Young Adult Library Services Association, RE-95-18-0048-18

Over the course of three years, *Transforming Teen Services: A Train the Trainer Approach* will train 11,000+ library staff across all 50 states and the five U.S. territories in best practices in library programming for/with teens at a cost of approximately $71 per frontline library staff member, or $7 per youth attending library programs that result from this project. The project will use the lens of connected learning (CL) to help libraries facilitate computer science (CS) and computational thinking (CT) activities which prepare teens for personal and professional success, and be implemented by the Young Adult Library Services Association (YALSA), in partnership with the Chief Officers of State Library Agencies (COSLA).

The *Transforming Teen Services: A Train the Trainer Approach* project will initially train 55 state library agency (SLA) staff and 55 frontline library or consortia staff to deliver continuing education (CE) to library staff in their state who will then provide CS and CT programs and services for/with youth, especially underrepresented youth. The initial train the trainer (TTT) training will take place via a mix of in-person and online sessions in Years 1 and 2. Following these sessions, each of the 110 TTT cohort members will then plan, implement and evaluate five training sessions in their state. This TTT model provides a cost-effective way for COSLA and YALSA to bring about transformation in teen services through a CE focus.

Training will be approached through a CL framework for addressing the CS/CT knowledge library staff need, which they can apply across all of teen services. Using CL as the framework enables library staff to plan and deliver CS/CT programs regardless of the technology available at their library, and regardless of the level of CS/CT-specific skills library staff have. Project deliverables include a Trainer's Facilitation Guide, a Teen Programming Guidebook, a suite of e-learning materials, and a final report, all of which will be freely available on YALSA's web site.

There is a demonstrated need for CS and CT programs and services to help guarantee that underrepresented youth across the nation build 21st century workforce skills. Libraries are well-positioned to provide this type of programming, and they are clamoring for support in providing CS and CT activities for/with youth, as outlined in a report from ALA's Office for Information Technology Policy and multiple library staff surveys from YALSA.

The total project cost is $783,297, including a 1:1 cost share, minus student support. YALSA requests $497,635 from IMLS to fund 1) $230,320 in student support for 5 in-person trainings (including travel and accommodations for 110 cohort members); 2) $118,500 for contracting with experts to serve as project manager, evaluator, coaches, curriculum developer, etc., and 3) $148,815 to support in-state trainings and for the development and dissemination of open educational resources to the library and afterschool communities. YALSA supports a cost share of $283,162, which is slightly better than a 1:1 match when the student support is factored out.

Transforming Teen Services: A Train the Trainer Approach builds on COSLA and YALSA's current IMLS funded project, *Transforming Teen Services through CE,* as well as YALSA's 2014 IMLS funded report, "The Future of Library Services for and with Teens: A Call to Action." By helping library staff provide programs focused on essential 21st century workforce skills in this latest proposal, YALSA and COSLA will position libraries as community anchors who provide responsive library programming that engage communities and provide hands-on, interest-based learning experiences for underrepresented youth.

STATEMENT OF NEED

Needs of Youth

There is a great need for computer science (CS) and computational thinking (CT) programs and services to help guarantee that underrepresented youth across the nation build 21st century workforce skills. Black and Hispanic youth are 1.5 and 1.7 times more likely than White youth to be very interested in learning computer science (CS). Yet, Black youth have less access to CS classes in school, and Black and Hispanic youth have less exposure to computers. [1] The Obama Administration launched the CS for All program in part, as noted on the National Science Foundation website, to, "...expand access to computer science: Women, girls, minorities, and persons with disabilities participate in computing in very low numbers, which is a loss of talent, creativity, and innovation for the discipline and the nation."[2] One viable solution to addressing this need is by offering CS and CT activities through libraries.

Needs of Libraries & Library Staff

Libraries are clamoring for support in providing CS and CT activities for/with youth. A 2017 ALA Office for Information Technology Policy (OITP) report states that "libraries are the ideal location for youth to gain the coding experience they need," because they are open during out-of-school time, have necessary infrastructure, and are ubiquitous.[3] The report also indicated "in interviews and focus groups, library staff noted lack of their own knowledge and understanding of computational thinking which hindered their ability to fully engage in this area."[4] Further evidence of this need comes from ALA's Google-sponsored Libraries Ready to Code Phase III project, which is being administered by YALSA. The Phase III project is an outcome of ALA's 2017 OITP report, and is providing grants to libraries to support CS/CT programs for/with youth, especially underrepresented youth, received over 400 applications. ALA was only able to fund 27 applicants,[5] an overall competition rate (7%) similar to what is seen for acceptance into an ivy league school. [6] Phase III cohort libraries are reporting on their activities and their learning on a regular basis to help ALA, Google, OITP and YALSA better understand the barriers and opportunities that exist in providing CS and & CT learning for/with youth through libraries, which helped inform this project proposal.

It's not surprising that library staff struggle with providing CS and CT programs and services for/with youth. The ideas of CS and CT, as well as connected learning (CL), have been discussed within the context of library teen services for less than a decade. For the purposes of this proposal we are defining the CL, CS, and CT in the following ways:
- Connected Learning: "...when someone is pursuing a personal interest with the support of peers, mentors and caring adults, and in ways that open up opportunities for them."[7]
- Computer Science: A focus on computers and computational systems centering on theory, design, development, and application of software and software systems.
- Computational Thinking: "...the thought processes involved in formulating problems and their solutions so that the solutions are represented in a form that can effectively be carried out by an information-processing agent."[8]

[1] Google/Gallup. "Diversity Gaps in Computer Science: Exploring the Underrepresentation of Girls, Blacks and Hispanics." 2016. http://bit.ly/gglharris.

[2] NSF. "Computer Science Is for All Students! - Special Report." National Science Foundation. Accessed January 09, 2018. http://bit.ly/nsfcs4all.

[3] Braun, Linda W., and Marijke Visser. Ready to Code: Connecting Youth to CS Opportunity Through Libraries. Report. December 2017. Accessed January 9, 2018. http://bit.ly/rtcfinal

[4] Ibid

[5] ALA. Washington Office. "ALA Announces $500,000 in First-time Grants to Develop Coding Programs in Libraries." News release, October 26, 2017. ALA. Accessed January 9, 2018. http://bit.ly/rtciiipr.

[6] Behrens, Scott. "Here's What It Really Takes to Get into the Ivy League These Days." *USA Today: College*, April 26, 2017. Accessed January 9, 2018. http://bit.ly/ivystats.

[7] Connected Learning Alliance. "Why Connected Learning?" Connected Learning Alliance. Accessed January 09, 2018. https://clalliance.org/why-connected-learning/.

[8] Guzdial, Mark. "A Definition of Computational Thinking from Jeannette Wing." Computing Education Blog. June 23, 2014. Accessed January 09, 2018. http://bit.ly/wingct.

Looking beyond CS/CT programming, libraries are also struggling with the bigger issue of successfully implementing youth-focused learning opportunities that meet the needs of today's diverse youth. Principles for successful teen services as framed in the 2012 report by Dr. Mimi Ito, et. al., "Connected Learning: An Agenda for Research and Design,"[9] and in YALSA's 2014 report, "The Future of Library Services for and with Teens: A Call to Action" [10] (which was funded through an IMLS grant) have not seen widespread adoption. These principles are essential to the implementation of high-quality teen library services, including CS/CT programming. The 2016 report, "Connected Libraries: Surveying the Current Landscape and Charting a Path to the Future" notes, "Connected learning demands new competencies from youth-serving librarians that graduate programs in library and information science do not always provide."[11]

The need to support library staff knowledge and skill building around CL is apparent in the results in YALSA's most recent member surveys. 34% of 2016 and 2017 survey respondents had attempted to incorporate CL principles into their programs.[12] The fact that these numbers remained static over two years demonstrates a need to increase opportunities for library staff to gain and implement important new skills. Additionally, applicants for the Ready to Code Phase III project were asked to discuss how their project would incorporate connected learning principles. Only 14% of the applicants' responses to this query received scores of above 3.5 on a 5-point scale by applicant reviewers.[13]

Approaching teen services through a CL lens where youth programming is driven by their own interest is not only an opportunity for libraries to bring CS and CT activities into their programming; a CL lens also can be used as the foundation for all programming for/with youth. The Coding for All Project's HipHop and Coding program is a strong example of how young people's interest (in this case, music) can lead them to develop workforce skills like coding. The program focuses on youth interest in HipHop music and helps youth use the Scratch programming language to expand and enhance that interest in ways that build workforce readiness skills.[14]

Central to the findings of ALA's 2017 OITP report is the need for libraries to build on their role as community anchors by engaging with community members and partners to provide quality CS/CT learning. As stated in the report, "To succeed in integrating computer science with personal interests, the library must engage with community agencies and partners. These community members have, for example, the knowledge and skill youth need to write, record and perform music or create fashion that can be worn by others. Through community relationships, librarians assist youth in finding their pathway to achieving goals in academics, careers, and life. It is within this synergistic environment, connecting youth to their real life passions and interests, in which communities will ultimately thrive." [15]

The Needs of State Library Agencies
A key role for state library agencies (SLAs) is providing continuing education (CE) for library staff in their state, and the Chief Officers of State Library Agencies (COSLA) provides support in this area. In YALSA's December 2017 survey of youth services-focused SLA staff, YALSA asked about the needs of local library workers in relation to CL, CS and CT. Of the 36 respondents, 84% (32) noted that what library staff most needed is knowing how to facilitate learning in the areas of CS and CT. 85% (34) responded that the greatest barrier for local library staff in implementing interest driven

---

9 Ito, Mizuko, et al. "Connected Learning: An Agenda for Research and Design." DML Hub. December 31, 2012. Accessed January 09, 2018. http://bit.ly/2iOeKoh.

10 Braun, Linda W., et al. "The Future of Library Services for and with Teens: Project Report." YA Forum. June 28, 2017. Accessed January 09, 2018. http://bit.ly/1n6PoKS.

11 Hoffman, Kelly M., Mega Subramaniam, Saba Kawas, Ligaya Staff, and Katie Davis. "Connected Libraries: Surveying the Current Landscape and Charting a Path with Future." University of Washington iSchool. Autumn 2016. Accessed January 9, 2018. http://bit.ly/connectedlib_scan.

12 YALSA. "YALSA Member Survey 2017." Autumn 2017. Accessed January 09, 2018. http://bit.ly/17yalsamember and YALSA. "YALSA Member Survey 2016.". Autumn 2016. Accessed January 09, 2018 http://bit.ly/16yalsamember.

13 Martin, Caitlin. "LB21 Proposal." E-mail message to author. January 6, 2018.

14 MIT Media Lab. "Scratch - Imagine, Program, Share." Coding for All Project. Accessed January 09, 2018. https://scratch.mit.edu/codingforall/.

15 Braun & Visser, pg 4.

services is the lack of a strong understanding of the CL framework.[16] SLA respondents were also asked what they most needed to learn to support the CS/CT learning needs of library staff in their state. 75% (30) of the respondents stated that they need to build their own knowledge of the CL framework and 75% (30) responded that they need to learn how to help library staff take a coach and facilitator role in helping teens learn about and explore interests.[17]

In YALSA's December 2017 survey, SLA staff were also asked about the work happening in their state in the areas of CL, CS, and CT. 61% of respondents stated that libraries in the state are offering CS and/or CT activities for youth. When asked about the types of programs offered, a majority of those listed programs such as Hour of Code, which have two key characteristics: 1) they are "one size fits all," and don't take into account the varying needs of the nation's diverse youth; and 2) they are stand-alone, one-time events.[18] While these programs are useful as a starting point, they often do not give library staff skills they need to customize and facilitate learning for the specific teens in their local community, or demonstrate ways that libraries can connect with community partners. Similarly, they do not create opportunities for youth to scaffold and expand their learning over time, as these types of activities are often offered once and then the library moves on to host programs on different topics. However, libraries and library staff—through support from SLAs—are in a perfect position to bring deeper learning of this type forward with youth.   It is essential for libraries to get the support they need so they can successfully take on this critical role in providing interest-based CL opportunities for/with youth, because the library as a community anchor has the materials, dedicated staff, trusted reputation, and ubiquity to bring this learning to all teens throughout the community, particularly underrepresented youth.

PROJECT DESIGN

Because of SLA relationships with frontline library staff and the work that they do within the state, SLAs and COSLA are well-positioned to work with YALSA on this three-year project, set to begin in July 2018. YALSA and COSLA are partners on a 2017 – 2018 IMLS National Forum project, "Transforming Teen Services through CE,"[19] which focuses on working with SLA staff to create a national CE agenda for teen services.   Through that work, YALSA and COSLA are homing in on the learning needs of SLA staff and front-line library staff, which has helped inform the development of this proposal, *"Transforming Teen Services: A Train the Trainer Approach."*

This project will build CL, CS, and CT skills in library staff via a train the trainer (TTT) model, which as Yarber, et al note, "is less costly than the traditional method and allows for courses to be tailored to local issues"[20] Other benefits include creating leaders within library organizations who are dedicated to the content and the learning process, and a peer trainer's ability to create a learning environment that is comfortable and supportive for those taking part. [21] As noted in the Needs Assessment, YALSA has not yet seen wide-spread adoption of the teen services principles in its 2014 report. In identifying a strategy which best suits YALSA's capacity and strengths, YALSA's leaders determined that a TTT approach was its most viable means for transforming teen services. By training 110 SLA and frontline library staff, YALSA and COSLA will maximize limited resources to transform teen services, as the TTT cohort provides training for library staff in their state, who then use what they've learned to offer CS/CT programs for/with youth through a CL framework. In short, YALSA and COSLA seek to create a domino effect of training that will: 1) build CL, CS, and CT skills in SLA and front-line library staff, 2) better position libraries as community anchors, and 3) help underrepresented youth gain critical workforce skills.

---

[16] YALSA. "YALSA IMLS Proposal - SLA Staff Feedback."! December 12, 2017. Accessed January 09, 2018. http://bit.ly/slaimlsct.

[17] Ibid

[18] December survey

[19] YALSA. "National Forum on Transforming Teen Services Through Continuing Education." Young Adult Library Services Association (YALSA). January 08, 2018. Accessed January 09, 2018. http://bit.ly/2vJY2HX.

[20] Yarber, Laura, et al. "Evaluating a Train-the-trainer Approach for Improving Capacity for Evidence-based Decision Making in Public Health." PubMed Central (PMC). December 12, 2015. Accessed January 09, 2018. http://bit.ly/ttt_benefits.

[21] Martin, Harry J., and Mary W. Hrivnak. "Creating Disciples: The Transformation of Employees into Trainers." *Business Horizons* 52, no. 6 (2009): 605-16. doi:10.1016/j.bushor.2009.07.006.

Confirmed Advisory Board Members

YALSA and COLSA will work with a group of carefully selected advisors knowledgeable about CE, CL, CS/CT, libraries, serving underrepresented youth, and youth development to plan, design, and implement all aspects of the project.

- Ewurabena Ashun, Black Girls Code Curriculum Coordinator
- COSLA representative, TBN
- Patricia Garcia, Assistant Professor, University of MI School of Information and the COMPUGIRLS project
- Ani Martinez, Community Manager, Remake Learning
- Kai Morton, Black Girls Code Alumna and Program Assistant
- Mark Ray, Chief Digital Officer Vancouver (WA) Public Schools and Future Ready Librarians Lead at the Alliance for Excellence in Education
- Nicky Rigg, Project Manager, Google Education and Google Lead on Libraries Ready to Code
- Mega Subramaniam, Associate Professor, University of MD College of Information Studies, Project Lead on the IMLS funded Youth Experience project (LB21 CE grant), and ALA OITP Ready to Code Fellow
- Marijke Visser, ALA's OITP Associate Director, and OITP lead on the Libraries Ready to Code project
- Jasmin Zamorano, Director of Programs, Hispanic Heritage Foundation and lead on the Code as a Second Language initiative

Advisors have agreed to

- Participate in virtual meetings of the advisory group and as a group work closely with the project team
- Assist with promoting the project and its related activities, events and deliverables
- Promote the project's objectives
- Provide feedback on draft curricular materials that are developed for the project
- Disseminate the materials created by the project
- Invite project team members to national meetings to inform their constituency about the project and its resources

Core Project Team

- **Project Manager:** Linda W. Braun, learning consultant, and co-author of the OITP Libraries Ready to Code report. Linda will be responsible for managing the timeline and overseeing the various components of the project.
- **Evaluator:** Caitlin K. Martin, learning sciences researcher and project evaluator, including external evaluation role for Phases II and III of Libraries Ready to Code. Caitlin will design and implement the project evaluation.
- **Facilitation Guide Developer & TTT Primary Facilitator:** Jennifer Brady, Chief Executive Officer of Development Without Limits (DWL), a consulting firm that works with youth-serving organizations nationally to build capacity for youth-centered programming modeling effective, research-based practices that build upon strengths and respond to individual needs. DWL is currently a part of the team working on the NSF-funded Maine Mathematics and Science Alliance Afterschool Coaching for Reflective Educators in STEM.[22] This project focuses on developing and implementing virtual and in-person training for out of school time and library staff.
- **Project Director:** Beth Yoke, YALSA Executive Director. Beth will be responsible for managing the grant administration and budget through YALSA, and managing the grant related work of YALSA staff.

Coaches for TTT Cohort

YALSA and COSLA have identified six library leaders to serve as learning coaches (see List of Key Project Staff for biographical information). Each has expertise in one or more of the following: CL, community engagement, CS/CT, outcomes design, serving underrepresented youth, and youth development

- Mandy Carrico, Adult Programs and Outreach Librarian, Harris County Public Library, TX
- Cheryl Eberly, Principal Librarian for Young Adult and Volunteer Services, Santa Ana Public Library, CA

---

[22] MMSA. "Afterschool Coaching for Rural Educators in STEM (ACRES)." MMSA. Accessed January 09, 2018. https://mmsa.org/projects/acres/.

- Jason Gonzales, Technology Specialist, Muskogee Public Library, OK
- Alexandra Johnatakis, Tech Library Assistant, Meridian Library District, ID
- Shannon Lake, Teen Educator/Librarian, Providence Public Library, RI
- Paula Langsam, Children's Librarian, DC Public Library, Washington, DC

Three additional coaches are from DWL and will bring expertise in adult professional development, youth development, and instructional design (see supplemental materials for resumes):

- Hana Arafat, Director of Professional Development, Development without Limits
- Jimena Quiroga Hopkins, Executive Director, Development without Limits West
- Chirag Menon, Senior Consultant, Development without Limits

One coach will attend the Year 1 pilot session, and three coaches will attend each of the TTT trainings in Year 2: two will be from the group of library leaders and 1 will be from the DWL team. All the coaches will work with TTT cohort members in Years 2 and 3 to help them plan, implement, evaluate, and revise their trainings for front line library staff.

YEAR 1

TTT Training Pilot: Before rolling out training to representatives from the 50 states and 5 U.S. territories, YALSA and COSLA will run a pilot program to inform the development of training in Year 2 for the full TTT cohort. In Year 1 Jennifer Brady will design the 2.5-day in-person pilot and draft trainer's facilitation guide, which will train 4-6 SLA staff as well as one front-line or library consortia staff member with training experience from each of the 4 – 6 states. The 2.5-day training will be highly interactive with time for pilot cohort members to practice ideas presented and provide feedback on the trainer's facilitation guide which will then be fined-tuned for use in future in-state workshops, and with the Year 2 cohort. YALSA and COSLA will invite interested SLA staff to submit a letter of intent to participate in the pilot, and the advisory board will select 4 to 6 SLA and frontline or library consortia staff to participate in the pilot cohort. Each SLA participating in the pilot will then identify one frontline or consortia staff member from within their state to also participate, for a total pilot cohort of 8 to 12 (see the recruitment section below for more on selection of participants). The pilot training will take place in the fall of Year 1 at a central U.S. location. The pilot cohort will provide feedback to Jennifer and the project team, which Jennifer will use to refine the training for Year 2. The training will be facilitated by Jennifer Brady, Linda Braun, and Caitlin Martin. All in-person events for this project will be organized by YALSA's Program Officer for Conferences and Events, Nichole O'Connor, who has 17 years' experience in meeting planning. In Year 1 the pilot will be held in conjunction with YALSA's 2018 YA Services Symposium. For all the TTT trainings CL will be the lens through which everything else is presented. An overview of training is:

> **Day 1 (half day): Learning to Facilitate CL through Libraries**
> Participants gain an understanding of CL concepts and how to integrate them into work with underrepresented teens.
> **Day 2 (full day): Bringing CS & CT in CL Learning to Underrepresented Youth**
> Participants explore how to connect the concepts of CL and CS/CT activities for/with teens, especially those that are underrepresented in the STEM field.
> **Day 3 (half-day): Measuring Success**
> Participants will gain skills in developing learning outcomes for CL, CS, and CT activities and in implementing methods for measuring success.

A full draft agenda for the in-person TTT session is available in Supporting Document 1, and details about the facilitation guide are available as Supporting Document 2 in the DWL Scope of Work. The skills TTT cohort members acquire as a part of the sessions will not focus on technical skills required for specific activities like coding; rather, they will focus on the CL approach to working for/with youth. This focus on CL, as opposed to specific CS/CT technical skills, will enable and empower library staff to work for/with teens in support of CS and CT skills no matter what technology is (or isn't) available and regardless of their own skill level in things like robotics or coding. In addition, it frees up library staff for other critical activities identified in YALSA's 2014 report, such as taking on the role of coach with youth and building

relationships with community partners. A trainer's facilitation guide developed by Jennifer Brady and refined after Year 1 will be provided to each TTT cohort member at the TTT events and made freely available online in Year 3. The TTT facilitation guide will embed elements of the actual training that TTT cohort members undergo, which then can customize for their own state's library staff.

Recruitment: In YALSA's December 2017 survey, youth-focused SLA staff were asked if they were interested in working with YALSA and COSLA on the pilot. 25 of the 38 respondents (66%) said yes.[23] In selecting the pilot cohort, Linda will work with the COSLA rep and Jennifer to develop an application for those who are interested in the pilot. The application will require that the SLA staff member demonstrate they have the time required to participate, to provide feedback to the project team, and to work with library staff in their state to test TTT modules. SLA applicants will also need to receive approval from their supervisor to guarantee that they will be able to participate as planned.

The project will fund two individuals from each state and territory to participate. One will be SLA staff and the other will be from a local library or library consortia. This way, SLAs will not bear the full burden of having staff out of office at local trainings. Additionally, local library or consortia staff can leverage their knowledge and relationships at the local level to inform trainings. Each SLA will designate their one frontline or consortia library staff member. To help SLAs designate participants who will be successful in this work, Linda and COSLA will develop a selection checklist. This checklist will help SLAs consider the qualities and skills needed by those who will make up the TTT cohort and will focus on areas such as time; administrative support; previous experience with training and/or CT, CS, CL; and philosophy of teen services. Frontline and/or consortia participants will be required to submit the same letter of intent as the SLA staff.

Pilot Cohort In-state Implementation
After their in-person training, the pilot cohort will use the trainer's facilitation guide to develop the two trainings they are required to facilitate in Year 1. Linda will work with COSLA to develop guidelines for identifying and selecting locations for these trainings to ensure a diversity of library types and sizes, and that local staff can connect with underrepresented youth in their community. By providing these in-state trainings, the pilot cohort will test the TTT modules from the pilot trainer's facilitation guide and provide feedback to Jennifer and the project team for refining the guide for Year 2.

Pilot Cohort Continuous Learning & Support
The pilot cohort will be expected to continue learning with each other and the project team beyond the 2.5-day session. This will include participating in monthly live virtual sessions, as they are able, to share what they have been working on, provide feedback on materials they have used, and get support for challenges. Along with opportunities to discuss specific aspects of ongoing work, the sessions will provide ongoing learning on topics determined to be needed by TTT cohort members, and the project team. Along with these live events, the coaches will be available for support on an as-needed basis. Coaches may be called on to: provide brainstorming support in the customization of a facilitation guide component, help determine how to match content with audience, advise on working with challenging participants, and so on.

Recruitment & Selection of Year 2 TTT Cohort
At the end of Year 1, Linda will work with COSLA to identify cohort members from the remaining states and territories who were not part of the pilot. As in Year 1, a checklist will be used to help determine best candidates for the Year 2 TTT cohort. The original checklist will be revised based on feedback from COSLA, core team members, and those participating in the pilot. Since 4 – 6 states/territories participated in the Year 1 pilot, for a total of 8 – 12 individuals, the Year 2 cohort will be comprised of the remaining 49 – 51 states/territories, for a total of 98 – 102 individuals.

YEAR 2

---

[23] YALSA IMLS Proposal - SLA Staff Feedback

TTT Training Full Roll-Out

The Year 2 cohort will be divided by region: East, Midwest, and West, and one in-person training will be held for each of the three groups. One of the sessions will be held at YALSA's 2019 YA Services Symposium, while the other two locations are TBD. The Year 2 TTT sessions, each facilitated by Jennifer, Linda, Caitlin, 2 library coaches, and 1 DWL coach, will use a revised framework based on feedback received during and after the Year 1 pilot TTT session. As the TTT trainer's facilitation guide embeds the actual customizable training modules that cohort members will implement in-state, there will be many opportunities to iterate the design of in-state workshops in Year 2.

TTT Cohort In-State Implementation and Continuous Learning & Support

Following the in-person TTT sessions, members of the Year 2 cohort will each be required to facilitate 5 CS/CT focused in-state workshops in Years 2 and 3 (1-2 each in Year 2, and the remaining in Year 3) for a total of 550 sessions reaching approximately 11,000 library staff. Each of the 110 TTT cohort members - from the pilot and Year 2 - will host a minimum of 5 trainings equaling 550 trainings. We expect that approximately 20 library staff will attend each training session for a total of 11,000 library staff trained throughout the life of the project. If each of the frontline staff trained by the TTT cohort hosts at least one CS/CT program for/with 10 youth, this project will reach a total of 110,000 youth.

To provide ongoing support of all TTT cohort members (pilot and Year 2), the project team will leverage existing the Teen Programming HQ[24] for a project workspace where cohort members can connect with each other and the coaches, and share materials. All cohort members will be required to work with the coaches and project team on the design and implementation of their in-state trainings. This will include: customizing the trainer's facilitation guide and activities for particular locations and audiences; revising local training materials based on feedback from the project team, coaches, and cohort peers; determining locations for in-state trainings; facilitating the trainings; evaluating the trainings (using revised protocols initially developed for the pilot year); providing feedback on the trainings to the project team; and customizing and revising the trainings for future use. As with the pilot TTT cohort, those implementing in-state training during Year 2 will take part in monthly live virtual sessions, as they are able, to discuss their work and gain support from the project team and cohort peers (see the evaluation plan below for a full overview of measures of success).

Incentives for TTT cohort members will be provided to help keep up momentum in Years 2 and 3. They include funds for purchase of materials to support TTT cohort members' training, a bookshelf of professional resources from YALSA, free membership to YALSA, and free access to YALSA's monthly webinars and on-demand webinars. All TTT cohort members will be able to use the title, Transforming Teen Services Trainer, on resumes, etc., and will also have access to a digital badge that they can include on professional materials.

YEAR 3

Completion of In-State Trainings

Throughout Year 3 all TTT cohort members - pilot and Year 2 - will continue to train, revise, report, and evaluate. The project team will continue to host informal live virtual sessions at which TTT cohort members will discuss challenges, get advice and support from one another, and celebrate successes. Coaches will continue to work with the full TTT cohort.

In the fall of Year 3 YALSA and COSLA will bring together cohort members trained in Years 1 and 2, the coaches, Jennifer, Linda, and Caitlin for a 1.5-day session just before YALSA's annual YA Services Symposium. This gathering will be a peer learning opportunity. Attendees will demonstrate and share resources and successful methods of training with their peers, and receive peer support and input on any challenges they continue to face. The project team and coaches will provide support and input as needed. Cohort members will apply what they learn to their remaining in-state trainings.

---

[24] YALSA. Teen Programming HQ. Accessed January 9, 2018. http://hq.yalsa.net/.

Resources for the Library Community

YALSA will also open learning opportunities to the library community via a collection of free webinars and e-courses developed by interested individuals from the project team, advisors, coaches, and TTT cohort. In Year 3 the project team with coaches, and advisors will also develop a Teen Programming Guidebook focused on CL, CS, and CT activities and based on the learnings in Years 1 and 2. This online guidebook will be modeled on the successful web-based Remake Learning Playbook[25], and the Google/ALA Libraries Ready to Code Toolkit (currently under development). The guidebook will offer highly customizable content, how-to videos, and planning templates. All resources will be publicly available as open educational resources (OER) and housed on YALSA's website with links to them from COSLA's site. Similarly, TTT cohort members will be encouraged to upload materials they've developed as a part of their work on this project and those will be made freely available via YALSA's Teen Programming HQ.

CHALLENGES TO PROJECT SUCCESS

Through experience with previous IMLS projects, YALSA and COSLA acknowledge there are several risk factors to be aware of throughout the life of the project. These include project team and/or cohort members changing jobs, experiencing family or personal crises, and/or realizing they do not have the time necessary to work on the project. To proactively address attrition, YALSA and COSLA, at the end of Year 1, will identify an alternate in each state and territory with qualifications needed to take a TTT cohort member's place, if needed. Similarly, we recognize the need to be flexible with members of the project team and coaches in the instance that any of them may be lost through attrition. Any multi-year project also runs into issues of maintaining momentum among cohort members. To mitigate this issue, YALSA and COSLA will provide incentives to all TTT cohort members, as described in the Project Design part of this document.

The TTT model also has risks associated with it. These include the quality of the learning experience once TTT cohort members begin in-state implementation, as well as the level of commitment to reaching a wide range of library sizes, locations, types, and capacities, and the ultimate goal of reaching underrepresented youth. The ongoing learning opportunities and regular check-ins through virtual monthly discussions, along with access to support from coaches, will help limit these risks. There is also a risk related to what technology is available in libraries across the U.S. The focus on CL as the lens through which everything else takes place will lessen the need to have a particular technology available or for the TTT cohort or library staff member to be adept at a particular CS/CT skill.

Reaching and serving underrepresented youth may present a challenge for some libraries. The library profession is overwhelmingly White and female, and some library staff may not have the cultural competence skills to effectively serve youth from underrepresented communities. This project will take the proactive stance of embedding cultural competency in the 2.5 day in-person training, as well as addressing related issues through the monthly online discussions as needed.

Evaluation plan

The proposed evaluation is both formative and summative, providing information that can guide project decision-making, suggest ways the project might be improved, and provide evidence to demonstrate success, including broader impacts emerging from this work. Success of the project will consider the fidelity of implementation and overall contributions that result from the work, but also focus in on three key components that align with IMLS goals in the 2012-2016 agency's strategic plan: (1) Participant knowledge building (train and develop museum and library professionals); (2) Building capacity at an organizational and/or community level (Support communities of practice); and (3) Broadening participation (develop and provide inclusive and accessible learning opportunities). Central questions and methods include: [Fidelity and contributions] *What were the primary interventions/services? How did this align or change from what was originally proposed?* [Knowledge building] *Do project participants (TTT cohort members) develop skills needed to facilitate CL-centered CS and CT learning professional development opportunities for library staff in their communities? Does this*

---

[25] Remake Learning Playbook. Accessed January 09, 2018. http://bit.ly/1NlWkK3.

project impact library staff (trainees) around the country to provide high-quality CL-centered CS activities for teens in their communities? [Capacity building] *Do TTT cohort members develop strategies for working together in support of CL-focused CS and CT learning? Do participants develop strategies for working in support of CL-focused CS/CT learning with their local institution and communities?* [Broadening participation] *Who participated? What worked and what did not: To what extent? For whom? Under what conditions?*

Primary data collection methods include project artifact collection, post-training session surveys, meta-analysis of TTT cohort member evaluations of their own trainings, yearly reflection surveys and focus groups with TTT cohort members, the library staff they trained, and web-analytics. Data about the quantity and quality of training sessions will be collected at both levels (CE sessions for TTT cohort members and corresponding sessions run by them with library staff). Quantitative data across the project duration include the number of sessions held and the number of library staff trained, including demographic data about locations and participants. Qualitative impact will be gathered using session evaluation surveys (the evaluator and core project team will develop a training session evaluation survey for the pilot cohort and the pilot cohort will work together with the project team to co-design common instruments and protocols to use to assess and report on their own and full cohort trainings). In addition to a training exit-survey, more context-specific methods will be utilized to gather information beyond the immediate training opportunities, such as regular feedback/reflection reports from all TTT cohort members and yearly focus groups with a selected group of the cohorts and a sample of trained library staff. Themes include self-rated expertise with focal content, preparedness to facilitate CS/CT with the community, using CL in their communities and with the goal of facilitating CS/CT with teens, adaptations made to better serve their unique populations, perceived barriers to success, and successes and new ideas, including partnerships and implementations. Protocols will enable members of both cohorts to submit a yearly report summary of their trainings and will provide them with formative feedback about their sessions. This feedback at the TTT cohort and library staff level will inform revisions to the TTT trainings. Yearly reflective surveys and qualitative focus groups with participants will probe about how training moves into practice and strategies, number and types of partnership that develop within the community of practice and within communities and libraries, use of resources and materials shared and created, number of new opportunities within and beyond the library, artifacts created, and analysis of resulting and/or planned for CE materials. Web-based analytics will also be collected to see the number and geographic location of visits to project-related sites and downloads of the project guidebook and other materials generated.

DIVERSITY PLAN
Leverage the Advisory Board & Project Team
Throughout the grant, COSLA and YALSA will seek advice and feedback from the advisory group as well as from coaches, TTT cohort members, consultants and participants to ensure that the project meets diversity, equity and inclusion (DEI) goals. Collectively, these individuals will represent libraries from across the country of various types, capacities, sizes, geographical areas, and services to underrepresented populations. The advisors and coaches for this project were carefully selected because of their ability to ensure we reach diverse libraries, communities and underrepresented youth.

Strategic Selection of TTT Cohort Members & Training Locations
Through this project YALSA and COSLA will reach a diverse group of libraries and library staff. In each of the 50 states and 5 U.S. Territories, we expect workshops will be provided for staff in libraries of all sizes, types, capacities and geographic settings, including but not limited to small, rural, urban, suburban and tribal libraries. As each state and territory serves unique cultural populations, we will design a flexible facilitation guide that TTT cohort can customize for a specific community's needs. SLAs will be expected to think about DEI when designating library staff to participate in the TTT events during Years 1 and 2. We will also expect TTT cohort members to seek out workshop facilitation sites that are most likely to support the needs of library staff that work in communities which offer limited access to CS and CT learning, and include populations underrepresented in the CS/CT workforce (including Blacks, Hispanics, individuals with disabilities, individuals from low-income families, and females).

Embed Diversity, Equity and Inclusion in Training

While this project focuses on training library staff, we expect through this training the staff will take meaningful steps to meet the needs of their community's diverse populations, and plan on including training topics such as overcoming implicit bias, integrating social justice and civic engagement strategies, and recruiting diverse populations for participation in local library CS/CT activities for/with teens in TTT sessions. YALSA's report, "The Future of Library Services for and With Teens: A Call to Action" report highlights that the equity agenda of CL focuses not just on providing access to technology, but also on building skills and competencies that will increase the opportunities available to non-dominant youth. [26]

NATIONAL IMPACT

The 2016 report, "Training Library Professionals to Teach: A Study of New Jersey Train-the-Trainer" found that "The NJTTT program has had lasting effects on the library community and is a prime example of library professionals taking charge of their careers and using their skills to strengthen the profession."[27] The *Transforming Teen Services: A Train the Trainer Approach* project will similarly move forward the skills and abilities of 11,000 library staff through CE with a focus on those skills identified as most needed in ALA's 2017 OITP Report and YALSA's "Future of Library Services for and with Teens: A Call to Action" report.. This project enables libraries of all sizes, capacities, and geographic locations to better provide CS/CT-based CL opportunities for/with teens, and as a result enhance civic and cultural engagement, facilitate lifelong learning, promote digital inclusion, and support the economic vitality of their communities. Because materials developed for this project will be tested and used by a diverse group of library staff across the U.S., the project team will have the opportunity to design resources that support a wide array of types of libraries - rural, urban, suburban - and diverse sets of community demographics.

Following the three years of this project, YALSA will continue to work with SLA staff and frontline library staff on developing and maintaining skills related to CL, CS, and CT. This will occur via webinars and other YALSA-sponsored CE events, ongoing engagement with project pilot and Year 2 cohort members, through continued online discussion, seeking of feedback from project participants - to update the project guidebook on an annual basis, and upload materials designed for CL, CS, and CT trainings to the YALSA Programming HQ.

The project goals support the Learning goal of the 2012-2016 IMLS strategic plan:

Project Goal: Through the train the trainer sessions TTT cohort members have the skills needed to facilitate CL centered CS and CT learning activities for library staff.

Project Goal: Library staff around the country can provide high-quality CL centered CS activities for teens in their communities, especially teens from underrepresented groups.

Project Goal: TTT cohort members develop strategies for working together in continuous learning and in supporting CL focused CS/CT learning in their communities.

Project Goal: Through development of customizable in-person training materials and OERs (available at trainings and virtually) this project will increase library staff's opportunity to access CL based CS and CT training.

Project Goal: Through access to and use of OERs and participation in trainings, library staff will articulate an increased understanding of the value and importance of CL based CS/CT activities for and with teens, especially teens from underrepresented groups.

---

[26] Braun, et al, pg 9.

[27] Cooke, Nicole. "Training Library Professionals to Teach: A Study of New Jersey Train-the-Trainer." *iConference 2016 Proceedings*. doi:10.9776/16165.

Year 1: 2018-2019												
Activity	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**	**May**	**June**
Communication with Advisory Group		■	■	■	■	■	■	■	■	■	■	■
Ongoing communication with Project Team and Coaches		■	■	■	■	■	■	■	■	■	■	■
Develop facilitation guide for TTT pilot	■	■	■	■								
Develop pilot application & selection checklist & put out call for pilot participants	■	■										
Select pilot participants			■									
Plan for pilot TTT session including identifying site and meeting space	■	■	■	■								
Secure contracts from all contract workers		■										
Develop evaluation protocols	■	■	■	■								
Host pilot TTT at selected site					■							
Continuous learning with pilot attendees via virtual sessions				■	■	■	■	■	■	■	■	■
Pilot attendees schedule and present 2 workshops in their state							■	■	■	■	■	■
Gather feedback from pilot group							■	■	■	■	■	■
Refine criteria for selection of TTT cohort members begin selection process										■	■	■
Evaluate TTT pilot					■	■	■	■	■	■	■	■

Year 2: 2019-2020												
Activity	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**	**May**	**June**
Communication with Advisory Group	█	█	█	█	█	█	█	█	█	█	█	█
Year 1 cohort continues in-state trainings	█	█	█	█	█	█	█	█	█	█	█	█
Revise TTT facilitation guide	█	█	█									
Update evaluation protocols	█	█										
Ongoing communication with Project Team including coaches		█	█	█	█	█	█	█	█	█	█	█
Refine application materials for TTT cohort members	█											
Send invitation and letter of intent information to SLAs		█										
Select TTT cohort members and begin ongoing communication with the group			█	█	█	█	█	█	█	█	█	█
Arrange for 3 TTT sessions around the country including site and meeting space	█	█										
Submit interim project report to IMLS				█								
Continued communication with pilot and year 2 cohorts including virtual sessions				█	█	█	█	█	█	█	█	█
Hold TTT cohort training sessions				█	█							
Year 2 TTT cohort hosts first in-state sessions & provides feedback after each						█	█	█	█	█	█	█
Begin dissemination of project resources to the library & afterschool communities								█	█	█	█	█
Ongoing evaluation of the project	█	█	█	█	█	█	█	█	█	█	█	█

Year 3: 2020-2021												
Activity	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**	**May**	**June**
Ongoing communication with Advisory Group	■	■	■	■	■	■	■	■	■	■	■	■
Ongoing communication with Project Team including coaches	■	■	■	■	■	■	■	■	■	■	■	■
Continued communication with pilot and year 2 cohorts including virtual sessions	■	■	■	■	■	■	■	■	■	■	■	■
Plan for year 3 meeting prior to the YALSA Young Adult Services Symposium		■	■	■								
Development of Teen Services Guidebook and initial testing of Guidebook	■	■	■	■								
Submit interim project report to IMLS				■								
All project participants attend peer-to-peer learning session with launch of Guidebook					■							
TTT cohorts continue to schedule and hold in-state workshops for library staff and provide feedback and evaluation data	■	■	■	■	■	■	■	■	■	■	■	■
Launch of Guidebook to library and afterschool communities						■						
Ongoing dissemination of project findings and case studies to the library and afterschool communities	■	■	■	■	■	■	■	■	■	■	■	■
Ongoing evaluation of the project	■	■	■	■	■	■	■	■	■	■	■	■
Submit final project report to IMLS				■								

DIGITAL PRODUCT FORM

Introduction
The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

Instructions
You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

PART I: Intellectual Property Rights and Permissions

A.1 What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

http://us.creativecommons.org/

We will assign the "Attribution-Noncommercial-No Derivatives 4.0 International License" to the content created by the project, as we have with materials from previous grant funded projects.

A.2 What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

All resources will be made freely available via the YALSA web site as they are developed and refined during the project. We will not impose any restrictions to access or conditions of use.

A.3 If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

It is possible that images or video footage of the in-person trainings and virtual events prior to and following the trainings will be incorporated into the final report or supplemental video promoting the report. Before arrival at the events, all attendees will be asked to sign and submit a consent form granting permission of use of their image for these two purposes. If any attendees choose not to sign the form, they will not be photographed or videotaped.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New Digital Content, Resources, or Assets

A.1 Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and format you will use.

A.2 List the equipment, software, and supplies that you will use to create the content, resources, or assets, or the name of the service provider that will perform the work.

- Zoom video conferencing platform
- MS Office
- Drupal
- Word Press
- iMovie
- Piktochart
- Google Drive
- WordPress

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

It is envisioned that the report will be provided as a .pdf file, video will be hosted on YouTube, and images infographics will be available in pdf and image formats (png and/or jpg). The goal is to deliver high quality content in a low-tech format, to accommodate libraries who may not have access to the newest hardware or broadband. YALSA complies with all quality standards put forth by ALA, including accessibility standards.

B. Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

YALSA staff will consult ALA's IT Department as needed to ensure all digital products meet accepted practice and are accessible and ADA compliant. The Project Manager will work with key project team members, including YALSA staff and project consultants responsible for overseeing the development of the materials, to ensure that digital products are completed on schedule and meeting the needs of participants. Based on participant feedback, the Project Manager may make adjustments as needed. In addition, the evaluator will take digital content into consideration when conducting a formative evaluation of the project.

B.2 Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

The resources and web content will be housed on servers provided by ALA/YALSA and on YouTube, and these materials will be publicly available as they are completed for the project. It is envisioned that the resources will remain available indefinitely, should such a time come when they are obsolete, they can be archived through the University of Illinois' online repository which was created for ALA archival material.

C. Metadata

C.1 Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata. Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

Technical and descriptive metadata will be produced for the resources, as appropriate. Some technical metadata

will be automatically generated by virtue of saving the resources as Word documents or .pdf files. Additional technical metadata will be developed by staff, as appropriate. At this time it is anticipated that Dublin Core Metadata Element Set will be used and that a list of keyword terms specific to these resources will be developed for consistent use across all platforms.

C.2 Explain your strategy for preserving and maintaining metadata created or collected during and after the award period of performance.

Once created, YALSA's Communications Specialist will strive to ensure that the metadata is preserved on the site. YALSA's web master will work with ALA's IT Department to ensure that metadata is preserved if/when the organization migrates to a different content management system.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

Posting YALSA's resources on its portion of the American Library Association's website, which includes a federated search component, giving the ability for YALSA to enter SEO keywords and search terms, enabling the public to easily search for and discover YALSA's resources. Content posted on YouTube will also be tagged to support easy searchability.

D. Access and Use

D.1 Describe how you will make the digital content, resources, or assets available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

- The goal is to deliver high quality content in a low-tech format, to accommodate libraries who may not have access to the newest hardware or broadband; therefore, it is not envisioned that special software tools will be needed to access or use content.
- The software platform for ALA/YALSA website is Drupal
- Content posted on the YALSA site and YouTube will be accessible across all browsers

D.2 Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

- Mobile content: Teen Book Finder app, www.ala.org/yalsa/products/teenbookfinder
- Online community: http://hq.yalsa.net
- Online database: http://booklists.yalsa.net
- Video content: https://www.youtube.com/playlist?list=PLD4WeAdCmUhjNEjlAlElq7SghZwVCxUBW
- Virtual discussions: http://www.ala.org/yaforum/learn-about-report-and-its-implications-library-service
- Web site: http://www.ala.org/yalsa
- Webinars: www.ala.org/yalsa/onlinelearning/webinar#free

Part III. Projects Developing Software

OMB Control #: 3137-0092, Expiration Date: 7/31/2018   IMLS-CLR-F-0032

A. General Information

A.1 Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

N/A

A.2 List other existing software that wholly or partially performs the same functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

N/A

B. Technical Information

B.1 List the programming languages, platforms, software, or other applications you will use to create your software and explain why you chose them.

N/A

B.2 Describe how the software you intend to create will extend or interoperate with relevant existing software.

N/A

B.3 Describe any underlying additional software or system dependencies necessary to run the software you intend to create.

N/A

B.4 Describe the processes you will use for development, documentation, and for maintaining and updating documentation for users of the software.

N/A

B.5 Provide the name(s) and URL(s) for examples of any previous software your organization has created.

N/A

C. Access and Use

C.1 We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). Explain and justify any prohibitive terms or conditions of use or access and detail how you will notify potential users about relevant terms and conditions.

N/A

C.2 Describe how you will make the software and source code available to the public and/or its intended users.

N/A

C.3 Identify where you will deposit the source code for the software you intend to develop:

N/A

Name of publicly accessible source code repository:

URL:

Part IV: Projects Creating Datasets

A.1 Identify the type of data you plan to collect or generate, and the purpose or intended use to which you expect it to be put. Describe the method(s) you will use and the approximate dates or intervals at which you will collect or generate it.

N/A

A.2 Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

N/A

A.3 Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

N/A

A.4 If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

N/A

A.5 What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

N/A

A.6 What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

N/A

A.7 What is your plan for archiving, managing, and disseminating data after the completion of the award-funded project?

N/A

A.8 Identify where you will deposit the dataset(s):

N/A

Name of repository:

URL:

A.9 When and how frequently will you review this data management plan? How will the implementation be monitored?

N/A