES Act		ARPA	
	Number of vehicles purchased	Percentage of all vehicles purchased	Number of vehicles purchased	Percentage of all vehicles purchased
Alabama	0	0.00%	0	0.00%
Alaska	0	0.00%	1	0.64%
American Samoa	0	0.00%	1	0.64%
Arizona	0	0.00%	0	0.00%
Arkansas	0	0.00%	2	1.27%
California	0	0.00%	0	0.00%
Colorado	0	0.00%	0	0.00%
Connecticut	0	0.00%	1	0.64%
Delaware	0	0.00%	0	0.00%
District of Columbia	0	0.00%	0	0.00%
Federated States of Micronesia	0	0.00%	0	0.00%
Florida	1	33.33%	0	0.00%
Georgia	0	0.00%	12	7.64%
Guam	0	0.00%	0	0.00%
Hawaii	0	0.00%	0	0.00%
Idaho	0	0.00%	8	5.10%
Illinois	0	0.00%	0	0.00%
Indiana	0	0.00%	5	3.18%
Iowa	0	0.00%	8	5.10%
Kansas	0	0.00%	3	1.91%
Kentucky	0	0.00%	20	12.74%
Louisiana	0	0.00%	0	0.00%
Maine	0	0.00%	0	0.00%
Marshall Islands	0	0.00%	1	0.64%
Maryland	0	0.00%	13	8.28%
Massachusetts	0	0.00%	5	3.18%
Michigan	0	0.00%	7	4.46%
Minnesota	0	0.00%	0	0.00%
Mississippi	0	0.00%	2	1.27%

State or territory	CARES Act		ARPA	
	Number of vehicles purchased	Percentage of all vehicles purchased	Number of vehicles purchased	Percentage of all vehicles purchased
Missouri	0	0.00%	3	1.91%
Montana	0	0.00%	0	0.00%
Nebraska	0	0.00%	3	1.91%
Nevada	0	0.00%	0	0.00%
New Hampshire	0	0.00%	2	1.27%
New Jersey	0	0.00%	0	0.00%
New Mexico	0	0.00%	0	0.00%
New York	0	0.00%	2	1.27%
North Carolina	1	33.33%	5	3.18%
North Dakota	0	0.00%	0	0.00%
Northern Mariana Islands	0	0.00%	1	0.64%
Ohio	0	0.00%	13	8.28%
Oklahoma	0	0.00%	0	0.00%
Oregon	1	33.33%	7	4.46%
Palau	0	0.00%	0	0.00%
Pennsylvania	0	0.00%	2	1.27%
Puerto Rico	0	0.00%	0	0.00%
Rhode Island	0	0.00%	1	0.64%
South Carolina	0	0.00%	6	3.82%
South Dakota	0	0.00%	0	0.00%
Tennessee	0	0.00%	0	0.00%
Texas	0	0.00%	0	0.00%
Utah	0	0.00%	1	0.64%
Vermont	0	0.00%	1	0.64%
Virgin Islands	0	0.00%	3	1.91%
Virginia	0	0.00%	2	1.27%
Washington	0	0.00%	2	1.27%
West Virginia	0	0.00%	0	0.00%
Wisconsin	0	0.00%	14	8.92%
Wyoming	0	0.00%	0	0.00%
Total	3	100%	157	100%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

## Appendix E. Grants to States State-Level Allotment of CARES Act and ARPA Formula Funding

State or territory	CARES Act		ARPA	
	Funding	Percentage of total expenditure	Funding	Percentage of total expenditure
Alabama	\$443,044	1.48%	\$3,072,333	1.73%
Alaska	\$66,102	0.22%	\$2,159,309	1.21%
Arizona	\$657,694	2.19%	\$3,617,020	2.03%
Arkansas	\$272,684	0.91%	\$2,660,308	1.49%
California	\$3,570,265	11.90%	\$10,577,753	5.94%
Colorado	\$520,351	1.73%	\$3,265,421	1.83%
Connecticut	\$322,154	1.07%	\$2,775,022	1.56%
Delaware	\$87,988	0.29%	\$2,215,012	1.24%
Florida	\$1,940,696	6.47%	\$6,735,385	3.78%
Georgia	\$959,374	3.20%	\$4,333,563	2.43%
Hawaii	\$127,936	0.43%	\$2,306,567	1.30%
Idaho	\$161,477	0.54%	\$2,398,059	1.35%
Illinois	\$1,145,007	3.82%	\$4,742,647	2.66%
Indiana	\$608,313	2.03%	\$3,471,810	1.95%
Iowa	\$285,087	0.95%	\$2,689,296	1.51%
Kansas	\$263,243	0.88%	\$2,634,877	1.48%
Kentucky	\$403,692	1.35%	\$2,975,530	1.67%
Louisiana	\$420,058	1.40%	\$3,012,150	1.69%
Maine	\$121,461	0.40%	\$2,294,177	1.29%
Maryland	\$546,279	1.82%	\$3,319,475	1.86%
Massachusetts	\$622,796	2.08%	\$3,502,013	1.97%
Michigan	\$902,397	3.01%	\$4,171,573	2.34%
Minnesota	\$509,589	1.70%	\$3,232,656	1.82%
Mississippi	\$268,920	0.90%	\$2,646,421	1.49%
Missouri	\$554,569	1.85%	\$3,340,336	1.88%
Montana	\$96,573	0.32%	\$2,235,443	1.26%
Nebraska	\$174,790	0.58%	\$2,422,166	1.36%
Nevada	\$278,318	0.93%	\$2,683,783	1.51%
New Hampshire	\$122,861	0.41%	\$2,297,692	1.29%

State or territory	CARES Act		ARPA	
	Funding	Percentage of total expenditure	Funding	Percentage of total expenditure
New Jersey	\$802,581	2.68%	\$3,935,345	2.21%
New Mexico	\$189,466	0.63%	\$2,458,937	1.38%
New York	\$1,757,794	5.86%	\$6,213,213	3.49%
North Carolina	\$947,687	3.16%	\$4,309,771	2.42%
North Dakota	\$68,860	0.23%	\$2,166,750	1.22%
Ohio	\$1,056,209	3.52%	\$4,547,789	2.55%
Oklahoma	\$357,546	1.19%	\$2,867,357	1.61%
Oregon	\$381,108	1.27%	\$2,924,165	1.64%
Pennsylvania	\$1,156,768	3.86%	\$4,785,292	2.69%
Rhode Island	\$95,722	0.32%	\$2,230,333	1.25%
South Carolina	\$465,230	1.55%	\$3,136,938	1.76%
South Dakota	\$79,937	0.27%	\$2,194,511	1.23%
Tennessee	\$617,074	2.06%	\$3,500,545	1.97%
Texas	\$2,620,024	8.73%	\$8,397,299	4.72%
Utah	\$289,686	0.97%	\$2,708,103	1.52%
Vermont	\$56,384	0.19%	\$2,135,819	1.20%
Virginia	\$771,257	2.57%	\$3,871,764	2.18%
Washington	\$688,070	2.29%	\$3,676,331	2.07%
West Virginia	\$161,936	0.54%	\$2,388,880	1.34%
Wisconsin	\$526,106	1.75%	\$3,270,854	1.84%
Wyoming	\$52,297	0.17%	\$2,126,881	1.19%
District of Columbia	\$63,771	0.21%	\$2,155,313	1.21%
Puerto Rico	\$288,577	0.96%	\$2,684,768	1.51%
American Samoa	\$4,467	0.01%	\$210,103	0.12%
Northern Marianas	\$4,647	0.02%	\$211,256	0.12%
Guam	\$15,224	0.05%	\$236,779	0.13%
Virgin Islands	\$9,599	0.03%	\$223,068	0.13%
Marshall Islands	\$7,040	0.02%	\$217,176	0.12%
Micronesia	\$9,256	0.03%	\$222,154	0.12%
Palau	\$1,959	0.01%	\$204,709	0.12%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

## Appendix F. Intents of Grants to States Projects

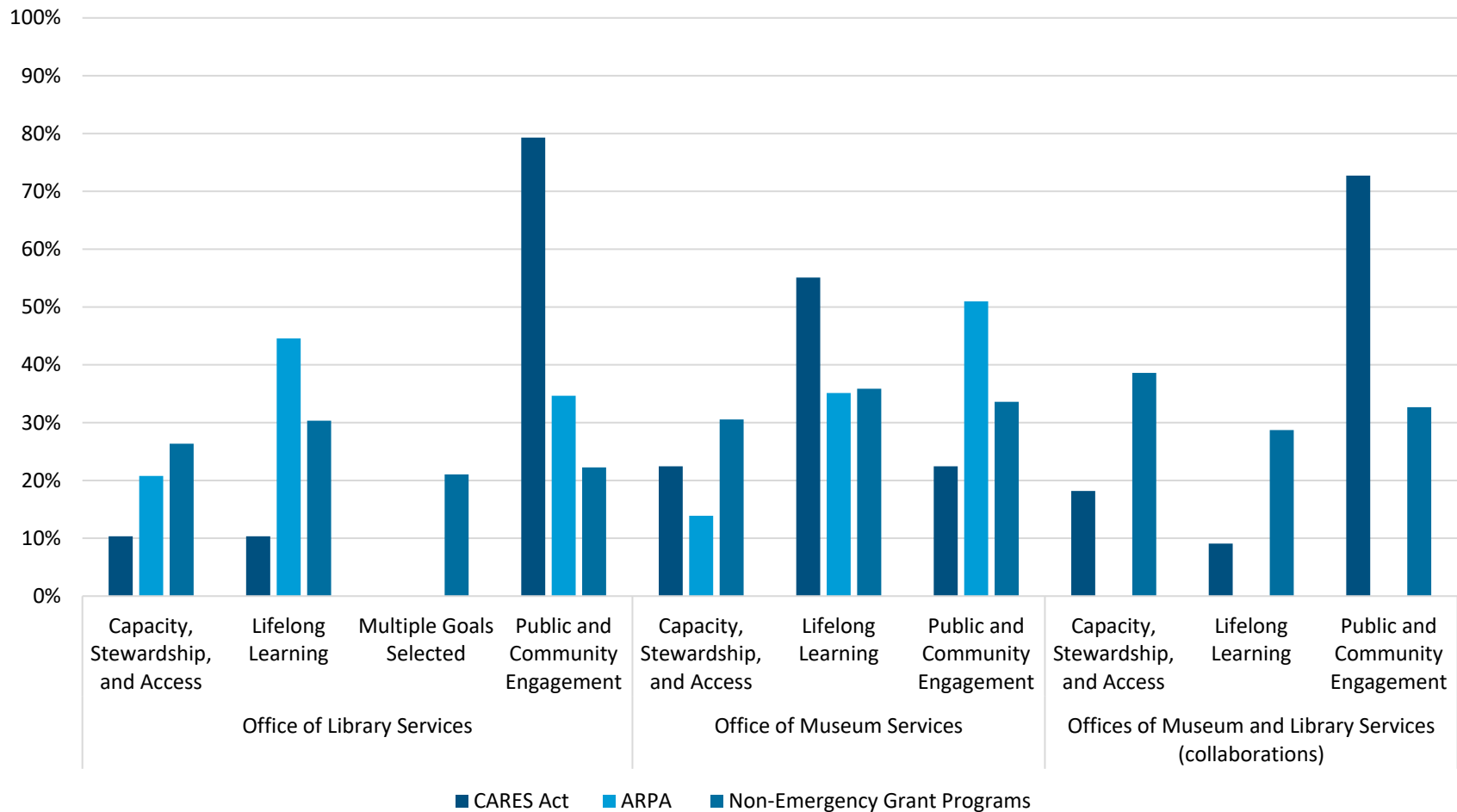
**Exhibit F1. Count and Percentage of Intents With CARES Act Funding**

Intent description	Count	Proportion
Improve library's physical and technology infrastructure	221	46.4%
Improve users' ability to obtain and/or use information resources	101	21.2%
Improve users' general knowledge and skills	58	12.2%
Improve library operations	41	8.6%
Improve users' ability to discover information resources	16	3.4%
Improve users' ability to use resources and apply information for employment support	11	2.3%
Improve users' formal education	11	2.3%
Improve the library workforce	7	1.5%
Improve users' ability to apply information that furthers their personal or family health and wellness	3	0.6%
Improve users' ability to converse in community conversations around topics of concern	2	0.4%
Improve users' ability to participate in their community	2	0.4%
Improve users' ability to apply information that furthers their parenting and family skills	2	0.4%
Improve users' ability to use and apply business resources	1	0.2%
<b>Total</b>	<b>476</b>	<b>100%</b>

## Exhibit F2. Count and Percentage of Intents With ARPA Funding

Intent description	Count	Proportion
Improve library's physical and technology infrastructure.	683	41.9%
Improve users' ability to obtain and/or use information resources.	250	15.4%
Improve library operations.	178	10.9%
Improve users' formal education.	164	10.1%
Improve users' general knowledge and skills.	150	9.2%
Improve users' ability to discover information resources.	60	3.7%
Improve the library workforce.	40	2.5%
Improve users' ability to use resources and apply information for employment support.	38	2.3%
Improve users' ability to participate in their community.	32	2.0%
Improve users' ability to apply information that furthers their personal or family health and wellness.	22	1.4%
Improve users' ability to converse in community conversations about topics of concern.	5	0.3%
Improve users' ability to apply information that furthers their parenting and family skills.	4	0.3%
Improve users' ability to apply information that furthers their personal, family, or household finances.	2	0.1%
Improve users' ability to use and apply business resources.	1	0.1%
<b>Total</b>	<b>1,629</b>	<b>100.0%</b>

## Appendix G. Visualization of IMLS Strategic Plan Goal Alignment in the CARES Act and ARPA to Program Office



Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.



## Appendix H. Bigrams of Project Descriptions by Program Office and Grant Program

CARES Act						ARPA					
Office of Museum Services			Office of Library Services			Office of Museum Services			Office of Library Services		
Bigram	Number of awards	Percentage of awards	Bigram	Number of awards	Percentage of awards	Bigram	Number of awards	Percentage of awards	Bigram	Number of awards	Percentage of awards
digital learning	7	14.29%	digital divide	8	27.59%	field trip	32	12.36%	digital literacy	18	17.82%
digital divide	5	10.2%	social distancing	6	20.69%	low income	29	11.2%	community members	14	13.86%
field trip	5	10.2%	access internet	5	17.24%	learning opportunities	23	8.88%	digital inclusion	14	13.86%
learning resources	5	10.2%	lending program	5	17.24%	community engagement	22	8.49%	access technology	11	10.89%
low income	5	10.2%	without access	5	17.24%	community needs	22	8.49%	community needs	10	9.9%
school districts	5	10.2%	digital access	4	13.79%	school district	22	8.49%	community partners	10	9.9%
social media	5	10.2%	digital literacy	4	13.79%	community partners	21	8.11%	digital divide	10	9.9%
access resources	4	8.16%	internet access	4	13.79%	public schools	20	7.72%	internet access	10	9.9%
community members	4	8.16%	learning resources	4	13.79%	access collection	19	7.34%	low income	10	9.9%
digital resources	4	8.16%	low income	4	13.79%	social emotional	19	7.34%	programs service	10	9.9%

Note. CARES Act = Coronavirus Aid, Relief, and Economic Security Act; ARPA = American Rescue Plan Act.

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