



LAURA BUSH 21st CENTURY LIBRARIAN PROGRAM

Sample Application RE-259725-OLS-26
Project Category: Community-Centered Implementation

University of Alaska Fairbanks

Amount awarded by IMLS:	\$100,000
Amount of cost share:	\$0

The Alaska Native Language Archive (ANLA) at the University of Alaska Fairbanks will implement modern metadata standards for archival description and bridge its collection management practices with open-source archival standards. ANLA is a well-established archive, known in the state of Alaska and among linguists, with a comprehensive collection of records on or about the Indigenous languages of Alaska. Its collections span word lists and explorers' logs of the early 18th century, to contemporary language revitalization and pedagogical resources. This community-centered implementation project will allow ANLA to better represent its collections in context, improve its system for accessioning and tracking collections, implement better rights control, and offer improved patron access. The project will establish best practices for metadata specific to language archives.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Narrative - Alaska Native Language Archive Catalog Harmonization Project

Introduction

In alignment with IMLS 21st Century Librarian Program Objective 2.1, “Develop[ing] or enhanc[ing] professional development and training programs to enable the library and archival workforce to meet the needs of their communities,” The Alaska Native Language Archive (ANLA) at the University of Alaska Fairbanks (UAF) seeks a grant for the purpose of developing the inhouse technical expertise to bridge our unconventional language archive catalog with modern metadata standards for archival description (DACS, or Describing Archives; A Content Standard) and with the current open source archival standard for collections management (ArchivesSpace). In addition, we hope to create metadata standards for the migration of our existing catalog to DACS and bring our archive in line with the current best practices and standards of the profession.

This project will allow ANLA to better represent its collections in their context, make its metadata more thorough, provide a better system for accessioning collections and tracking them throughout processing, implement better means of rights control and managing embargos on records, and ultimately offer better patron access via the online catalog.

To date, we have run pilot projects to determine how best to migrate our locally-developed and idiosyncratic catalog over to ArchivesSpace. We have reached the limits of our inhouse knowledge, and any progress will require the technical expertise of an experienced consultant. The main challenge at this time is how to increase the flexibility of ArchivesSpace for specific and nonstandard language archives; this is a crucial issue currently in the field of endangered language documentation, description, and preservation, and the results would be of benefit to a wide range of language archives, such as Kaipuleohone at the University of Hawaii Manoa, the Archive of the Indigenous Languages of Latin America at the University of Texas at Austin, or other Digital Endangered Languages and Musics Archives Network (DELAN) member institutions.

We are requesting \$100,000 in IMLS funds to support a temporary ArchivesSpace membership, expert consulting services, archival labor, IT services, and conference travel/fees, in order to, overall, establish and propagate best practices for translating between language archive-specific and industry-standard metadata.

Project Justification

ANLA is a well-established archive, well-known in the state of Alaska and among linguists, with a comprehensive collection of records on or about the Indigenous languages of Alaska. Its collections span from word lists and explorers’ logs of the early 18th century, to contemporary language revitalization and pedagogical resources—providing a comprehensive history of the

documentation of Alaska's 23 officially recognized Native languages.¹ It is unique in many respects, not least of which is its cataloguing system, explained more in depth below.

ANLA has organizational and cataloguing characteristics of traditional archives, language archives, and libraries. For example, academic archives are generally organized in *collections* associated with individual authors or custodial institutions; according to the foundational archival principle of *respect des fonds*, such collections endeavor to preserve the "original order" of materials, to preserve the context under which the materials were created.² Language archives, by contrast, are often highly-curated, catalogued at the item level, and may not reflect complete collections of their creators.³ ANLA's dominant organizational scheme is by language, and thereunder by creator; the concept of "creator," in this context, has been broadened to include language experts of all types. Digital language archives today are rarely conceived of as collections of single authorship; but, rather, tend to serve as collections of recordings, scans of written documentation, and born-digital products, processed and (ideally) transcribed so as to be useful for computational and corpus linguistics projects.

The Alaska Native Language Archive (ANLA) is a physical and digital archive of over 15,000 records, whose mission is to have a comprehensive coverage of all Alaska Native languages. It began as founder Dr. Michael Krauss's personal collection; by the early 1980's it had grown large enough to require a catalog.⁴ The original organizational scheme was created by Krauss on the model of library collections, with item-level cataloguing. By the late 1990's, significant creator collections were acquired from linguists from other organizations and institutions. As a result of this varied history, the cataloguing and organizational system is a unique mix of library, traditional archive, and language archive practices.

From the early 2000's, there have been continuous iterations of online catalogues for ANLA. The current catalog, in place since about 2008, was created in collaboration between ANLA's then-director Gary Holton and a UAF-based software developer. This catalog was designed without the input of an archivist, and copies the original 1980 catalog in its item-level description. It does not have the capacity to show hierarchical structure within collections, and related items do not show their contextual relationships. It incorporated metadata fields from the Online Language Archives Community (OLAC)'s Dublin Core-based standards—a system, likewise, designed primarily by linguists, separate from general academic archival standards and best practices. At the same time, increasing professionalization of ANLA staff has resulted in the increasing incorporation of archival standards into cataloguing, such as efforts to establish institutional name authorities for Native language speakers and informants. ANLA's CMS,

¹ Claire Stremple, "Lawmakers boost Council for Alaska Native Languages with new name, more languages and members," *Alaska Beacon*, May 10, 2024, <https://alaskabeacon.com/2024/05/10/lawmakers-boost-council-for-alaska-native-languages-with-new-name-more-languages-and-members/>

² T. R. Schellenberg, "Archival Principles of Arrangement," *The American Archivist* 24:1 (Jan., 1961), pp. 11-24.

³ Gary Simons and Steven Bird, "Building an Open Language Archives Community on the OAI foundation," *Library Hi Tech* 21:2 (2003), pp. 210-218.

⁴ Michael E. Krauss, B973KM1980: "Alaska Native Languages: A Bibliographical Catalogue, Part 1: Indian Languages," Alaska Native Language Archive, <https://www.uaf.edu/anla/record.php?identifier=B973KM1980>

Drupal 7, has ended all security and compatibility updates as of January 2025, compelling us to consider a major catalog migration.⁵

ANLA has looked into various options for migrating the ANLA catalog over to a supported archival software platform, and we have run pilot projects to test the results. We have determined that ArchivesSpace is the most appropriate for our needs because of its widespread adoption in academic archives, its compliance with industry-standard DACS metadata, its accessibility and usability, its open source nature, and overall sustainability (i.e. not requiring sustained memberships or other payments year-over-year). Similar institutions have used ArchivesSpace to great effect; for example, see the Violetta Delafield-Benjamin Smith Barton Collection at the American Philosophical Society—a particularly rich, digitized collection with significant 19th Century Native American studies content, organized and made accessible through an ArchivesSpace portal.⁶ Recent scholarship also reports success stories of using ArchivesSpace for digital cultural heritage collections, as in a successful case study regarding the Archive of the Institute of Ethnology and Anthropology of North Macedonia.⁷ There are numerous good precedents and models that can be drawn upon to guide ANLA’s own migration.

At the most fundamental level, the proposed project will bring ANLA’s catalog in line with modern academic archival standards (i.e. DACS) by implementing industry-standard, open-source ArchivesSpace Content Management System (CMS). By implementing ArchivesSpace and aligning ANLA’s metadata with DACS standards, digital records (such as field notes) will be reunited with sister records, and descriptive metadata will be better-standardized and enriched, thereby increasing the collections’ discoverability and usability by linguists, historians, and speaker communities alike.

This project furthermore provides an opportunity to better bridge differing standards and practices between traditional academic and language archives, to be expressed in an OLAC-DACS Metadata Crosswalk. Our intention is to establish best practices for translating between these two standards for collections such as ours, that have elements of both traditional and language archives.

Through a partnership with the Tanana Chiefs Conference (TCC), and with the help of UAF IT services, ANLA has already installed ArchivesSpace and set up a software sandbox, or secure virtual testing environment. This has allowed us to test the feasibility of migrating our existing catalog. We found that most fields can be migrated easily, but some problems will require a specialized consultant. In particular, DACS’s hard reliance on Library of Congress subject headings and standards limits ANLA’s ability to accurately describe its collections with regard to *language*. DACS metadata element 4.5, Languages and Scripts of the Material, *recommends*, but does not *require*, languages and scripts to be denoted according to their ISO

⁵ Drupal, “Drupal 7 End of Life,” <https://www.drupal.org/about/drupal-7/d7eol/partners>

⁶ Collection: Violetta Delafield-Benjamin Smith Barton Collection, American Philosophical Society Manuscript Collections Search, <https://as.amphilsoc.org/repositories/2/resources/1340>

⁷ Ines Crvenkovska Risteska and Ljupcho Risteski, “Utilizing ArchivesSpace for Data Archiving: A Case Study of the Digital Archive for Ethnological and Anthropological Resources at the Institute of Ethnology and Anthropology,” *Ethnographica et Folkloristica Carpathica* 25 (2025), <https://doi.org/10.47516/ethnographica/27/2025/15666>

639-1 or 639-2 language codes, which are limited, highly imperfect, and, most importantly, *do not reflect ANLA and the State of Alaska's rigorously-defined taxonomy of Alaska's 23 Native languages*.⁸ ArchivesSpace currently *requires* language metadata to conform to ISO 639-2 codes. This is a critical problem for ANLA's catalog's migration. For example, the Alaska Native Language Center (ANLC), ANLA's parent institution at the University of Alaska Fairbanks, currently recognizes 11 distinct Alaskan Athabascan languages; of these, only one, Gwich'in, has an ISO 639-2 code (gwi), and the rest would need to be captured under the more general "Athapascan languages" code (ath). Likewise, ANLA's collections distinguish between the five Yupik languages, and, in many cases, between dialects of the respective languages; whereas, ISO 639-2 groups them together as a single category: "Yupik languages." ANLA must be able to use its informed, scientifically-grounded language taxonomy system in order to accurately describe and organize its collections.

One of the advantages of ArchivesSpace as an open-source platform is the ability of its developer community to take requests for new features, or, otherwise, to support bespoke plugins to accommodate individual institutions' needs. By purchasing an ArchivesSpace membership (and thereby gaining access to the support of Lyris, the company that owns ArchivesSpace), and employing an experienced consultant familiar with both the software and developer community, ANLA intends to either broaden the ArchivesSpace list of acceptable authorities for coding Languages and Scripts, or develop its own plugin that will enable it to describe its language collections accurately, at the appropriate levels of granularity for its collections (which its expert and speaker community user-bases will expect).

Through collaboration with the ArchivesSpace consultant, ANLA's Collections Manager, John DiCandello, will document informed procedures for catalog migration, with wide applicability to other library and archives professionals working with idiosyncratic legacy and linguistic and ethnographic collections. These insights will be published as a metadata crosswalk, and presented on at relevant regional and organizational conferences and meetings. The resulting documentation will furthermore serve as a blueprint for the future migration (and modernization) of the remainder of ANLA's legacy catalog.

ANLA's patrons and users will benefit from a more usable search system and interface, more complete and standard descriptive metadata, and the ability to navigate between resources of similar provenance (as opposed to the status quo, under which individual archival files, such as stray fieldnotes, are often pulled by search as individual items, without the context of their parent collections). This will allow for the more discoverable, accessible collections for both expert and casual users.

⁸ Describing Archives: A Content Standard - Version 2019.0.3, <https://mysaa.archivists.org/productdetails?id=a1B5a00000heUDGEA2>

Project Work Plan

The project is planned to last for two years. The inhouse participants include PI John DiCandeloro (ANLA Manager) and co-PI Anna Berge (ANLA Director). The project relies heavily on the outside expertise of hired consultants. Finally, storage capacity will be rented from the University of Alaska Fairbanks Office of Information Technology. PI John DiCandeloro will have the responsibility of daily operations on the project and will work most closely with the consultants. The co-PI Anna Berge will manage plot project progress and participate in regular performance reviews and discussions.

We have identified a list of Lyrasis consultants and contacted several for quotes. The final determination and contract will be made at such time as we have procured funding for the project. During the first year, the PI will work extensively with the consultants on building the necessary sandbox, aligning ANLA's needs with existing DACS / ArchivesSpace metadata elements, and testing the migration on small collections. These tests will allow us to evaluate the effectiveness of the migration, and its representation of the metadata fields specific to ANLA. The work will involve regular Zoom conversations with the chosen consultant, communicating ANLA's needs with concrete examples, delivering data, mapping the collections, training on ArchivesSpace's data model and using ArchivesSpace, and working together to develop appropriate solutions for migrating and enriching ANLA's catalog; as such, extreme attention to minute details will be required of both the hired ArchivesSpace consultant and the PIs. The requested Lyrasis membership will additionally give ANLA access to a dedicated support network, as well as periodic training sessions. This project will be both constructive and capacity-building, involving elements of collaborative work between ANLA and contracted partners, working with the consultant and ArchivesSpace community to build durable tools (such as an Alaskan Native languages plugin), training in this specific platform's minutiae, and creating a plan for better management of ANLA's collections' metadata going forward. At the end of the project, both ANLA as an institution and its staff (primarily PI John DiCandeloro, but also Archive Director and co-PI Anna Berge) will be in a position to serve as an example and train others on similar catalog cleanup and harmonization projects, particularly within the language archives community.

In the course of migrating ANLA's catalog between its legacy system to DACS, ANLA's Collections Manager, John DiCandeloro, will devise a metadata crosswalk between OLAC standards and DACS, codifying a process for translating metadata between language and traditional archives. The process will continue to be refined throughout the project; however, the second year will focus on scaling the migration as our reliance on the consultants winds down.

The PI will present the crosswalk and report on the catalog migration each year at the annual conference of the Alaska Librarians Association (AkLA), as well as the Describing Endangered Languages and Musics Archives Network (DELANMAN) annual meeting in the project's second year. This crosswalk and report will offer a codified blueprint to other institutions on how to clean up and adapt metadata for language resources to DACS (as well as vice-versa, from DACS

to OLAC standards), increasing transparency and interoperability between different collections types.

The project is of particular relevance to the other Archives that are part of DELAMAN, such as the California Language Archive and the American Philosophical Society Library & Museum. In order to qualify for DELAMAN membership, institutions must demonstrate that they are “an established and trusted digital repository created and maintained by an institution with a demonstrated commitment to permanence and the long-term preservation of archived resources;” and furthermore, “The catalog of the collection should be available via the internet and harvestable by services like the Open Language Archives Community or the Open Archives Initiative.”⁹ Many member institutions house a mix of resources, some of which is of linguistic interest, but often much broader in scope. This is vividly demonstrated in the American Philosophical Society’s Indigenous Cultures, Anthropology, and Linguistics Collection, where rare and valuable language data is often embedded in sprawling ethnographic and historical collection, as with the Mary R. Haas Papers, or the Edward Sapir Papers. DELAMAN institutions would benefit by better harmonizing their metadata standards with traditional archives, rather than trying to overly compartmentalize language archives as a special type of institution with their own, unique standards. The DACS-OLAC crosswalk produced in the course of this project will give such institutions guidelines for describing their collections in more standardized ways than OLAC currently supports, while also allowing such institutions to back-translate collection-level DACS-compliant descriptions to OLAC, thereby making them more discoverable and openly accessible. ANLA hopes that this intervention will provide some much-needed clarity in the language archiving field.

The project’s primary consultant will be selected from an informal list of expert consultants registered with Lyrasis, and communicated via email to PI John DiCandeloro in February 2026 (or, from an updated list acquired at a later date). ANLA is particularly interested in those consultants based in the United States with listed software development experience, who offer data cleanup and migration services. ANLA staff have already established contact with three consultants in particular from this list for prospective quotes, although scheduling and availability will need to be confirmed upon award of the LB21 grant.

The work plan is summarized in the table below. Performance measures include regularly scheduled meetings and reviews and are detailed separately in the ‘Performance Measures’ chart:

Personnel		
	PI	John DiCandeloro (direct work with consultant, training on ArchivesSpace, datamapping, report writing and conference presentation)
	co-PI	Anna Berge (regular evaluation meetings with PI and consultant, integration of project into ANLA work flow)

⁹ “Constitution - DELAMAN,” DELAMAN, <https://www.delaman.org/constitution/>

	consultant	ArchivesSpace technical expertise, migration scripts, troubleshooting, documentation
	UAF IT	Server support
Timeframe		
Quarter 1	Activity	Select and contract consultant from Lyrasis list; Purchase ArchivesSpace Membership; Initial project outlining
	Results	Consultant contract in place; Active ArchivesSpace membership; Detailed project timeline
	Evaluation Criteria	Consultant contract in place; Consultant retainer paid; Consultant work plan agreed to; ArchivesSpace membership active
Quarter 2	Activity	Data mapping; Engaging with ArchivesSpace network on Confluence (collaboration platform); building language plug-in if necessary; Building OLAC-DACS crosswalk; Preliminary ArchivesSpace trainings via Lyrasis
	Results	Written ANLA metadata map/guide for consultant; Draft OLAC-DACS crosswalk
	Evaluation Criteria	Completion of data map/gap analysis; Identification of all problematic metadata fields; Draft OLAC-DACS crosswalk
Quarter 3	Activity	Sandbox testing and trial migration of 1-2 small collections; First AkLA conference presentation
	Results	Successfully migrated 1-2 test collections to ArchivesSpace; Revised Crosswalk (version 2.0); Migration documentation; Sharing progress report and eliciting feedback from archives colleagues at AkLA annual conference
	Evaluation Criteria	Successful test collection entries reflecting ANLA/ANLC language codes; Validation against sample records; Internal usability testing; Successful AkLA conference presentation
Quarters 4-6	Activity	Refine OLAC-DACS crosswalk; Partially migrate two designated, sizable, and different collections; Document migration workflows; Present to DELAMAN 2027 annual meeting
	Results	OLAC-DACS crosswalk version 3.0; Majority of two significant collections successfully migrated to ArchivesSpace, organized hierarchically
	Evaluation	Crosswalk version 3.0 complete; Majority of designated

	Criteria	collections migrated and accessible through ANLA backend; Metadata completeness benchmarks met; Migration documentation stored on ANLA servers; Receive feedback from DELAMAN
Quarter 7	Activity	Troubleshoot and complete designated collections migrations; Incorporate DELAMAN feedback; Finalize OLAC-DACS metadata crosswalk
	Results	Designated collections completely migrated to ArchivesSpace; Final OLAC-DACS metadata crosswalk
	Evaluation Criteria	Completed final Crosswalk; Designated collections fully migrated to ANLA's backend
Quarter 8	Activity	Embed ArchivesSpace Public User Interface into ANLA website; Implement usability refinements; AkLA 2027 conference; Reduce consultant reliance and transition to independent management
	Results	Integrated ArchivesSpace portal on ANLA website; Disseminate results and lessons at AkLA conference; Consultant closeout documentation
	Evaluation Criteria	Designated collections accessible on ANLA website via ArchivesSpace portal; Peer feedback from AkLA; Demonstrated staff capacity to independently manage ArchivesSpace

Project Results

Key deliverables will be as following: a) Implementing appropriate Language and Script codes in ANLA's instance of ArchivesSpace, b) Migrating at least two key, large collections to ArchivesSpace, c) Embedding the ArchivesSpace Portal into ANLA's website, d) Developing an OLAC-DACS Metadata Crosswalk, e) Presenting to conferences and meetings of Alaska and linguistics library and archives professionals on best practices for reconciling the catalogues of language and traditional academic archives. Because ArchivesSpace does not require ongoing paid memberships to sustain usage, once the initial problems with language codes and data mapping have been resolved, and the metadata crosswalk has been established, continued monetary support should not be required, outside of ANLA's regular staffing needs. Overall, the products and projects produced by the LB21 grant will set up ANLA to migrate the bulk of its collections to ArchivesSpace (and, hence, DACS), and establish modern best practices for bridging metadata between language and traditional archives, which can then be modified or implemented by other institutions.

All archival collections made available under this project (and, generally, at ANLA) will be made publicly available under a Creative Commons Attribution-Noncommercial-No Derivative

Works 4.0 United States License, as per Deeds of Gift with donors. ANLA believes that the best means of preserving its invaluable language resources for future generations is through open access, encouraging their free circulation and usage.

As this project primarily aims to migrate two relatively recent collections, and not ANLA's entire catalog, there will be a large remainder of materials left to migrate past the expiration of the grant. This grant will be used on critical initial investments, such as resolving the critical language codes issue in ArchivesSpace, personnel training, and establishing reusable migration protocols, which will set up ANLA for success migrating the remainder of its catalog moving forward. Newer collections, which are more likely to maintain their original order, will be given priority. With that being said, there will be a transitional period during which ANLA will maintain its legacy catalog, parallel to ArchivesSpace; this will have the added benefit of pacifying long-time users who may be resistant to change. The timeline for full migration to ArchivesSpace will depend on future ANLA staffing; however, we hope that this project's successful implementation will increase ANLA's impact and visibility in the field of language archiving, introducing us to new professionals, strengthening our institutional reputation, and better preparing us to meet new opportunities.

ANLA's collections represent an irreplaceable record of the linguistic and cultural history of Alaska and, by extension, the United States. The archival history of Alaska's Native languages—field notes, recordings, dictionaries, pedagogical materials, and oral histories—constitutes a critical body of primary sources for understanding the American past. By bringing ANLA's catalog into alignment with modern archival standards, while preserving the specialized descriptive practices required for language materials, this project will ensure that these records can be more accurately described, responsibly managed, and readily discovered by scholars, educators, and heritage speaker communities. In doing so, the project contributes to a broader national effort to preserve and make accessible unique local histories, strengthening the infrastructure through which an essential part of American history can be studied, revitalized, and shared with future generations.

Schedule of Completion - Alaska Native Language Archive Catalog Harmonization Project

Year 1				
Activity	Q1	Q2	Q3	Q4
Phase 1 - Project Initiation and Setup				
Select and contact ArchivesSpace consultant				
Purchase ArchivesSpace membership				
Initial project outlining				
Phase 2 - Metadata Analysis and Technical Development				
Metadata mapping and gap analysis				
Develop draft OLAC-DACS Crosswalk				
Engage with ArchivesSpace developer community on Confluence				
Establish language taxonomy solution				
Participate in relevant ArchivesSpace/Lyrasis trainings				
Phase 3 - Testing and Pilot Migration				
Sandbox testing and trial migration of 1-2 small test collections				
1st AkLA Conference presentation				
Phase 4 - Full Migration				
Refine OLAC-DACS Crosswalk				
Partially migrate two designated, sizable collections				
Present to DELAMAN 2027 annual meeting				

Year 2				
Activity	Q5	Q6	Q7	Q8
Phase 4 - Full Migration (continued)				
Refine OLAC-DACS Crosswalk				
Partially migrate two designated, sizable collections				
Present to DELAMAN 2027 annual meeting				
Phase 5 - Dissemination and Sustainability Planning				
Troubleshoot and complete two large collection migrations				
Incorporate DELAMAN feedback				
Finalize OLAC-DACS Crosswalk				
Embed ArchivesSpace Public User Interface				
Implement usability refinements				
Present at AkLA 2027 Conference				
Reduce consultant reliance and transition to independent management				