Futurescape Libraries: Mapping Possibilities for Tomorrow's Information Hubs

The Association of Research Libraries (ARL) requests $149,885 for a 1-year Laura Bush 21st Century Librarian Program (LB21) Grant in the Forum category in alignment with Goal 3, Objective 3.1 of the LB21 program for Libraries. This transformative project will engage stakeholders by socializing a set of Artificial Intelligence (AI) future scenarios for research libraries and the research environment between August 2024 – July 2025. Scenario planning is a strategy-related methodology many organizations and communities employ to navigate complex uncertainty during the long term, and to test their long-term assumptions about the direction and pace of change. These scenarios will inform strategic decision-making about libraries' investments and resourcing in a rapidly changing AI-influenced research ecosystem. Crucially, the scenarios will also empower research libraries to *shape* that ecosystem if they act now.

Project Justification

Artificial Intelligence (AI) technologies, and in particular, generative AI, have the potential to significantly disrupt the information and library science field and the communities libraries support and serve[1]. We are already seeing evidence of that disruption. Since Chat-GPT was launched in November 2022, this new, more accessible large language model (LLM) has sparked many possibilities in how users engage with information and media, and raised a number of ethical and legal considerations. This new tool, along with similar generative AI technology such as DALL-E, Google Bard, Claude, and other focused tools such as ResearchGPT, could transform our public and academic communities. Within the research landscape, institutions are considering how best to balance ensuring research and academic integrity, while also accelerating the innovations in teaching and learning practices and research and scholarship methods that generative AI may yield. For public library community members, generative AI technologies offer the opportunity to create story ideas, compose new melodies, explore and experiment with new art techniques, and even use generative AI as personal assistants or chatbots to help schedule appointments and answer questions. Research libraries—through their services, expertise, access to technology and information, and engagement with users—are in a unique position within their communities and among their constituencies to navigate the disruptive nature of generative AI. Research libraries span the academic, public, specialized, and even federal library sectors, but by definition, provide advanced services and infrastructure tailored to the needs of researchers through access to specialized materials and research assistance, such as instruction in information literacy.

While the impact of these technologies is still developing and evolving, early research and exploration has identified the need for critical changes to various job-related responsibilities within the information and library science field depending upon various AI and machine-learning possible futures[2]. This includes modifying

[1] See: Hosseini, Mohammad; Holmes, Kristi. "The Evolution of Library Workplaces and Workflows via Generative AI". *College & Research Libraries*, [S.l.], v. 84, n. 6, p. 836, nov. 2023. ISSN 2150-6701. Available at: <https://crl.acrl.org/index.php/crl/article/view/26094/34016>. Date accessed: 25 feb. 2024. doi:https://doi.org/10.5860/crl.84.6.836; Narayanan, Nikesh, "The era of Generative AI: Transforming Academic Libraries, Education, and Research" (2024). *All Works*. 6351. https://zuscholars.zu.ac.ae/works/6351

[2] See: Lo, Leo S.. "Evaluating AI Literacy in Academic Libraries: A Survey Study with a Focus on U.S. Employees." (2024). https://digitalrepository.unm.edu/ulls_fsp/203; Lo, L. S. (2023). AI policies across the globe: Implications and recommendations for libraries. *IFLA Journal*, *49*(4), 645-649. https://doi.org/10.1177/03400352231196172

patron-facing services, such as information literacy education and reference services, and internal library operations, including metadata and cataloging.

A recent working paper by OpenAI researchers indicates that the information services sector will be one of the most significantly affected labor markets. Specifically, they found that the information services sector could have close to 50% of their tasks replaced or completed more quickly by LLM capabilities[3]. Given the potential effects of generative AI on both the way libraries provide services and the ways that libraries operate , there are immediate, critical implications for library and information science training and education, as well as post-MLIS workforce development.

At the same time, the rapidly changing U.S. and international policy[4] landscape adds to the complexity of planning for significant library service and operational changes. While the U.S. has not passed any formal legislation governing AI yet, 2023 and 2024 has seen AI leaders speak with Congress, with some even asking for regulations[5]. Additionally, in October 2023, the White House issued an Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence, which sets new standards for safety and security and includes a framework to protect personal privacy[6]. Congress also appears poised to address ethical and legal challenges raised by this technology. Additionally, there have been calls from those within the AI industry requesting technology pauses, further research and risk assessments of ethical and human impacts, as well as additional studies on environmental implications[7].

Across the library community, the following services and infrastructure have been identified as potentially changing given various AI technology in development and shifting researcher needs.

- Internal library operations: cataloging and metadata creation, collection search and retrieval (ILS)
- Public services: chatbots, reference consultations, supporting communities of AI users
- Managing increasingly vast corpora of research data and supporting widespread discovery and re-use of data for AI applications
- Library collections: machine actionable collections, collections as data
- Ethical and privacy issues
- Intellectual property and copyright considerations
- Training and education: information literacy, mitigating misinformation, literature review and research assistant tools, etc.
- Workforce skills and development needs

Given how many areas of library-related work and services could be modified or changed based on these more accessible AI technologiest, there is an immediate need for research libraries to be proactive and plan for the

[3] Eloundou, Tyna, et al. "Gpts are gpts: An early look at the labor market impact potential of large language models." *arXiv preprint arXiv:2303.10130* (2023).
[4] Urs Gasser, An EU landmark for AI governance. *Science* **380**, 1203-1203(2023). DOI:10.1126/science.adj1627
[5] https://www.nytimes.com/2023/05/16/technology/openai-altman-artificial-intelligence-regulation.html
[6] Biden, J. (2023) Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, The White House. Available at: https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/.
[7] Emily M. Bender, Timnit Gebru, Angelina McMillan-Major, and Shmargaret Shmitchell. 2021. On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? 🦜. In Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT '21). Association for Computing Machinery, New York, NY, USA, 610–623. https://doi.org/10.1145/3442188.3445922

possible futures that AI will continue to bring to their communities and their workplaces. Additionally, the rapid technical development of AI technologies, along with the urgent need of researchers and the general public to learn how to leverage these tools appropriately necessitates a proactive approach. To address this, we propose to build upon a joint ARL and Coalition for Networked Information (CNI) project to conduct scenario planning for an AI-influenced future, which will develop 4 scenarios for an AI-influenced future 10 years in the future. Leveraging these scenarios we propose to develop a series for educational and outreach events to assist senior library leaders on their use to help all research libraries be more proactive about an AI-influenced future. Our approach is::

1. **National Forum:** Host a 2-day facilitated workshop for understanding the strategic implications of an AI-influenced future for research libraries and the research environment
2. **Toolkit:** Create an AI Scenario Planning Toolkit that will facilitate public, research, and academic libraries in leveraging the scenarios for local strategic planning
3. **Regional Workshops:** Host three 1.5 day regional workshops throughout the United States to educate library leaders in how to use the scenario planning toolkit and learn more about futures work. One virtual event will also be developed, independent of physical location.

Scenario planning is a strategy-related methodology employed by many organizations and communities to test their long-term assumptions and explore the uncertain landscape of their future environment[8].As a method for strategic planning it gained popularity in the mid-1970's when leveraged by Shell Oil to forsee the oil crises of the 1970's and 1980's. In 2010, ARL undertook a scenario planning effort to answer the question: "How do we transform our organization(s) to create differential value for future users (individuals, institutions, and beyond), given the external dynamics redefining the research environment over the next 20 years?". These scenarios were leveraged by senior leaders in research libraries to plan for and be proactive about the transformations taking place in the research environment.

The scenario planning process is designed to make deeply held assumptions and beliefs explicit and to test those beliefs and assumptions against the critical uncertainties facing the organization. Critical uncertainties are drivers of change that are highly relevant to the organization but are uncertain as to how they will play out in the future and become the building blocks for scenarios. The resultant four scenarios provide a context to develop strategy and for monitoring the external environment in which the organization or community operates as it strives to build adaptive capability and proactively shape its future. In the end the future will never be captured accurately in any one scenario and we do not choose a scenario or apply probabilities against them. Instead, we believe the future will be made up of components of each of the scenarios that are developed. At its core scenario planning is a risk mitigation planning process, and as discussed previously, given the significant and rapid changes AI will bring to our profession and community, is the best tool for assisting libraries in planning for the uncertain future.

One of the greatest strengths of scenario-based strategic planning is the engagement of the organization or community in the development of the strategies. The output will be the research library community's scenarios and strategies. This collaborative approach will increase the community's buy-in and use of the scenarios and strategic insights for the future of research and research libraries.

[8] Lindgren, Mats, and Hans Bandhold. Scenario planning. London: Palgrave, 2003.

Scenarios are stories about the relevant future the ARL and CNI communities will face. The scenarios bring to life a wide range of challenging drivers of change with a special focus on the role and impact of AI on the research environment and research library ecosystem. The power of the scenario set comes from the ability of the participants to stretch their thinking beyond conventional wisdom—to re-imagine the present and future in new and surprising ways. As described in more detail in the timeline below of current work, one of the first steps in scenario planning is articulating a set of critical uncertainties that each scenario will need to take into consideration. Appendix 1, Item 3 includes a list of some of the critical uncertainities surfaced through our work to date and potential library impacts. Just to illustrate, two of these critical uncertainties include:

Digital Divide Exacerbation: In this uncertainity, generative AI technologies have advanced significantly, but their adoption in libraries has been uneven. Well-funded libraries with access to state-of-the-art AI tools and resources have a distinct advantage, while smaller or under-resourced libraries lag behind. This exacerbates the digital divide and knowledge gap, with implications for community readiness, outcomes, academic competitiveness, and equitable access to scholarly resources. Libraries strive to address these disparities and promote inclusive AI literacy and adoption.

Ethical and Regulatory Challenges: This uncertainity highlights the challenges and concerns associated with generative AI in libraries. AI algorithms have become increasingly autonomous and creative, raising ethical considerations in areas such as intellectual property rights, data privacy, and bias. Libraries struggle to navigate the complex legal and regulatory landscape surrounding AI, as well as develop robust governance frameworks and accountability mechanisms. Balancing innovation, accessibility, and responsible AI usage becomes a key focus for libraries.

While the scope of this effort is primarily geared towards research libraries, the scenarios may have broader implications for other library types, including those libraries that are primarily serving teaching and learning communities, institutions with smaller research funding and development expenditures, among others.

Current AI Futures Collaborative Project
The joint ARL/CNI AI scenario planning initiative kicked off in November 2023, with the formation of a task force on scenario planning for AI and machine learning futures. Task force members include:

- Dianne Babski (US National Library of Medicine)
- Karen Estlund (Colorado State University)
- Salwa Ismail (University of California, Berkeley)
- Boyhun Kim (University of Michigan)
- James Lee (Northwestern University)
- Leo Lo (University of New Mexico)
- Christy Long (University of Oregon)
- Elisabeth Long (Johns Hopkins University)
- Rosalyn Metz (Emory University)
- Devin Savage (Illinois Institute of Technology)
- Catherine Steeves (Western University)
- Keith Webster (Carnegie Mellon)
- Kate Zwaard (Library of Congress)

ARL and CNI membership is diverse, yet centers on the library and information science community. ARL members include not just large academic research libraries, but also large federal, non-profit, and public research libraries (such as the Smithsonian, the Library of Congress, and the New York Public Library, among others). Each type of research library in the ARL membership is deeply engaged and grappling with how to support new public services and internal uses of AI. The scenario set developed through this pre-work is intentionally structured to be of significant value for each of these library sectors. Hence, beyond the ARL and CNI membership, many library leaders will be able to leverage the scenarios for their own local strategic planning needs and considerations.

ARL and CNI contracted with Susan Stickley, CEO at Stratus, Inc. to facilitate the design of a series of AI-influenced scenarios for libraries through a robust community engagement process. The development of the scenario set is currently underway and consists of the following work phases and points of community engagement.

December 2023–January 2024: Conducted seven focus groups (4 virtual and 3 in-person) with over 150 community members and 12 one-on-one interviews of key stakeholders across the research environment to collect and explore the key critical uncertainties for our community in an AI-influenced future. Critical uncertainties are drivers of change that are highly relevant to the organization but are uncertain as to how they will play out in the future. This work resulted in a forthcoming publication that articulates critical themes and provides a strategic context for AI futures for research libraries.

January 2024: Held five one-on-one interviews with provocative thinkers (provocateurs). These five interviews were held with researchers and stretch thinkers who are on the cutting edge of change and see a new and often surprising set of possibilities. These interviews resulted in a provocateur interview summary document, which ARL will publish in quarter one of 2024.

February 2024: Facilitated 1.5 day Task Force workshop to create the structure, early outlines, and end state descriptions of the scenarios.

March 2024: Draft scenarios shared with ARL/CNI community. Community feedback and review of the scenarios will begin at the Spring CNI 2024 meeting in San Diego where we hosted 3 listening sessions each with 30-40 possible attendees plus an additional virtual listening session in early April that currently has 160 individuals registered. In total, we plan to gather feedback from approximately 250 ARL and CNI members.

April 2024: Revisions of scenario set

May 2024: Final scenario set published and made available to the research library community.

While the scenarios will be developed through the joint ARL/CNI work, the strategic implications of these scenarios, as well as training and education on the use of these scenarios, is currently not included in the scope of our work. This work is a critical next step in making the scenarios maximally usable for libraries. Thus, we are requesting funds from IMLS to fund the second half of this effort to surface strategic implications of the scenarios across multiple library sectors, support the development of a toolkit for libraries on how to use the scenarios, and to host a series of regional workshops on leveraging the scenarios for strategic planning.

Personnel

Project

1. Cynthia Hudson Vitale, Director, Science Policy & Scholarship, Association of Research Libraries - Oversees the project; works directly with the consultant; designs and delivers the Regional workshops, and ensures project goals are met.

Consultants

1. Susan Stickley, CEO, Stratus Consulting – Responsible for facilitating the strategic implications workshop and developing the Toolkit.

Advisory Board

We will establish an advisory board composed of former task force members, and other library community members. The advisory board will provide feedback on the general direction of the project, circulate engagement and feedback opportunities with their communities, and provide overall advocacy for the project. These members will include:

- Judy Ruttenberg, Senior Director of Scholarship and Policy, Association of Research Libraries
- Cliff Lynch, Executive Director, Coalition for Networked Information
- Heather Moulaison-Sandy, Associate Professor, University of Missouri
- Leo Lo, Dean and Professor of the College of University Libraries and Learning Services, University of New Mexico
- Kate Zwaard, Library of Congress
- Xuemao Wang, Dean of Libraries and University Librarian, Northwestern University
- Keith Webster, Carnegie Mellon University
- David Leonard, President, Boston Public Library

Project Work Plan

1. **National Forum: Strategic Implications of an AI-influenced future**
   Expected outcome: A report based on the strategic implications forum that articulates a set of cross-cutting and scenario-specific strategies that libraries may undertake to prepare for a variety of possible AI-influenced futures.

During the Strategic Implications Forum the focus is on identifying and analyzing the potential consequences, challenges, and opportunities that may arise from the different scenarios developed. These strategic implications will be made up of the robust and game changing strategies that create the foundation for the preparation for the future uncertainty posed by AI and its impact on the research environment and research libraries. This Forum plays a crucial role in helping organizations make informed decisions and develop strategies that are robust and flexible enough to adapt to various possible futures. ARL will work with Futurist expert Susan Stickley to develop and facilitate this session.

Format & Draft Agenda

The Strategic Implications Forum will be structured as a 1-1.5 day, 30 participant workshop, which will take place centrally in Washington, DC. ARL will keep costs to a minimum by seeking a local host for the workshop, possibly within the ARL membership. ARL has extensive experience seeking institutional hosts for regional workshops and

events, with space often donated by the host institution. This will help keep costs manageable and allow the host institution to showcase its own leadership in this emerging area of importance for research libraries. While the format of the Forum is still under development, in order to account for the various research library types and how the implications for each sector may differ, we are considering at least three tracks for the Forum: public, academic, and federal/non-profit library. Table 1 below includes a draft agenda of the Strategic Implications Forum.

Table 1: Draft Agenda for Strategic Implications Forum

Day One	
Overview of Scenario Planning	45 minutes
- Presentation on the importance of scenario planning for libraries	
Review of Scenarios	60 minutes
- Participants revisit the scenarios developed during the earlier stages of the scenario planning process. These scenarios represent different possible futures based on a range of uncertainties.	
Identification of Key Trends and Drivers	60 minutes
- The session involves a discussion on the key trends, drivers, and uncertainties that are common across multiple scenarios. This helps in identifying the factors that are most likely to shape the future landscape.	
Analysis of Implications	90 minutes
- Participants analyze the strategic implications of each scenario. This involves considering how each scenario might impact the organization's goals, operations, stakeholders, and external environment.	
SWOT Analysis	
- A SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) is often conducted in the context of each scenario. This helps in assessing the internal strengths and weaknesses of the organization as well as external opportunities and threats in light of the specific scenario conditions.	90 minutes
Day Two	
Scenario Integration	
- Participants explore the intersections between different scenarios. They look for commonalities and divergences to understand where strategies can be developed to be robust across multiple possible futures.	90 minutes
Development of Strategies	60 minutes
- Based on the analysis of implications, participants work together to develop strategies that are adaptive and responsive to the potential challenges and opportunities identified in the scenarios.	
Risk Assessment	
- Risks associated with each scenario and the strategies proposed are assessed. This involves considering the likelihood and impact of different risks and developing risk mitigation plans.	90 minutes

Audience

To ensure we have the broadest, most representative attendance at this meeting, the project team will recruit senior library leaders and executives from a variety of libraries to attend, including representatives from public, academic, federal, non-profit, and other types of research library organizations. Given the high-level focus on the scenarios, senior leaders within libraries are often the ones most frequently tasked with strategic planning and the ones most likely to benefit from this type of Forum and engagement. The audience will extend well beyond the ARL membership. ARL has extensive experience working beyond our membership through successful programs, such as Kaleidoscope[9] and the Leadership Fellows[10] programs. We have also requested IMLS funds to provide 3 travel awards for individuals who may not otherwise be able to attend because of financial constraints.

2. **Toolkit – A User Guide for the Scenarios**
   Expected outcome: A free, online resource for libraries of all types to learn how to use and apply the scenarios for their local context.

Scenarios are stories of possible AI futures that research libraries may see in the next 10 years. Through the joint ARL/CNI initiative four possible AI futures will be developed, each with a brief description and a fictionalized story about an AI-influenced future that will impact libraries. While on their own these scenarios are interesting and engaging to organizations and senior library leaders, their use will be greatly enhanced by guidance and clear operational processes. To assist libraries in leveraging the scenarios for strategic planning, we proposed to develop a Toolkit. This Toolkit will be designed to be user-friendly and brief so libraries can better leverage the AI scenarios within their institutions.

We view the Toolkit as a mechanism to invigorate how libraries can adapt and transform to accommodate a heavily influenced AI-future. When ARL conducted scenario planning approximately fifteen years ago, the Toolkit was an important component of the overall process in order to ensure appropriate use of the scenarios[11].

We anticipate the Toolkit will include the four scenarios created through the joint ARL/CNI initiative; the Strategic Implications Forum outcomes, guidelines on applying the scenarios within libraries, implementation and operations suggestions, and related workshop templates for use locally. ARL will work with the facilitator to develop the Toolkit. Funds are requested for the professional design and publication of the Toolkit. To better illustrate the Toolkit content, we've included an excerpt from the table of contents for the ARL 2030 Scenario Toolkit in Appendix 1, Item 5.

3. **Regional Workshops—Putting the Scenarios into Practice**
   Expected outcome: The training of approximately 80 library leaders in the use of scenarios for their local strategic planning.

A series of regional events will be scheduled to follow the release of the AI Scenario Planning Toolkit. These training and education events will assist library leaders as they contemplate how to implement scenario planning within their individual institutions around the impacts of AI.

Format and Draft Agenda

[9] https://www.arl.org/category/our-priorities/diversity-equity-inclusion/kaleidoscope-program/
[10] https://www.arl.org/lfp-current-fellows/
[11] https://www.arl.org/resources/the-arl-2030-scenarios-a-users-guide-for-research-libraries/

We propose to host three regional 1.5 day workshops (of up to 20 individuals for each workshop) after the publication of the Toolkit. Each regional workshop will be organized by a local planning committee composed of library staff from various local research libraries, including academic, public, and non-profit. The local planning committee will help plan the event, recruit attendees, and identify and secure plenary speakers and physical space to host the workshop. This hosting model is one that ARL has successfully leveraged for events, and given the geographic distribution of our membership, we are confident we can apply the same approach to the hosting of these three workshops. ARL will also host one virtual event that will be limited to approximately 20 people, but will take place all online through the Zoom platform.

The location of the three regional workshops will be distributed throughout the United States, prioritizing the US South, Midwest, and Pacific-Northwest. When possible, to reduce travel expenses and the environmental impact of travel, we will co-locate the workshops with existing conferences or events. We have tentatively planned to host the workshops in the Fall and Winter of 2024 (October 2024–February 2025).

During these events, participants will engage in an interactive dialogue on the future impact of AI on the library ecosystem, be introduced to scenario thinking, and learn how to use the scenarios at their home institutions to do strategic planning. Table 2 provides a draft agenda for the regional workshops.

Table 2: Draft Agenda AI Scenarios Regional Workshops

Day One	
Overview of Scenario Planning	45 minutes
- Presentation on the importance of scenario planning for libraries - Brief explanation of the toolkit and its components	
Workshop Session 1: Engagement with the Scenario Set	90 minutes
- Interactive session where participants explore and engage with the scenario set - Facilitators guide participants in understanding the scenarios and their implications	
Networking Lunch	60 minutes
Workshop Session 2: Understanding the Toolkit	90 minutes
- Break into smaller groups for hands-on exploration of the scenario planning toolkit - Facilitators guide participants through the toolkit components and answer questions	
Case Study Presentations	45 minutes
- Libraries that have successfully implemented scenario planning share their experiences - Q&A session with presenters	
Day Two	
Workshop Session 3: Applying Scenario Planning	90 minutes
- Participants work in groups to apply the toolkit to hypothetical scenarios - Facilitators provide guidance and support	
Panel Discussion: Challenges and Opportunities	60 minutes
- Panel of experts discuss common challenges faced by libraries and opportunities presented by AI	

Group Reflection and Sharing	45 minutes
- Each group shares key insights and findings from their scenario planning exercises - Facilitated discussion on common themes and trends	

Audience

The audience for these workshops are primarily senior library leaders who want to learn how to leverage the scenarios for strategic planning and introduce futures-type planning within their organization. ARL will provide one to two travel scholarships (up to $2000) per regional event to increase the representation of diverse library types who may benefit from AI scenario planning.

Evaluation & Dissemination

The project will be evaluated using a combination of quantitative and qualitative methods, including: participant surveys, session evaluations, and attendance and engagement metrics. Data from these sources will be analyzed using both descriptive statistics and thematic analysis. The results of the evaluation will be used to assess the success of the outreach and engagement of the scenario planning exercise, identify areas for improvement, and inform future initiatives. We will build upon and modify existing feedback forms from ARL and CNI events to assess the Strategic Implications Forum and the regional workshops.

The findings and outcomes of the project will be disseminated through a multi-pronged approach to ensure they reach a wide audience within the library and information science community, including proceedings, a final report, webinars, publications, email lists, and social media updates. The Toolkit will also be discussed at CNI, NISO, and other library-centered and adjacent meetings. The Toolkit will be sustained on the ARL website for the foreseeable future.

Project Results

This National Forum will ensure that libraries across the United States are prepared for the significant disruption that AI and machine learning will bring to the communities across our nation. By planning for uncertain futures and equipping library leaders with strategies and skills to be proactive in planning for these changes, we can ensure that libraries remain relevant and critical for our communities in the next decade and beyond. The first phase of the scenario planning initiative was to create the scenarios, but that is not enough to ensure their strategic use and understanding. The Forum and related work proposed to IMLS here will guide senior library leaders in being proactive and preparing for these changes. The specific results of this initiative will include the Strategic Implications of an AI-Futures Scenarios report, the free and accessible Toolkit on how to use the scenarios, and over 80-100 senior library leaders trained in the scenarios strategic use and application.

The broader impacts of this initiative on research libraries are profound. It will not only enhance libraries' abilities to adapt to rapidly changing technological landscapes but also position them as centers of innovation and knowledge in their communities. Libraries that embrace these changes will be better equipped to serve diverse community needs, offer cutting-edge resources and programs, and maintain their relevance in an increasingly AI world. Ultimately, this initiative will empower libraries to continue their mission as essential partners in the research environment and uphold research integrity.

	2024					2025						
	August	Sept	October	Nov	Dec	Jan	Feb	Marc	April	May	June	July
Project kickoff meeting												
Recruit attendees for strategic implications workshop												
Strategic Implications Workshop												
Strategic Implications Workshop Assessment												
Toolkit Development												
Toolkit Published & Disseminated												
Recruit attendees for regional workshop 1												
Regional workshop 1												
Regional workshop 1 assessment / modifications												
Mid-year project coordination meeting												
Recruit attendess for regional workshop 2												
Regional workshop 2												
Regional workshop 2 assessment / modifications												
Recruit attendees for regional workshop 3												
Regional workshop 3												
Regional workshop 3 assessment / modifications												
Final Report												

Types

The primary digital products that will be generated during this training and education program will be the AI scenario toolkit.

Additionally, we will have presentation and training materials for both strategic implications workshops and the regional workshops completed through this project.

Availability

All materials created through this project will be made openly accessible online and disseminated on the ARL website. As appropriate, materials will also be deposited into the Zenodo repository for long-term preservation and access including the assignment of Dublin Core metadata assigned for discovery.

Access

All materials and data will be published and made accessible under a standard Creative Commons license (CC-BY or CC-BY-NC) to allow for broad reuse by the community. A standard citation of the content producers will be provided to facilitate proper acknowledgment by secondary users.

Sustainability

Digital assets archiving and preservation is supported through an approach that starts with adequate documentation of data using metadata and other formats appropriate for long-term preservation. The digital assets from this project will be retained and curated for a minimum of 10 years. This archiving will protect against the fragile nature of commercial and other open-source projects, thus providing dedicated backup services for the project assets.