

Form: Final Performance Report (FY2016-F&2020)

LG-95-17-0046-17

Nebraska, State of (Nebraska Library Commission)

LG-95-17-0046-17

(Library Innovation Studios: Transforming Rural Communities)

Nebraska, State of

Ms. JoAnn S. McManus

Form: Final Performance Report (FY2016 - FY2020)

Refer to the detailed IMLS performance reporting instructions for additional guidance (opens in a new window). If you have questions concerning final performance reporting requirements, you may address them to the Program Officer associated with your award in eGMS Reach.

Please note that IMLS may publish performance reports and attachments online or otherwise share them and the information they contain with awardees, potential awardees, and the general public to further the mission of the agency and the development of museum and library services.

Certification: By submitting this report I certify to the best of my knowledge and belief that this information is correct and complete for performance of activities for the purposes set forth in the award documents. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or otherwise (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

Your name will be added to the IMLS Final Performance Report Form as the Authorized Certifying Official when you submit this report.

OMB Control Number 3137-0100 Expiration Date: 03/31/2025

Keywords, Activities, and Changes

Recipient Identifying or Account Number (optional)

Keywords (required)

Civic Engagement

Civic Technology

Community Engagement

Services and Programs for Adults

STEM / STEAM Programming

Activities (required)

Activities Proposed in your Approved Application	Completion Status	Explanation if Partially Completed or Not Undertaken
<p>Establish local Community Action Teams in 35 communities. Due to pandemic library closures, we requested and received a change to the number of host libraries served from 39 to 35 libraries. (Revision approved 5/6/21):</p> <p>Community Action Teams were established in 35 communities. Some of the community action teams established after the pandemic were not as active, although the internal library staff teams remained strong and focused as witnessed earlier in the project with pre-pandemic libraries.</p>	Completed	
<p>Purchase and replace as needed, equipment and related materials for four rotating Innovation Studios:</p> <p>All equipment was purchased and the four Studios were first installed in November 2017. Several machines were also replaced as expected. Smaller accompanying devices were added to the studios along the way to fill needs identified.</p>	Completed	
<p>Develop instructional materials and equipment certification processes:</p> <p>Instructional materials were developed and the certification database was built. View written instructional materials at: http://nlc.nebraska.gov/grants/InnovationStudios/Components/Equip_Instructions.aspx</p> <p>Due to library closures during the pandemic, the project team committed to adding new video online courses so that we could use the time libraries were closed to ensure that when training resumed trainings could be conducted in a more socially-distanced manner. In response to that commitment, new video courses were produced and courses were uploaded to Niche Academy. The Nebraska Library Commission’s website promotes these courses that can be accessed by any trainers and makers at: https://my.nicheacademy.com/innovationtraining</p>	Completed	
<p>Certify “makers” on the use of studio makerspace equipment:</p> <p>According to the data entered into the certification database by host library staff members, in total 2,709 individuals/makers were certified to operate equipment at the Library Innovation Studios. On average, each individual was certified on 2.9 machines. In total, the project reached 7,797 certifications (if an individual was trained on three machines, that is counted as three certifications). An average of 77 unique individuals were trained at each host library during their 20-week hosting period. The average number of certifications at a host library was 223.</p>	Completed	

Activities Proposed in your Approved Application	Completion Status	Explanation if Partially Completed or Not Undertaken
<p>Provide training on the use of the equipment, including Train the Trainer strategies:</p> <p>Seven statewide trainings were held prior to the first seven hosting cycles. We did not conduct a statewide training in Lincoln prior to the eighth cycle as we no longer wanted to bring together four libraries due to pandemic-related issues. Local train-the-trainer trainings were conducted on-site at all 35 host libraries.</p>	Completed	
<p>Assist with local marketing efforts and programming/events, including Open Houses and Maker Showcases:</p> <p>The first 27 libraries held in-person open houses, maker showcases and programming. Event and marketing materials were developed and will remain available for examples on our project webpages. The final eight host libraries also made efforts to promote the makerspaces and held some modified, socially-distanced events that included more displays and more one-on-one interactions rather than large group events in consideration of Covid protocols.</p>	Completed	
<p>Host annual Inventors Showcases in Lincoln or at the Nebraska State Fair:</p> <p>Two annual Maker Showcases were held at the Nebraska State Fair in August of 2018 and 2019. Due to Covid concerns, no statewide maker showcase was held in 2020. A final maker showcase was held at the 2021 Nebraska Makerspace Conference held in Lincoln on November 2-3, 2021.</p>	Completed	
<p>Conduct a fact-finding, networking event near the end of the grant:</p> <p>The 2021 Nebraska Makerspace Conference took place Nov. 2-3 at the Nebraska Innovation Conference Center. The event offered 3 general sessions, 14 presenter sessions, 13 panel sessions, 9 demos and 8 making/hands-on sessions (some repeated), and a networking brainstorming. Tours of the Nebraska Innovation Studio were also offered. The registration flyer can be accessed at: https://nlc.nebraska.gov/grants/innovationstudios/2021NebraskaMakerspaceConferenceFlyer.pdf</p> <p>A total of 150 individuals from public, school and academic libraries and community makerspaces attended the event. In response to two recommendations that came out of the Networking Brainstorming breakout session, two major products have since been produced. The Makerspaces Mailing List was launched February 2022. The Nebraska Makerspace Database is accessible from the Nebraska Library Commission’s website and includes information about Nebraska’s makerspace and the equipment they offer.</p>	Completed	

Activities Proposed in your Approved Application	Completion Status	Explanation if Partially Completed or Not Undertaken
<p>Conduct formative, summative and outcome-based evaluation:</p> <p>Surveys were designed and distributed to the makers and Community Action Teams of host libraries after their hosting periods wrapped up. Certifications were entered into the certification database by host library staff to track who was trained on the various machines and kits. Besides using this database to verify certified makers, it also served as a system to track how many individuals were trained and on what machines. The email addresses were used to distribute maker surveys after the library’s hosting period. Library directors from the 35 host libraries were also surveyed to collect additional information related to their hosting period and what has happened since then, related to garnering local support and acquiring equipment for a permanent makerspace. The 29-page Evaluation Summary is attached to this report.</p>	Completed	
<p>Employ intentional sustainability strategies for permanent studios:</p> <p>The project team employed sustainability strategies at all 35 libraries. Strategies included: 1) developing a local action team to create support and local buy-in, 2) providing the library with marketing materials and templates, 3) placing signs near machines with features and cost, 4) requiring an open house, 5) requiring a maker showcase, 6) periodic check-ins afterward, and 7) inviting library staff to the 2021 Nebraska Makerspace Conference to share information and continue the learning process.</p> <p>We hoped that some would establish makerspaces and that many would strengthen their position as a community catalysts. To date, over 320 pieces of equipment have been acquired by the 35 host libraries. We estimate the value of that investment to be over \$450,000 for equipment alone at the 35 host libraries. Nearly all 35 libraries reported that the process paved the way to move toward a permanent makerspace.</p>	Completed	
<p>Disseminate information to enable national replication:</p> <p>Our project website features resources; marketing, event and community engagement templates; and Niche Academy courses. Our project received statewide press and was showcased nationally in a Government Technology article. Project presentations included sessions at the 2017 Nebraska Library Association Conference (along with a hands-on makerspace); the 2017 Entrepreneurship Best Practices Summit; the 2018 Capitol Hill Maker Faire in Washington DC; the Association of Rural and Small Libraries’ 2021 Conference; the 2021 Nebraska Library Association Conference (3-hour pre-session; and the 2021 Nebraska Makerspace Conference (several sessions). We also reached librarians nationwide through three NCompass Live sessions in 2017, 2018 and 2022. Information can also be shared through our new Makerspaces Mailing List and the recently launched Nebraska Makerspace Database.</p>	Completed	

Type of Change	Date Change Became Effective	Reason for Change
Budget Revision	4/16/18	Not more than \$2,000 can be spent on the Capitol Hill Maker Fair presentation trip expenses made by JoAnn McManus in May 2018. Per Email from Tim Carrigan, April, 2018
Budget Revision	8/22/19	In August 2019 we applied for a one-year extension to the project and requested an additional \$185,000 for a total of \$715,732 grant funds obligated. The Amendment and the additional \$185,000 was approved on 8/22/2019
Extension to Period of Performance	8/22/19	Extended project 12 months to June 30, 2021 to reach additional libraries and add a final networking, fact-finding event.
Extension to Period of Performance	5/6/21	On May 6, 2021, our 6-month no-cost extension was approved so that we could complete our final four hosting periods and have an in-person final conference. The changes include reducing our host libraries to 35, while adding online video training courses to help with social distancing via Niche Academy.
Extension to Period of Performance	2/17/22	On 2/4/22, we requested an additional 3-month no-cost extension to allow us more time to distribute the maker machines purchased for use in the project to the 35 host libraries located across the state of Nebraska.

Project Results (required)

The ***Library Innovation Studios: Transforming Rural Communities*** project used makerspaces, hosted by 35 rural and small libraries to support participatory learning experiences. The project achieved success in stimulating creativity, innovation, and the exchange of ideas to facilitate entrepreneurship, skill development, and learning. Makers reported making and selling products, starting businesses, purchasing equipment, and gaining skills.

In total 2,709 individuals/makers were certified to operate equipment at the Library Innovation Studios. On average, each individual was certified on 2.9 machines—for a total of 7,797 certifications. An average 77 unique individuals were trained at each host library (an average of 223 machine certifications).

Nearly all the libraries have purchased makerspace equipment and many have impressive makerspaces today. Over 320 pieces of equipment were acquired by the 35 host libraries—an average of 9 devices each. The estimated equipment value is over \$450,000. Nearly all 35 libraries reported that the process helped them to develop local partners, brought new people to the library, and paved the way to move towards a permanent makerspace. As designed, the makerspaces served as the vehicle for libraries to expand their role as community anchor organizations. The community action teams developed locally led to community change as most of the host libraries went on to establish permanent makerspaces with community support.

The project generated products and they are accessible from our project website at <http://nlc.nebraska.gov/grants/InnovationStudios/>. There you will find downloadable resources; written machine instructions; marketing, event and community engagement templates; the makerspace conference agenda; as well as the makerspace-related Niche Academy courses that anyone can access.

The two-day 2021 Nebraska Makerspace Conference was attended by 150 staff from public, academic and school libraries as well as representatives from community makerspaces. It featured 47 separate sessions, demonstrations and hands-on making opportunities to continue the learning process. In response to two recommendations that came out of the conferences' networking brainstorming session, two major products have been produced.

The recently launched Makerspaces Mailing List already had over 130 users. The mailing list is an avenue for those interested in makerspaces to share information and ask questions. People from around nation can subscribe to the mailing list. The second product just launched is the Nebraska Makerspace Database accessible from the Nebraska Library Commission's website at <https://nlc.nebraska.gov/libraries/maker/orglist.asp> Makerspaces in Nebraska can upload information about their makerspace to include an inventory of equipment they offer and other important details about the makerspace. This database is searchable and the information will be useful to anyone interested in makerspaces. Contact information included in the database will promote continued networking opportunities.

The project's products and results to include an Evaluation Summary are accessible on the website. Project information has been disseminated via statewide press and nationally through a Government Technology article. We made presentations at conferences throughout the project's four years to include a presentation at the Capitol Hill Maker Faire in Washington DC. Most recently, we shared results at a session at the Association of Rural and Small Libraries October 2021 conference in Nevada-- "If You Build it, Will They Come? Makerspaces Work in Small, Rural Libraries." Our March 2022 N-Compass Live webinar also reached libraries across the nation and the recorded version can still be accessed online. We will continue to maintain our project website and will be receptive to continue the conversation with those who wish to learn from, or replicate the project.

Attachments

Attachment File Name	Brief Description
LG-95-17-0046-17 Attachment 1	Evaluation Summary of the Library Innovation Studios Project

Lessons Learned

Lessons learned early in the project included: an ambitious schedule: many moving parts; the number of vans needed to haul the machines and consumables; the need for low-cost consumables to encourage making; and the issues to train some local trainers who find software challenging.

Activities near the latter part of the project also presented some challenges. Since we extended past the initial three years, keeping some of the equipment in good working order did take more effort. Fortunately, we had enough in the budget to purchase new parts and in some cases new machines. Our biggest issue was with the specialty ink printers and the heat presses. For these devices, we purposely selected equipment that were more modestly-priced. We would now recommend devices that are more durable.

An earlier issue was the skillset of some local trainers. As a follow-up, we did notice that this was less of an issue as time went on. Three factors may have contributed to the improvement. Certainly, the technology skills of people tend to improve over time. Another factor was that we asked libraries to sign up fewer local trainers for our more

socially-distanced trainings—so they probably enrolled only those that they had more confidence in. And lastly, the statewide team was getting better at training and recognizing what elements we needed to spend more time on.

By far our biggest challenge after February 2021 was the presence of the Covid-19. By nature makerspaces involve group hands-on learning and activities. Social distancing is not easy when makers must be trained before they can operate maker machines. Due to the pandemic, we loosened our model to be open to alternatives to the Open House, and the Maker Showcase. We asked libraries to find a creative and safe way to promote the makerspace without bringing large groups into the library. We also modified our training methods. Due to the pandemic, we no longer brought four libraries together for their initial training. Eliminating this training reduced the in-person trainings from two to one. However, we had a plan to offset the eliminated training.

Although we already had short introductory videos, we decided to produce actual training videos for our maker devices. These videos turned into “Niche Academy” courses that were designed to help train the local trainers as well as the makers. They were a much-needed resource and they are still being accessed today. The courses did not eliminate in-person trainings, as some level of hands-on instruction is important. However, they did allow local trainers to conduct more compact and socially-distanced trainings. The lessons also provided local trainers and makers the opportunity to view the videos as many times as needed.

Although we knew the time it takes to put together a first-class conference such as the 2021 Nebraska Makerspace Conference, it is good to mention this as a lesson learned. It always takes longer than you think. Make sure you have the staff needed and try to work ahead if possible.

During the final four months of the project it was also quite a chore to manage the delivery process, reinstallation, and some refresher training after the devices were installed at their permanent homes at the host libraries. Make sure to allow enough time to organize and carryout this final phase. Our final 3-month extension was needed to complete this task.

The final lesson learned was that although we were glad to have the nearly five years to undertake the project, it may have been too long for some team members. When the pandemic started, we were close to our original end date. Around mid-2020, due to a bit of burnout and the added risk of doing our jobs at libraries elsewhere, it was harder to keep some team members engaged. In the future, we may try to keep a time-intensive project within the bounds of a 3-year period.

Next Steps (required)

Our project is now final, however we will continue to work with libraries in Nebraska on issues related to makerspaces and will encourage libraries to work on local partnerships and serve as strong community anchors. We will also continue to maintain the information, templates, trainings, and resources we have online so that others are able to make use of those resources to promote replication.

We will work to promote our Makerspace Mailing List free subscription service and will share information with that group related to makerspace information and networking opportunities.

We will also encourage Nebraska makerspaces to enter and update their makerspace information in the newly launched Nebraska Makerspace Database and will continue to promote the database to those that will benefit by accessing the information it contains.

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We will remain open to invitations to present at future conferences to continue to share information about what we learned. We will also be willing to offer our expertise to other libraries both in and outside of Nebraska to share our expertise.

If we can find the funds in the future, we will also consider hosting another makerspace conference like the one that was held in November 2021. It was well-received and worthwhile to those who attended.

Thank you IMLS for this wonderful opportunity. Makerspaces can thrive in even small, rural communities. I believe our host libraries would also be very receptive to sharing what they have learned (both during and after the project while developing their permanent makerspaces) to other libraries who may want to visit some great examples of library makerspaces in Nebraska.

Form submitted by Ms. JoAnn S. McManus on 7/11/2022 10:54 AM