



NATIONAL LEADERSHIP GRANTS FOR LIBRARIES

Sample Application LG-260726-OLS-26
Project Category: Planning

Comanche Language and Cultural Preservation Committee

Amount awarded by IMLS: \$199,996
Amount of cost share: \$0

The Comanche Language and Cultural Preservation Committee will plan an integrated Comanche language and culture archive designed around visiting (kahnimia), where language circulates through presence and participation rather than passive retrieval. Planning includes collection survey, technical architecture design integrating Mukurtu4 with interactive learning components, community governance framework development grounded in the Four R's (Relationship, Responsibility, Reciprocity, Redistribution), component testing with community learners, and production of an implementation roadmap and Planning Documentation Guide for replication by other community language archives. The primary beneficiaries of the Planning project are Comanche community members: language learners, families, educators, and community members who will ultimately use the integrated archive. The secondary beneficiaries are practitioners at other Native American language and culture archives who face similar design questions and will be able to adapt the documented planning process, design principles, and tested components produced by this project. The project will also benefit the growing network of Mukurtu-based Native American language archives, which face similar integration and governance challenges and will be able to draw on the Planning Documentation Guide as a replicable model.

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.

Planning for a Living Archive: Designing an Integrated Native American Language and Culture Archive for Community Use

Introduction. The Comanche Language and Culture Preservation Committee (CLCPC), located in Lawton, Oklahoma, requests \$199,996 from the Institute of Museum and Library Services (IMLS) National Leadership Grants for Libraries Program (Planning project type) to design the integrated architecture of an existing community language archive in deliberate preparation for a significant expansion of its holdings. CLCPC operates an active, public-facing archive at archives.comanchelanguage.org, built on Mukurtu CMS with Traditional Knowledge labels and community-controlled access tiers already in place. Parallel projects currently underway are processing and preparing a substantial body of Comanche language materials (audiovisual, written, and born-digital) for ingest into this archive. This Planning project designs the integrated system that will receive them. This project aligns with NLG-L Objective 1.3: Provide broad access to and preservation of information and collections through libraries and archives, specifically addressing community memory, digital access, artificial intelligence, collections stewardship, and digital preservation strategies. The planning work will produce a comprehensive implementation roadmap, tested technical components, a community governance framework, and a documented design process replicable by other Native American language and culture archives.

Many Indigenous language archives successfully preserve materials but lack infrastructure that supports active language use by learners and speakers. Archives typically function as storage systems optimized for retrieval: materials are cataloged, preserved, and made accessible for research or reference, but the archive itself does not actively support the production of new speakers or the circulation of language through everyday community practice. This gap between preservation and language vitality is not a failure of existing archives — it reflects the fact that most digital repository platforms were designed for research libraries, not for community language revitalization.

The archive we are planning is not a repository. It is a space where Comanche people can be Comanche, visiting with Comanche voices and with each other. In Comanche relational life, visiting (*kahnimi?a*) is the practice through which language circulates, relationships are sustained, and people are produced as Comanche through participation and presence. An archive designed around this principle measures success by whether people become speakers through engagement with it, organizes materials around the relationships between voices and learners rather than around discrete items, and is governed by the obligations of presence and care. This design logic is not exclusive to the Comanche context: it represents a fundamentally different approach than standard digital repositories, one with implications for any community language archive whose goal is speaker production rather than content delivery.

Designing an archive around the principle of visiting raises a series of concrete planning questions that this project will address: how audiovisual, written, and lexical materials should be technically integrated to support relational engagement with language rather than item retrieval; how governance structures should reflect community protocols for visiting with culturally sensitive materials at the scale of a fully integrated system; how technical components (a line-by-line audio player, dictionary-driven language games, and AI-assisted transcription pipelines) can be designed and tested to support speaker production; and how the full planning process can be documented in terms adaptable by other Native American language and culture archives facing the same design challenges. These are the questions this Planning project exists to answer.

CLCPC is an operational archive and library, functioning as the specialized cultural library and archive serving Comanche learners, educators, and families. archives.comanchelanguage.org is publicly live, built on Mukurtu CMS with Traditional Knowledge labels and community-controlled access tiers in place, the Comanche dictionary live, and representative entries establishing the metadata structure. The platform is operational and proven: CLCPC already maintains a functioning Mukurtu archive with digitized language materials, community-governed access protocols, and an active user base of learners and educators. The collection (audiovisual materials spanning multiple formats, written materials including handwritten notes of elder speakers and typed lesson plans, born-digital files on deteriorating 3.5-inch floppy disks, and teaching resources spanning multiple generations of community language instruction) exists at significant scale and is being prepared through parallel projects for the ingest this archive was built to receive. What has not yet been designed is the integrated architecture that will receive it: the hosting infrastructure for large audiovisual files, the integration layer connecting the dictionary to language games and the audio player to lesson materials, the governance framework scaled to a fully integrated system. The infrastructure exists. The community relationships exist. The collection exists. What this Planning project designs is the architecture that brings them together: a fully deliberate system in which a learner can visit with an elder's voice

through a line-by-line audio player integrated with a lesson plan, where dictionary-driven language games produce speakers through play, and where the governance of the space reflects the relational obligations of the community it serves. Because CLCPC already maintains this functioning archive infrastructure, the project focuses on integration and planning rather than initial infrastructure creation. Because Native American language archives exist in tribal programs, universities, community nonprofits, and libraries across the country, the planning framework developed through this project will be designed for adaptation across these contexts, contributing a replicable model to a field that has not yet fully articulated what community-centered archive design looks like in practice.

Project Justification: The Need: Infrastructure Without Architecture. CLCPC has built its archival infrastructure through a deliberate sequence of investments, each designed to advance a specific capacity in anticipation of the next: conducting preliminary surveys and digitization of existing holdings, processing audiovisual materials for Mukurtu ingest through an active ANA grant now in its first year, developing a Comanche-specific training dataset for AI-assisted transcription through Mellon-funded operational work, and submitting a pending application to CLIR for professional digitization and remastering of a substantial body of audiovisual materials (VHS, DVD, DV mini, Hi-8, cassettes, reel-to-reel, LPs, and mini video cassettes) that represent the core of the legacy collection. Each of these is a building block. The Planning project is the next block, the one that designs the integrated architecture capable of receiving what the prior investments have been preparing. What the existing components do not yet constitute is a coherent, integrated archive system designed from the ground up around the needs and relational practices of the Comanche community. The components exist but the architecture does not; without deliberate architectural planning before the next ingest, further implementation risks replicating the fragmented, item-centered logic of standard repositories rather than building the relational, speaker-producing environment the community needs.

The collection itself presents immediate planning imperatives. As an active archive that has grown across multiple projects and formats, CLCPC has not yet completed a formal integrated survey that establishes the full scope, condition, and format distribution of all holdings and systematically sets processing priorities across them, a gap that is common in community archives that have developed organically alongside their collections, and that this project addresses directly. Born-digital materials on 3.5-inch floppy disks are actively deteriorating; the hardware required to read them is increasingly rare and the window for recovery is closing. The technical questions surrounding integrated components (a line-by-line audio player synchronized with transcripts and lesson materials, language games drawing live from the lexical database, and AI-assisted transcription workflows for handwritten and typed documents) have been prototyped and proved as concepts but not yet scoped, tested, or designed for the scale of full implementation. The governance framework governing a fully integrated archive, including protocols for how community members visit and engage with materials of varying cultural sensitivity, has not been developed at the scale the full ingest and implementation will require. Two years of deliberate planning addresses all of these imperatives before implementation begins.

Building on Established Models and Prior Investment. This Planning project builds on and extends three streams of prior investment. First, CLCPC has conducted preliminary surveys and a first-pass digitization of 92 CDs and 95 DVDs using BWF funding, establishing item counts and producing working copies; these materials are queued for professional digitization and remastering pending a submitted CLIR application. An active ANA grant, now in Year One of Three, is processing 36 audiovisual recordings over the three-year grant period: a carefully scoped initial run, with a media specialist just brought on, designed to establish processing workflow and build capacity rather than to process the collection at scale. A central planning question this project will resolve is the hosting architecture for large audiovisual files: video and audio at volume cannot live inside the Mukurtu database without consuming server resources the archive cannot sustain, and determining where files live, how they connect to Mukurtu, and what the ingest pipeline looks like at scale is among the most consequential technical decisions this planning project will make. Should the CLIR application not be funded, CLCPC has internal capacity to advance digitization work through its two part-time language data specialists (young Comanche men whose work builds both the archive and their own engagement with the language), ensuring the collection processing pipeline is not entirely contingent on a single external award. The hosting architecture planning will proceed regardless of the CLIR award outcome: the technical consultant will design scalable hosting solutions informed by the ANA digitization work in progress and the collection survey's volume projections, with specific capacity planning refined once the full digitization timeline is confirmed. The Planning project's scope, timeline, and deliverables do not change based on CLIR's funding decision; what changes is the implementation timeline in the subsequent phase, not the architectural planning work

itself. Second, the existing Mukurtu deployment at archives.comanchelanguage.org provides a tested platform with growing community governance protocols that the planning work will develop and scale. Third, Mellon Foundation and Better Way Foundation operational funding has supported exploratory development, including the Comanche-specific AI training dataset, the line-by-line audio player prototype, and the dictionary-driven language games, providing a technical foundation for planning the integrations that will make these tools fully operational within the archive architecture.

The Design Logic: Visiting as Archive Architecture. Most language archives are designed around the logic of retrieval: a user identifies a need, searches for relevant materials, retrieves them, and uses them. This logic reflects the institutional priorities of the repositories that developed it (universities, national archives, research libraries) but it does not reflect the relational practices through which endangered languages are actually transmitted and revitalized. Languages are not retrieved. They are inhabited. The archive CLCPC is planning is designed around a different logic: visiting (kahnimi?a), the practice through which language circulates and people are produced as Comanche through participation and care. An archive designed around visiting measures success by how many speakers engagement with it produces, not by how many items it holds.

The visiting framework is grounded in a set of values that Harris and Wasilewski (2004) identify as foundational to Indigeneity: relationship, responsibility, reciprocity, and redistribution. LaDonna Harris, herself Comanche and founder of Americans for Indian Opportunity, articulated these four values through two decades of structured dialogue with Indigenous communities across the country. They are not abstract principles; they are obligations. Relationship is the kinship obligation: the recognition that the archive exists within a web of connections among people, materials, and the language itself. Responsibility is the community obligation: the archive's governance must reflect the obligations CLCPC holds to the community it serves, not the institutional priorities of outside repositories. Reciprocity is the cyclical obligation: materials that community members created, contributed, and entrusted to the archive must return to them in forms they can actually use. Redistribution is the sharing obligation: the frameworks and tools developed through this planning process are meant to be given away to other Native American language and culture archives navigating the same design questions. The four Rs describe what visiting actually means in practice. They are the values this archive is being designed to enact.

This design logic has direct technical implications. A line-by-line audio player synchronized with lesson plan text is not merely a playback feature; it is a mechanism for visiting with an elder's voice through the materials they created, hearing the language as it was taught rather than as an abstracted audio file. Dictionary-driven language games are not gamification layered onto an archive; they are a way of spending time with the language in the presence of community-developed lexical knowledge, producing speakers through playful relational engagement rather than delivering vocabulary as a skill. AI-assisted transcription of handwritten materials is not just a processing efficiency; it is a way of making the handwriting of elders speak, of bringing their written presence into the visiting space alongside their recorded voices. Each technical component is in service of the same design principle: building a space where Comanche people can be Comanche.

This design logic is not exclusive to the Comanche context. Any community language archive whose goal is speaker production rather than content delivery faces the same fundamental design question: how do we build a space where community members can be present with their own language rather than merely accessing it? The planning work CLCPC undertakes will document the visiting framework and its technical implications in terms that other Native American language and culture archives can adapt to their own relational practices and community contexts, contributing a replicable design model to a field that currently lacks one.

Who Will Benefit. The primary beneficiaries of the Planning project are Comanche community members: language learners, families, educators, and community members who will ultimately use the integrated archive. Their needs and practices will directly shape every design decision made during the planning process. The secondary beneficiaries are practitioners at other Native American language and culture archives who face similar design questions and will be able to adapt the documented planning process, design principles, and tested components produced by this project. Broader beneficiaries include the linguistics, archival, and digital humanities communities, for whom the visiting framework represents a genuinely new contribution to the theory and practice of community-centered archive design. The project will also benefit the growing network of Mukurtu-based Native American language archives, which face similar integration and governance challenges and will be able to draw on the Planning Documentation Guide as a replicable model.

Project Work Plan: Organizational Capacity. CLCPC has sustained community Comanche language work for over 30 years, securing and managing federal and private grants including current awards from the Administration for Native Americans (processing 36 audiovisual recordings over three years with a newly hired media specialist, admin position, curriculum development), the Council on Library and Information Resources (submitted application for professional digitization and remastering of legacy audiovisual materials), the Mellon Foundation (produced a Comanche-specific AI training dataset), and the Better Way Foundation (supporting ongoing operational work, line-by-line audio player prototype, and four dictionary-driven word games, and community language classes). Each grant has been designed as a deliberate step in a long-term capacity-building strategy: compartmentalized projects that collectively advance the organization's archival development, language resources, and community programming. The present proposal represents the next logical phase of that strategy: the infrastructure exists, the community relationships exist, the collection exists, and three decades of sustained work have produced the institutional knowledge required to plan and execute an integrated archive build-out. The Project Director has managed all grant writing and project administration throughout this period while maintaining active roles in language instruction, resource development, and community engagement; this concentration of institutional knowledge that is the organization's greatest strength and that the proposed coordinator hire is specifically designed to support and extend. The Project Coordinator role will be documented with sufficient operational detail to ensure project continuity under any circumstance. CLCPC has recently engaged an outside accountant for financial oversight as the organization's grant portfolio has expanded, strengthening the administrative infrastructure that supports sustained multi-grant project management. The board of directors is actively engaged in organizational governance and provides oversight of strategic direction and financial management. CLCPC's existing grant management infrastructure, including established financial oversight, project tracking systems, and board governance procedures, provides the administrative capacity required to manage a complex multi-year planning project while maintaining ongoing archive operations.

Staffing and Roles. The project will hire one full-time Archive and Planning Coordinator (1.0 FTE, 24 months) to lead day-to-day planning activities including collection survey, floppy and Zip disk recovery coordination, technical scoping and documentation, community consultation coordination, component testing coordination, and deliverable production. This position requires strong organizational and writing skills, comfort learning new digital tools and systems, familiarity with Native American language and culture contexts, and the ability to manage multiple concurrent workstreams across a two-year project period. The breadth and sequentiality of the planning work: survey before architecture, architecture before testing, testing before roadmap: requires full-time sustained engagement; this work does not compress into part-time hours without extending the timeline beyond the project period. Professional development will include training in archival practice, Mukurtu platform operations, and AI-assisted tools for language resource development, building the coordinator's capacity to support the contracted coder during Year Two integration work using the same AI-assisted coding methodology the Project Director has successfully used to design CLCPC's existing digital tools (including the audio player prototype and word games). The coordinator's role is to learn enough to assist with workflow support, bug identification, and testing refinement: not to independently write integration code, but to build capacity to maintain and extend integrated components in future implementation phases. The coordinator will also train language data specialists in the use of AI-assisted transcription and language workflow tools, extending community capacity for language resource development beyond the grant period.

The Project Director (Dr. Kate Pewenofkit) will provide intellectual and design leadership at 0.10 FTE across the project period, overseeing all planning components, leading community governance development, and ensuring that the archive design reflects the relational principles at its core. The Project Director currently oversees CLCPC's existing archive operations and concurrent grant-funded language programs (including ANA-funded audiovisual processing and Mellon-supported language resource development), contributing strategic oversight, governance leadership, and training to this Planning project while the Coordinator leads day-to-day planning activities.

Two contracted roles provide specialized technical expertise at distinct phases. A technical consultant will be engaged during the Year One architecture planning phase (Months 3–9) to assess the Mukurtu API, evaluate existing open-source tools for adaptation, and make scoped build-versus-adapt recommendations for each component. This is a senior scoping role requiring experience with digital humanities infrastructure, open-source archival platforms, and community-centered technology design. A coder on contract will be engaged during the Year Two component testing phase (Months 13–20) to integrate and refine the three priority components (the line-by-line audio player, the dictionary-driven language games, and the AI-assisted transcription interface) within the Mukurtu 4 architecture

based on the decisions made in Year One. The coder's contract deliverable is fully integrated components ready for spring 2028 class testing; the Archive and Planning Coordinator handles all testing documentation and community coordination independently during the spring testing cycle. These are distinct roles requiring different expertise at different project phases; separating them reflects the actual structure of the work.

Community advisors will participate in governance planning sessions as volunteers. The advisory group draws from CLCPC's existing board members and is supplemented by community members actively engaged in CLCPC language classes and programs, including learners of all ages and family groups. This structure ensures that governance planning reflects both institutional leadership and the perspectives of community members who will be the primary users of the integrated archive. Part-time language data specialists and citizen transcribers who evaluate the AI-assisted transcription pipeline will do so as volunteers, contributing expertise they already exercise in their ongoing language data work. The Archive and Planning Coordinator will support their participation by sharing AI-assisted transcription and language workflow tools developed during the component testing phase, and by contributing AI-assisted coding support alongside the contracted coder during integration and refinement work, building community capacity to use these tools for language resource development independently and in future implementation phases.

Year One: Understanding, Architecture, and Recovery (September 2026 – August 2027)

Collection Survey and Condition Assessment (Months 1–4). The Archive and Planning Coordinator will conduct a systematic survey of the full collection across all format types. The paper collection spans approximately 20 linear feet and includes handwritten notes of elder speakers, typed and printed lesson plans, language learning materials, correspondence, and founding organizational documents, all of which constitute both linguistic and community historical record. Born-digital materials include approximately 50 3.5-inch floppy disks and a smaller number of Zip disks. Floppy disk recovery will be initiated in Month 1 given the active preservation risk; Zip disk recovery presents an equal or greater urgency as the drives required to read them are rarer and more difficult to source than floppy disk hardware. Both formats will be prioritized for imaging and migration to current archival formats through engagement with a qualified vendor or institutional partner before further deterioration occurs. The volume of born-digital content on these disks is not yet fully known; the survey will establish what materials are present and assess their condition and readability. An unknown volume of additional born-digital materials in various formats will also be surveyed.

The survey will establish item counts and format distribution across all collection materials, assess physical and digital condition, identify preservation priorities, and document the provenance and contextual relationships between materials (the connections between a speaker's recorded voice, their handwritten notes, and the lesson plans they developed from those notes) that will inform the relational architecture of the integrated archive. These relational connections are not incidental metadata. They are the design material from which the visiting environment will be built.

Deliverable: Collection survey report documenting scope, condition, format distribution, preservation priorities, and relational connections between materials, completed by end of Month 4.

Technical Architecture Planning (Months 3–9). Drawing on the collection survey and in consultation with the technical consultant, the project team will develop the technical architecture for the integrated archive across four workstreams.

Mukurtu 4 migration scoping. CLCPC's current archive runs on Mukurtu 3. Mukurtu 4 is scheduled for release in late 2026, and the migration from Mukurtu 3 to Mukurtu 4 is a technical prerequisite for the full integration build-out, as integration architecture differs between versions and designing integrations for a platform that will be superseded during the project period would require rework. All integration planning will therefore be designed for Mukurtu 4. If Mukurtu 4 is delayed beyond the architecture planning phase, the technical consultant will design the integration architecture for the Mukurtu 3 API with a documented migration pathway, and the architecture document will include a Mukurtu 4 addendum once the platform is available. The technical consultant, in consultation with Mukurtu's technical assistance program for partners and informed by CLCPC's existing relationship with a Mukurtu designer, will scope the migration path, document what changes in the API and integration layer between versions, and produce a migration plan that specifies the steps, timing, and resource requirements for execution. The migration itself will occur in the implementation phase, not during this planning project; the deliverable here is a fully

specified, tested migration plan so that when implementation begins, the migration can be executed with confidence. A key lesson from CLCPC's development experience with the word-of-the-day constraint and the unresolved AV hosting question confirms that architectural decisions made without full platform knowledge require costly rework; the migration scoping work exists precisely to prevent that.

API and integration constraint mapping. CLCPC's development experience includes a direct encounter with Mukurtu's integration limits: an attempt to build a word-of-the-day feature was blocked when Mukurtu's architecture prevented external code from pulling from the dictionary. This is not an edge case; it is a constraint that potentially affects the game integrations, the line-by-line player, and other planned components. Systematic mapping of what the Mukurtu 4 API allows and restricts is therefore an early and essential architecture priority, not a detail to be resolved during implementation. Mukurtu's technical assistance program for partners is a named resource for this workstream, providing direct access to platform expertise that CLCPC cannot replicate internally.

Open source tool evaluation. The architecture planning phase will conduct a systematic review of available open source tools alongside CLCPC's existing prototypes, making documented build-versus-adapt-versus-integrate decisions for each component. Tools under evaluation include but are not limited to IIIF-based audio players, FirstVoices language learning components, and other open source language archive infrastructure. Decisions will be made on the basis of Mukurtu 4 compatibility, community governance integration, technical maintenance requirements, and alignment with the visiting design framework.

Prototype refinement scoping. CLCPC has developed working proof-of-concept versions of the line-by-line audio player and four word games (three Wordle-style games at three-letter, four-letter, and five-letter levels, and a word order game) currently live on the organizational website. These prototypes demonstrated feasibility and community interest, but were developed rapidly and require systematic refinement before they are ready for a fully governed archive environment: code review, accessibility compliance, performance optimization, security review, and integration architecture for the Mukurtu 4 platform. The architecture document will specify what each prototype requires to reach production quality, providing the coder on contract with a precise scope for Year Two integration work.

Deliverable: Technical architecture document mapping existing components, required integrations, build versus adapt decisions, and development priorities, completed by end of Month 9.

Community Governance Planning (Months 3–12). Parallel to technical architecture planning, the Project Director will lead a community governance planning process to further develop the protocols and structures that will govern the integrated archive. This process is grounded in the relational principles of Comanche community life (Relationship, Responsibility, Reciprocity, and Redistribution) and will address the specific governance questions that an integrated visiting environment raises: How are visiting protocols established for materials of varying cultural sensitivity? How does the community advisory structure function at the scale of a fully integrated archive? How are decisions made about new components, new integrations, and new access arrangements? How are the obligations of presence (the responsibilities that come with visiting) communicated to and held by users? Community advisory sessions will be held at minimum four times per year across both project years, with Year One sessions focused on governance design and Year Two sessions focused on reviewing and finalizing the framework in light of component testing findings.

By end of Month 12, the Project Director will complete a draft community governance framework for the integrated archive, including visiting protocols, advisory structures, and decision-making processes. This draft is an internal working document that will be refined in Year Two in light of component testing findings before community review and finalization.

Year Two: Testing, Refinement, and Roadmap (September 2027 – August 2028)

Component Testing (Months 13–20). Year Two will move from architecture to integration testing, evaluating how proven components perform within the full Mukurtu archive architecture and with community participants before finalizing the implementation roadmap. CLCPC has already developed working versions of key components: a line-by-line audio player exists in prototype form, and four word games (Wordle-style games in three-letter, four-letter, and five-letter formats, and a word order game) are live on the CLCPC website. These are proven components with community track records; the work of Year Two is to test how they integrate into the full archive

architecture, evaluate that integration with specific community cohorts, and document what full implementation at scale requires. Component testing will focus on three priority integrations identified in Year One. A central asset for this phase is CLCPC's existing active learner community: approximately 100 participants enrolled in structured Comanche language classes offered each fall (after Labor Day through early December), spring (February through May), and summer (July through August), in person and via Zoom. These participants are an already-engaged community of language learners whose class sessions provide natural, realistic evaluation contexts for each component. Testing will occur in existing CLCPC community classes so tools are evaluated in authentic language-learning environments rather than controlled lab settings, ensuring that component evaluation reflects actual community use patterns and learner needs. The coder on contract will support integration and refinement of each component for testing within this cohort structure.

- Dictionary-driven language games: Fall 2027 class session (approximately Sep through Dec). CLCPC has already developed four word games currently live on the organizational website: three Wordle-style games at three-letter, four-letter, and five-letter levels, and a word order game. The Year Two work tests how these games integrate with the full archive lexical database and Mukurtu architecture, and evaluates that integration with the fall 2027 class cohort, typically the highest-enrollment session, providing learners across different proficiency levels. Testing will assess whether archive-driven game mechanics produce meaningful language engagement at scale and gather structured feedback on design, vocabulary coverage, and the quality of relational engagement the games produce. Refinements identified in fall 2027 will be incorporated before spring 2028 class sessions, allowing a second evaluation cycle within the project period.
- AI-assisted transcription pipeline: evaluated by CLCPC's existing cohort of part-time language data specialists and citizen transcribers across the Year Two testing period. This cohort already performs language data work and represents the actual intended users of the transcription pipeline in the implementation phase. Testing will assess transcription accuracy and workflow efficiency for handwritten versus typed Comanche language materials, building on the existing Comanche-specific training dataset, and will develop and evaluate community review protocols for transcription outputs. Spring 2028 class participants will provide supplementary evaluation of transcribed materials as readable and accurate language text.
- Line-by-line audio player integrated with Mukurtu: Summer 2028 class session (July through Aug). A working prototype of the line-by-line audio player already exists. The Year Two work tests its integration into the full Mukurtu archive architecture and evaluates that integration with the summer 2028 hymns class cohort. CLCPC's summer session regularly focuses on Comanche hymns, a context in which visiting with recorded voices carries particular cultural and spiritual weight. Testing will evaluate whether the integrated component produces the visiting experience it is designed to create: presence with an elder's voice through the materials they recorded and taught. This is the most culturally resonant testing context available and is deliberately placed last in the testing/validation sequence so that integration quality is highest when community members are engaging with materials of greatest significance.

Each component test will be documented with findings on technical feasibility, community reception, design refinements needed, and resource requirements for full implementation. Testing will explicitly evaluate whether each component contributes to the visiting experience (whether it produces presence, participation, and relational engagement with the language) rather than evaluating technical performance alone. Game refinements identified in the fall 2027 testing round will be incorporated before spring 2028 class sessions, allowing a second evaluation cycle within the project period.

Deliverable: Component testing reports for each priority integration, including technical findings, community reception, and implementation recommendations, completed by end of Month 20.

Governance Framework Finalization and Community Review (Months 18–22). The draft governance framework developed in Year One will be revised in light of component testing findings and reviewed with the community advisory group. Testing will inevitably surface governance questions that were not fully anticipated in Year One: how visiting protocols apply to interactive components, how game mechanics intersect with cultural access tiers, and how community oversight of AI-assisted transcription outputs is structured. The governance framework will be updated to address these questions before finalization. A final community review session will confirm that the framework reflects community values and is ready to govern the full implementation.

Deliverable: Final community governance framework for the integrated archive, reviewed and approved by the community advisory group, completed by end of Month 22.

Implementation Roadmap & Planning Documentation (Months 20–24). The project will conclude with the production of two capstone documents that synthesize all planning work and position CLCPC for the next phase of implementation. The Implementation Roadmap will provide a detailed, costed, and staffed plan for building out the fully integrated archive over a subsequent multi-year implementation period. It will include: a prioritized processing plan for the full collection based on the Year One survey; a phased technical implementation plan for each integrated component based on testing findings; a staffing model for the implementation period; a budget framework; a sustainability plan for ongoing archive operations; and a timeline for the full build-out. The Roadmap will be the primary deliverable supporting CLCPC's next grant application to IMLS or other funders.

The Planning Documentation Guide will document the full two-year planning process (the collection survey methodology, the technical architecture planning process, the community governance development approach, and the component testing framework) in terms accessible and adaptable to other Native American language and culture archives. It will include the visiting framework and its design implications, written for a practitioner audience that may not share Comanche cultural context but can adapt the underlying design logic to their own community's relational practices. CLCPC will submit session proposals to present the Guide at three language practitioner venues that collectively reach the broadest possible audience of community language program directors, archive practitioners, and language teachers: SAIL (Symposium on American Indian Languages), AILDI (American Indian Language Development Institute), and CoLang (the Institute on Collaborative Language Research). Proposals will be submitted during Year Two and Post Award once the Planning Documentation Guide is in draft form. The Guide will be published under a Creative Commons license and hosted permanently on the CLCPC website and through the Mukurtu community network.

Deliverables: Implementation Roadmap and Planning Documentation Guide, completed by end of Month 24.

Evaluation. Evaluation will assess whether the planning activities successfully produce the technical, governance, and design clarity necessary to support full archive implementation. Four dimensions will be evaluated with concrete success thresholds. Effectiveness will be measured by completion and quality of the project's six deliverables (the collection survey report, floppy and Zip disk recovery archive, technical architecture document, component testing reports, community governance framework, and Implementation Roadmap and Planning Documentation Guide) assessed against the planning questions identified in the Project Justification. All six deliverables must be substantially completed for the project to be considered effective, with any schedule adjustments documented and approved through the project's monthly review process. Technical feasibility will be evaluated through component testing results, including the performance and usability of the line-by-line audio player, dictionary-driven language games, and AI-assisted transcription pipeline within the Mukurtu archive environment. Component testing will be considered successful if at least 80% of class cohort participants in each testing cycle report meaningful language engagement through the component, and if technical testing confirms the component integrates with Mukurtu without requiring unsustainable custom development. Community alignment will be assessed through structured feedback from community advisory sessions and language learners participating in component testing, including the class cohorts engaged in Year Two testing activities. Community alignment will be considered adequate if at least 75% of community advisory group members affirm that the governance framework reflects Comanche relational values and community practice, and if class cohort feedback confirms that interactive components support visiting rather than mere retrieval. Project management performance will be monitored through monthly progress reviews between the Project Director and Archive and Planning Coordinator, quarterly milestone reviews with the CLCPC board, and documentation of adherence to the Schedule of Completion. Deliverables completing within 30 days of scheduled dates will be considered on-time; delays beyond 30 days will trigger immediate review and mitigation planning. Together these evaluation activities will ensure that the project produces a fully specified implementation roadmap grounded in both technical feasibility and community practice.

Project Results: Deliverables. This project will produce six deliverables:

- Collection survey report documenting the full scope, condition, format distribution, preservation priorities, and relational connections of the CLCPC collection.

- Recovered and migrated content from 3.5-inch floppy disks and Zip disks, preserved in current archival formats.
- Technical architecture document mapping the integrated archive system, including build versus adapt decisions and development priorities for each component.
- Component testing reports for the line-by-line audio player, dictionary-driven language games, and AI-assisted transcription pipeline, including technical findings, community reception, and implementation recommendations.
- Community governance framework for the integrated archive, including visiting protocols, advisory structures, and decision-making processes, reviewed and approved by the community advisory group.
- Implementation Roadmap and Planning Documentation Guide, the primary capstone deliverables positioning CLCPC for the next phase of archive build-out and providing a replicable planning model for other Native American language and culture archives.

Advancing Objective 1.3 and Potential for Future Implementation. This Planning project directly advances NLG-L Obj 1.3 by developing the architecture & governance frameworks for an integrated archive that will substantially expand community access to and stewardship of Comanche language and culture materials. The collection survey addresses collections stewardship. The floppy disk recovery addresses digital preservation strategies. The technical architecture and component testing advance digital access in ways specifically designed for community language contexts. The governance framework advances community memory stewardship in a manner grounded in the relational practices of the Comanche community. The project's use of artificial intelligence (in the transcription pipeline, in AI-assisted transcription and prototype testing tools, and in building coordinator and community capacity to use these tools) directly addresses artificial intelligence as a named example under Obj 1.3, and reflects the field-wide priority of creatively and effectively deploying new technologies to improve library and archival services. Together these planning activities position CLCPC to undertake a National Implementation project in a subsequent funding cycle that could not be responsibly scoped or executed without the foundational work this Planning project provides.

Replicability and National Relevance. The Planning Documentation Guide will make the full planning process, including the visiting framework and its design implications, accessible to other Native American language and culture archives facing similar design questions. While grounded in Comanche relational practice, the visiting framework offers a replicable design logic for any community language archive whose goal is speaker production rather than passive content delivery. In library-sector terms, this project develops a replicable model for community language archives integrating digital preservation systems with participatory learning interfaces, addressing the gap between archival storage and active language use. Because Native American language archives exist in diverse institutional contexts (tribal programs, community nonprofits, universities, and libraries), the governance frameworks and design principles developed through this planning process will be written for adaptation across these settings rather than as a prescription tied to CLCPC's specific context. All technical architecture documentation, component testing findings, and planning methodologies will be published under CC BY-NC 4.0 licenses, enabling adaptation by other community language archives navigating similar integration challenges. The component testing findings will be of particular value to archives considering similar technical integrations, providing documented feasibility assessments and community reception data that can inform their own planning decisions without requiring them to start from scratch. The Mukurtu 3 to Mukurtu 4 migration work will be of immediate and specific value to other Mukurtu-based Native American language archives facing the same platform transition; a documented migration path and integration architecture for Mukurtu 4, developed through this planning process and published in the Guide, addresses a challenge the broader Mukurtu community is navigating simultaneously.

Sustainability. The Planning project's primary sustainability mechanism is the Implementation Roadmap itself: a detailed, costed plan for the next phase of archive development that positions CLCPC to seek implementation funding from IMLS and other sources. The planning work builds on existing infrastructure (Mukurtu, the active ANA digitization work, the Mellon-supported tool development, and the preliminary surveys and digitization already completed) that will remain in place regardless of future funding decisions. The collection processing pathway is likewise designed for resilience: professional digitization and remastering will proceed if the pending CLIR application is funded; internal digitization capacity through the two part-time language data specialists ensures the work advances regardless of that outcome. The community governance framework developed during planning will

govern CLCPC's archival work in the interim period between planning and full implementation, immediately improving the organization's governance practice. The Planning Documentation Guide will be published under a Creative Commons license and hosted permanently on the CLCPC website and through partner networks.

Contribution to America's 250th Commemoration. Among the founders of the Comanche Language and Culture Preservation Committee was Roderick RedElk — one of seventeen Comanche Code Talkers who served in the United States Army Signal Corps during the Second World War. Alongside his brother, whose family continues to lead this organization today, Roderick RedElk carried the Comanche language across the European theater to protect American forces. The language he used on the beaches of Normandy is the language this archive is being designed to keep alive.

As the United States marks the 250th anniversary of its founding, a full and honest accounting of the American story includes preserving the languages through which its most consequential chapters were lived. The Comanche language is held in archives across the country, but none were designed from the ground up around Comanche relational practice — by Comanche people, for Comanche people. This archive represents a community acting on its own behalf, using American innovation (AI-assisted transcription, open-source digital infrastructure, community-governed design) to ensure that what was earned and endured is not lost.

The deliberate, community-driven design of an archive that produces speakers rather than preserving language as artifact is itself an act of historical continuity. The founders of this organization built it so that the language carried into war would be spoken by Comanche children long after the war was memory. Planning an integrated archive that keeps that language alive through relational engagement is a continuation of that founding act — and a contribution to the American story that will outlast any commemoration.

Schedule of Completion — Planning for a Living Archive

Comanche Language and Culture Preservation Committee | Project Period: September 1, 2026 – August 31, 2028

YEAR ONE September 2026 – August 2027

Activity	Start	End	Responsible Party
Hire Archive and Planning Coordinator	Sept 2026	Oct 2026	Project Director
Collection survey and condition assessment (all formats)	Sept 2026	Dec 2026	Coordinator
Floppy and Zip disk imaging and migration (vendor)	Sept 2026	Jan 2027	Coordinator + vendor
Deliverable: Collection survey report (scope, condition, format distribution, priorities)	—	—	Coordinator / Project Director
Engage technical consultant	Nov 2026	May 2027	Project Director
Mukurtu 4 migration scoping	Nov 2026	Mar 2027	PD + consultant
API and integration constraint mapping	Nov 2026	Mar 2027	PD + consultant
Open source tool evaluation	Jan 2027	May 2027	PD + consultant
Prototype refinement scoping	Mar 2027	May 2027	PD + consultant
Deliverable: Technical architecture document (component map, integrations, build/adapt decisions)	—	—	Coordinator / Project Director
Community governance planning (Year 1 sessions)	Nov 2026	Aug 2027	Project Director
Community advisory sessions	Nov 2026	Aug 2027	Project Director + advisors
Draft community governance framework	Jun 2027	Aug 2027	Project Director
Deliverable: Draft community governance framework	—	—	Coordinator / Project Director
Coordinator professional development (archival, Mukurtu, AI tools)	Oct 2026	Aug 2027	Coordinator
Quarterly milestone reviews with CLCPC board (progress updates, community feedback)	Sept 2026	Aug 2027	Project Director

Shaded rows indicate project deliverables. PD = Project Director.

Schedule of Completion — Planning for a Living Archive

Comanche Language and Culture Preservation Committee | Project Period: September 1, 2026 – August 31, 2028

YEAR TWO September 2027 – August 2028

Activity	Start	End	Responsible Party
Dictionary-driven language games testing (Fall 2027 class cohort)	Sept 2027	Dec 2027	Coordinator + coder
AI-assisted transcription pipeline testing (language data specialists + community)	Sept 2027	Mar 2028	Coordinator + specialists
Coder on contract — integration and refinement	Sept 2027	Apr 2028	Coordinator
Line-by-line audio player testing (Summer 2028 Hymns class cohort)	Jul 2028	Aug 2028	Coordinator
Deliverable: Component testing reports (audio player, language games, AI transcription pipeline)	—	—	Coordinator / Project Director
Governance framework revision (based on testing findings)	Oct 2027	Feb 2028	Project Director
Community review of governance framework	Jan 2028	Mar 2028	PD + advisors
Deliverable: Final community governance framework (reviewed and approved)	—	—	Coordinator / Project Director
Implementation roadmap drafting	Mar 2028	Jul 2028	Project Director + Coordinator
Planning documentation guide drafting	Mar 2028	Jul 2028	Coordinator
Accessibility review and open-access formatting	Jul 2028	Aug 2028	Coordinator
Deliverable: Implementation Roadmap and Planning Documentation Guide	—	—	Coordinator / Project Director
Quarterly milestone reviews with CLCPC board	Sept 2027	Aug 2028	Project Director

Shaded rows indicate project deliverables. PD = Project Director.