

Final Proposal Adjustments (250 words)

[Following the initial proposal round, reviewers provided feedback regarding your application. The final proposal should be revised to address the comments made by reviewers. Briefly summarize the changes you have made in the final version in response to their comments and point to where the revisions can be found in the final proposal.]

Diversity section, rights section and added information in the List of Collections to be digitized.

The feedback from the reviewers inspired us to re-evaluate and assess the rights of the collections we nominated for digitization. Through outreach with collection managers, archivists and producers, we established a more complete understanding of these collections and their intellectual property. In the Rights, Ethics and Reuse statement, reviewers can find more details about our research and discussions with holding institutions on this issue. We also added more information to the List of collections to be digitized 2019 spreadsheet and we included information about the number of items we have secured permission to make accessible along with details regarding the Intellectual Property of each series.

We also chose to rewrite the Equity, Diversity and Inclusion section to expand upon our work in online open platforms, but to also showcase the diverse and inclusive history of CUNY. Upon review, our application did not emphasize this part of the school's history and how the collections we are choosing to digitize represent this long time mission of representing underserved communities as well as bringing issues that impact these groups to the forefront.

In anticipation of our access plans, we also engaged in further discussions with the American Archive of Public Broadcasting and Library of Congress and their commitment to the project can be seen in our letters of support.

Eligibility

CUNY Television confirms that:

- It is located in the United States or in an associated entity, e.g., the Commonwealth of Puerto Rico or American Samoa.
- It is one of the following: IRS Code Section 501(c)3, IRS Code Section 115, IRS Code Section 170(c)1

- It acknowledges the restrictions of the Hidden Collections Limitations: Single-institution applications:
 - Minimum allowable request for 2018: \$50,000
 - Maximum allowable request for 2018: \$250,000
 - Minimum allowable project term: 12 months
 - Maximum allowable project term: 24 months
 - Projects must begin between January 1 and June 1, 2020
 - Projects must be completed by May 31, 2022
- It agrees that it's assigned Principal Investigator is not also serving on another NEH proposal.

Initial Proposal Phase

Section 1: Project Summary

Applicant Institution (Legal Name): CUNY Television

Applicant Institution (Colloquial Name): CUNY TV

Collection/Project Title (50 words): Uncovering The City University of New York's Audiovisual Heritage

Project Summary (150 words):

CUNY Television proposes to digitize, preserve, and make accessible select audiovisual collections from a diverse set of organizations within the CUNY system. CUNY Television has become the largest audiovisual archive within the CUNY system and has succeeded at developing and implementing efficient preservation and accessibility workflows. With this project, CUNY TV intends to apply its workflows to collections within select CUNY organizations that do not have active audiovisual preservation programs. These collections had been produced or acquired in order to meet particular educational goals; however, their status as obsolete audiovisual objects has limited their potential, ongoing educational impact. These collections represent subjects including education, criminal justice, urban development, and New York's Puerto Rican communities. The hosts of these collections are passionate about serving their communities and we feel that drawing together their visionary outreach plans in collaboration to uncover these collections will create a significant educational asset to students, researchers, and the public.

What is the size of the request (in whole dollars)? (50k-250k): \$244,955.70

Provide the proposed project length in whole months, and list the project start and end dates:
12 months, 03/01/2020 - 02/28/2021

Is this a collaborative project? No

Resubmission? (250 words)

We submitted a proposal in 2018 that also focused on using the established preservation resources of CUNY TV to preserve and make accessible other audiovisual collections within CUNY's vast system of universities, colleges, and research institutions. This new proposal addresses the particular critiques related to expression of scholarly value, outreach planning, rights management, and workflow. To learn more about the collections, we engaged with and surveyed participating CUNY collection managers to gather more specific information about the collections. We also reached out to get their perspective on the research value and the overall impact these digitized collections might have on students, researchers and overall user communities. Relatedly we also undertook initiatives to apply Creative Commons licenses to both new and legacy productions to expand upon opportunities for academic use of CUNY TV works. Additionally, we've reduced the budget by selectively prioritizing collections that have demonstrated significant scholarly value and potential for impact. We also adjusted the work plan by involving the collaborating institutions into the workflow in areas where their content-knowledge would have the more impact, such as managing rights and supporting transcription efforts to supplement this project.

****Quantities and types of original materials to be digitized during the project:**

[Enter below the estimated quantities and select the units of measurement and material types that best describe the extent of original materials that will be digitized during the project. You may add as many different measurement/material types as you like but each individual item should be accounted for in only one category. If the quantities provided are rough estimates rather than precise descriptions, explain the method used for estimating those quantities in the space provided for additional information.]

How many categories would you like to enter?: 1

Types of Materials: audiovisual

Amount of Material: 1394

Unit of Measurement: items

Additional Information: Totals of audiovisual recordings from each collection were closely approximated using what available inventories, finding aids, or collection survey existed and our own onsite discovery where needed. In some cases collection numbers were approximated partly because redundant copies must be examined and removed.

Quantities and formats of master digital files to be created during the project:

[Enter estimated quantities of uniquely described digital files to be created through digitization, as well as the relevant format(s) created.

If additional files are to be derived from those created in the digitization process for the purposes of backup, preservation and/or access, do not count these derivative files or formats in the totals entered; you may describe any derivative formats to be created and the purposes these will serve in the space provided for additional information.]

Select how many master digital file formats will be created: 1

Quantity: 1394

Format: Matroska / FFV1 / PCM

Additional Information: More information about our use of Matroska and FFV1 is available in our technical plan. Along with other institutions such as NYPL, Indiana University, VIAA, and others we've found this is an optimal open format to meet the requirements and challenges of long-term audiovisual preservation. Multiple derivative files will be generated for each Matroska file including files for web use, editing, and several forms of access.

List the name(s) and URL(s) of the catalogs/repositories/services through which the digitized files and/or associated metadata will be made available (format: <http://address.com>):

1. CUNY Television, <http://tv.cuny.edu>
2. American Archive of Public Broadcasting, <http://americanarchive.org>
3. YouTube, <https://www.youtube.com>
4. Websites of the originating collections, such as <https://centropr.hunter.cuny.edu/> and <https://bccgreats.commonsgc.cuny.edu/> and <https://bcchalloffame.commonsgc.cuny.edu>
5. Internet Archive, https://archive.org/details/@cuny_tv

Section 2: Description of Content

****Description of materials to be digitized**

Provide a brief narrative description of the source materials nominated for digitization, including their subject(s), provenance, relevant associated people, organizations, and events. (max. 250 words)

The materials to be digitized are videotapes held in several collections within CUNY, including Hunter College's Centro de Estudios Puertorriqueños (Centro Center for Puerto Rican Studies), the Special Collections of Bronx Community College, John Jay College of Criminal Justice, the College of Staten Island, and the School of Public and International Affairs at Baruch College. These educational audiovisual materials are the result of the work of faculty, students, and staff of CUNY and the select acquisitions of CUNY collections. The collections document various subjects such as Puerto Rico, criminal justice, education, and NYC society, culture, and politics.

As specific examples, the collection from Centro de Estudios Puertorriqueños includes "HoMoVisiones," a collection of 283 video recordings related to a cable television show dedicated to gay Latino issues. It provides rich documentation on gay, lesbian, and Latino social and political movements in the 1980s and '90s. From John Jay College, the television series "Criminal Justice Closeup" has interviews from experts in the fields of law enforcement and criminal justice covering a time when New York City was undergoing substantive criminal justice reforms.

The collections from Baruch College contains two series, "City Club" and "Baruch College Specials." Both of these series feature public servants speaking about national and local issues such as health care, public housing and education. A number of political figures such as NYC mayor Ed Koch, United States representative Herman Badillo, and activist Al Sharpton are featured in these programs.

**Geographic Scope.

Describe the range of geographic regions represented in the materials nominated for digitization. Do not describe the current or future location(s) of the original, physical materials. (max. 50 words)

These collections primarily represent the geography, culture, and politics of New York City; however, the Centro de Estudios Puertorriqueños collection also focuses on the New York Puerto Rican community. Select collections also highlight the outer boroughs of New York, such as the Bronx and Staten Island.

**Date range of materials to be digitized.

1980 AD - 2011 AD

**Collection level descriptions

If applicable, identify and provide the URL(s) for any collection-level descriptions currently available online:

1. John Jay College, <http://guides.lib.jjay.cuny.edu/video>
2. Centro de Estudios Puertorriqueños at Hunter College, <https://centropr.hunter.cuny.edu/library/film-and-video>
3. Bronx Community College, Hall of Fame for Great Americans Collection <https://bcc-cuny.libguides.com/archives/collections>

Current arrangement and description(s) of materials to be digitized

Provide a brief narrative that summarizes the physical arrangement and the level(s) of processing, cataloging, or other descriptive work that has previously been done for the nominated collection(s). Include the date(s) this descriptive work took place and the standard(s) and/or current format(s) of the records that were created.

(max. 250 words)

The selected audiovisual collections from Centro de Estudios Puertorriqueños at Hunter College and John Jay College are described by detailed collection assessments produced by students within the New York University Moving Image Archiving and Preservation program. These assessments are from 2014 and 2015 and are included as Appendices A and B.

For content that had historically been broadcast on CUNY Television, such as “Cinema Then, Cinema Now,” and “City Club” we have cataloging records of these items to support broadcast such as content abstracts, list of associated speakers, guests, or events as well as subject matter. This metadata originated in tape labels and paper inventories and eventually moved into and expanded upon in broadcast management systems and later migrated into the PBCore metadata standard to standardize our ongoing cataloging of these works.

Current condition and housing of materials to be digitized and plans for their conservation and preservation

Describe the current condition and housing of the source materials to be digitized, including the means through which this condition has been assessed.

Identify the individual or individuals responsible for this assessment and approximately when the assessment took place.

Describe the strategies to be employed for stabilization, conservation, and/or preservation of the materials, including the means through which this work will be supported and sustained long-term.

Explain the environmental provisions made for the long-term management of the source materials and the strategy for responding to requests for access to them.

(max. 250 words)

From our collections assessments, most audiovisual content is in stable condition without the need for comprehensive treatment. An exception to this are the U-matic tapes in several of the collections. CUNY Television is well-experienced with the treatment, repair, and conditioning of these tapes to optimize their digitization and have included the time and labor for such treatment within our budget and workflow estimates. Further details about the assessment of the videotape may be reviewed in Appendices A and B, which detail assessments provided in regards to two of the collections by students of the NYU Moving Image Archiving and Preservation program. CUNY TV will clean, splice, or bake videotapes as needed, stage the materials in cool, dry, stable environments, meticulously maintain and document of use of playback and recording hardware, use time-base correctors and process amplifiers to calibrate analog audiovisual recordings in regards to volume, brightness, contrast, hue, and saturation to ensure that the digitization represents the full quality and extent feasible to playback from the audiovisual object.

Description of samples

Briefly describe the representative samples in the uploaded PDF document.

(max. 100 words)

The attached PDF depicts representative images, series descriptions, scope notes, and citations for some of the nominated collections to provide an impression of the content and value of the included series. Some of these collections do already have a small percentage in digital form so we could extract a screengrab. In other cases a representative logo or images of the source tapes were used.

May CLIR excerpt from and display some portion of these representative samples within the Hidden Collections Registry, elsewhere on CLIR's website, or in program-related social media? Tick "yes" or "no" indicating whether CLIR may display some portion of the provided samples within the Hidden Collections Registry, elsewhere on CLIR's website, or in program social media.

CLIR staff will cite the holding institution if a sample is used in one of these ways.

Note that an applicant's response to the question will be visible to CLIR staff only and will not affect the proposal's assessment in the competition for funding in any way.

If you select "Yes" but would prefer that some representative samples be displayed but not others, note below which specific samples CLIR has permission to share.

No.

Section 3: Rights Ethics, and Re-Use

Tick to confirm

All parties to this proposal understand that as a condition of acceptance of any Digitizing Hidden Special Collections and Archives award from CLIR, all recipient institutions and collaborating partner organizations will be required to sign and execute the program's intellectual property agreement (single institution IP agreement; collaborative IP agreement).

Responses Selected:

Confirm

All parties to this proposal understand that as a condition of acceptance of any Digitizing Hidden Special Collections and Archives award from CLIR, all metadata created in the course of funded project activities must be dedicated to the public domain under a CC0 Creative Commons license. Exceptions may be made for culturally sensitive metadata.

Responses Selected:

Confirm

All parties to this proposal understand that as a condition of acceptance of any Digitizing Hidden Special Collections and Archives award from CLIR, recipient institutions, including partnering institutions in cases of collaborative projects, must not claim additional rights or impose additional access fees or restrictions to the digital files created through the project, beyond those already required by law or existing agreements. Digital copies of materials that are in the public domain in their analog form must also be in the public domain. CLIR strongly encourages grant recipients to share digital copies as public domain resources and/or with Creative Commons licenses, as appropriate. Exceptions may be made for those materials in the public domain without the express wishes of local, traditional, and indigenous source communities.

Responses Selected:

Confirm

Applicants who tick any of the boxes below should provide details clarifying their responses in the Rights, Ethics, and Re-Use Statement.

Note that applicants planning to use watermarks or charge fees for the use of digital materials created through this program, particularly for non-commercial re-use, are less likely to be competitive for funding.

Tick all that apply:

Responses Selected:

Applicant and/or partner institutions plan to charge fees for commercial re-use of the digital copies created through this project.

Applicant and/or partner institutions plan to impose specific attribution requirements when digital copies created through this project are re-used by others.

Some of the content within the collections nominated for digitization contains private or other potentially sensitive information that poses legal or ethical concerns related to providing access to the digital copies created through this project.

Section 4: Scholarly Significance

Explain why you consider the nominated collection(s) to be “hidden” currently, and describe the value and significance of the proposed project for the full range of scholarly disciplines and communities it will serve once the collections have been digitized and made accessible. For the purposes of the Digitizing Hidden Collections program, applicants must convincingly argue that their collections are “hidden” in the sense that they cannot be used for important scholarly work until they are fully digitized, discoverable, and accessible. This part of the proposal should state the ways in which the content of the collections is currently “hidden” from those who need it, and it should describe the importance that the completed project will have for teaching, research, and the creation of new knowledge. Applicants should avoid the temptation to provide merely a more detailed description of the nominated materials than is given elsewhere in the application. The statement should go beyond asserting the significance of the subject matter covered by the original materials, presenting a case for the potential use of nominated materials beyond the holding institution and surrounding region and across multiple disciplines and explaining how scholars’ and students’ understanding of those subjects could be transformed by using digitized versions of those materials specifically.

(500 words max.)

The material nominated within this project proposal represents material that is often not easily known to exist, let alone access. It includes works that represent specific scholarly value in the fields of criminal justice, cultural studies, education, and Puerto Rican and the development of educational and political systems within New York City. Many of them are works that were created at one time for a television broadcast on an educational access television channel and then returned to their originating academic departments to be stored in closets or possibly passed along to a campus library. All of these recordings are held in obsolete videotape formats, most of them have no formal access policy governing them, and they are not integrated into a current preservation plan. The intent of this project is to reuse the expertise, systems, and workflows of the archive at CUNY Television and to apply it to collections held elsewhere in the CUNY system with a particular focus on collections that are the most challenging to access.

Each collection we included in this grant has significant scholarly value and some focus on groups that are traditionally excluded from the historic record. For example, the HoMoVisiones videotape collection, a cable access program dedicated to gay Latino issues, focuses on a community that has historically been undocumented within the wider LGBTQ movement and in many ways is still an invisible group in this country. By making this collection accessible, it will provide a wealth of information on the particular issues and experiences of LGBTQ Latinos. Running from 1980-2002, the series addressed the AIDS crisis and other health issues, socio-cultural contributions of Puerto Rican and other Latinos, along with Latino perspectives on issues affecting LGBTQ communities.

Many of the other collections we selected focus on topics that have limited resources. For example, the audiovisual material in the Hall of Fame for Great Americans, the first hall of fame in the United States, depicts unveiling ceremonies that have very little audiovisual documentation. These ceremonies provide researchers with information about the notion of fame and commemoration throughout history. Another collection, "City Club," could potentially be an amazing resource for scholars of New York City history from the 1980s into the 1990s. This show features speeches from three former mayors, Ed Koch, David Dinkins and Rudy Giuliani and focuses on relevant topics that are still important to New Yorkers today such as police reform, health care and the census. Since this entire series is on an obsolete format, digitized episodes would be the first time in over 3 decades scholars would have to access them.

Section 5: Project Context and Impact

List and describe all envisioned project deliverables. Explain the means through which each will be available to the public, and any applicable conditions or terms limiting their availability. Applicants should describe all expected outcomes, how each will be made accessible to others, and under what conditions.

Deliverables include the digital surrogates created during the project and related metadata, and they may also include aggregations of those files and metadata with related files and metadata already available online. Metadata created through this program is not restricted to any particular standard or structure. Other possible deliverables include authority files, description and digitization manuals, training materials, research guides, or other outcomes. If any special measures are being taken to improve accessibility for specific user communities (e.g. visually or hearing impaired; users with limited internet access; foreign language speakers, etc.), include them here.
(500 words max.)

Project deliverables are also detailed in the project plan but in summary, for each item the deliverables include: a lossless digital preservation file, several access files (including multiple mp4 files, a dvd master in iso format, an mp3 representation, a series of representative still images, and an edit master file), several technical metadata reports per file from open source assessment tools, quality control metrics and results, event logs, checksum and file attribute reports, descriptive and administrative metadata, a rights and access review, clean-up audio-to-text transcript to facilitate search and discovery, and associated metadata per series.

All of the deliverables referenced above will be stored in archival information packages that are written to redundant and geographically-separated LTO tapes and subject to regular verification and migration. From this archival information package, some contents will be pushed into an online portal for access including: descriptive metadata, captioning data for accessibility and search, and select administrative and rights metadata.

CUNY TV project staff will collaborate with participating collection managers to define what parts of our archival information packages will be delivered to the participating collection (whether only select access files or the entire package) and work out if any unique access file requirements exist within that collection's own outreach plan.

CUNY TV will also use automated audio-to-text conversion software to provide collections with full transcripts of collection audio. Collections may use this data to assist in cataloging or if such data is reviewed and refined, then CUNY TV can offer to use our existing captioning tools to resynchronize the transcript with the audio of the digitized audiovisual asset so that access files may meet federal accessibility requirements as well use the transcript to advanced user navigation and research. We are aware that CLIR is cautious of funded transcript or accessibility services for digitized audiovisual works and thus we've devised a plan where CUNY TV is offering support for accessibility and transcripts via application of automated services, while allowing participating collections to provide the more time-consuming review and clean-up of transcripts. We believe this balance will help both to use CLIR's resources as intended, offer the collections a meaningful way to use their content knowledge to participate in and support the project, and ensure that access to the resulting files may be efficiently searched and navigated in addition to meeting accessibility requirements.

To facilitate rights and clearances, CUNY TV will work with CUNY's Office of General Counsel to draft rights releases and agreements for participating collections to use with related material donors or rights holders, in order to clarify rights and reuse effectively.

Describe any planned outreach and community engagement activities.

Identify the communities most likely to be interested or invested in the digitization of the proposed material. Describe how you plan to engage them and detail specific outreach approaches for different user groups. Consider the potential impact of the project on scholarly, local, professional, and other related communities of interest.

(250 words max.)

To support outreach of the project, we plan to publish and hype a press release about the work and intended results of the project, and to support and encourage the participating collections to do the same. We will also host a conference about the project and its collections with the intent of learning more about the content and how it can be best put to use. If successful, the staff of the project will also report on the progress of this project at related conferences such as the CUNY IT conference, CUNY accessibility conference, The Society of American Archivists or Association of Moving Image Archivists conference.

We also anticipate hosting events that are open to communities outside of CUNY and the larger archival community. For example, Bronx Community College is hosting an event called ["Reclaiming the Hall: Open Call for Art."](#) that engages with the community to create new pieces of work inspired by memory and the Hall of Fame. Using events like this as a template, we would like promote these newly digitized collections and engage with the communities at large.

Another way to promote this project is through the resources provided by the collection insitutations. For example, we can promote the newly digitized HomoVisiones collection through Centro's Cultural Ambassador program, which educates people on the Puerto Rican experience in the United States, Centro produced television shows and documentaries, and also through Centro's scholarly journal.

Describe collections related to the materials nominated for digitization and describe plans for creating meaningful linkages to those collections.

Applicants should be as specific as possible in describing these related collections, particularly those held at institutions not participating directly in the project. The nature of the relationship between the collections described here and the collections nominated for digitization should be made explicit. Mention any meaningful linkages that will be created through aggregating related metadata for search and discovery (using registries, databases, or other well-known research portals), adopting common standards, protocols and/or controlled vocabularies, or promoting the joint use of the related collections directly to scholars and students.

(250 words max.)

All content hosted within this project within CUNY Television's own website will link back to the originating institution or its collection finding aids (where they exist), so that the object can be effectively linked back to any other official online context (where it exists). This will be particularly useful with the collections held in libraries and archives such as those of John Jay College or Centro de Estudios Puertorriqueños; however, for many of the collections from academic departments, there are not many other related online resources to which to link. The CUNY Television website integrates many linked data features so that links between objects may be used to facilitate collection navigation and discoverability. For instance, the names of those depicted in the audiovisual works are cataloged in their own name authority record which then links that identify across the items and collections that depict that person.

Describe any future scholarly initiatives that would be made possible by the completion of project work.

Such initiatives may be those planned by the applicant institution or consortium or those that other individuals or organizations might launch as a result of the project. Examples may include but are not limited to research and assessment projects, digital scholarship, new forms of computationally intensive research, digital exhibits, and new online teaching and learning initiatives.

(250 words max.)

Through planning this project, we've been very encouraged by the initiative and excitement of faculty to integrate this material into curriculum and research in ways that are far more feasible than with the collections in their current form. We intend to form an advisory group to further study and advise on scholarly opportunities as this project progresses by drawing upon the expertise of library directors, scholarly communication librarians, and faculty within the CUNY system.

We also hope to collaborate with other organizations outside of the CUNY and archive community. For example, we plan to reach out to ["The Society for Cinema Studies & Media Studies."](#) the leading scholarly organization dedicated to teaching the history of cinema about sharing digitized episodes of "Cinema Then, Cinema Now." Another group we plan to work with is The Criterion Collection, Inc, a distribution company focused on preserving classic and contemporary films. They have recently expressed interest in using CUNY TV archival materials as supplemental segments for their new Criterion Streaming Channel.

Most of the research, both scholarly and non-academic, produced about Puerto Ricans and other Latinos, rely on the resources of the Centro Library and Archives at Hunter College. Being able to provide access to the HoMoVisiones collection through Centro's digital archive will be an invaluable gain for researchers, Latinos and the LGBTQ community and the wide dissemination and promotion of these assets will result in new avenues of research.

Section 6: Project Design

Explain the rationale behind the project's design. Describe prior research and/or experiences that have directly informed this design. Note any innovations or practices that will make the proposed approach particularly efficient, ground-breaking, and/or cost-effective. CLIR expects that this program will support innovative and increasingly efficient methods of digitizing and disseminating information about cultural heritage materials to scholars and the broader public. All applicants should demonstrate an understanding of how their proposed approach to digitization fits into current understandings of best professional practice and, if applicable, may propose unique improvements to this practice.
(500 words max.)

As the educational access television station of the City University of New York (a system comprising of 25 colleges), CUNY Television became a funnel for audiovisual resources of CUNY and ended up becoming the largest audiovisual archive within the university system. As CUNY Television expanded the staffing of the archive, it expanded its preservation services and scope of work as its preservation approach matured. As a host to two back-to-back National Digital Stewardship Residency programs, CUNY Television better standardized and optimized its workflow in a system of publicly-developed microservices. At this point, CUNY Television has a highly tested, reliable, and efficient method to making archival audiovisual collections preserved and accessible. This approach has been applied to the collections within CUNY Television's own collections, but this project is intended to expand its reach and offer services and opportunities to valued audiovisual materials held in other collections within the CUNY system. We believe this approach will offer comprehensive efficiencies so that we can start making active and reliable progress right away as we have already met most of the technical challenges associated with a project of this scope. Additionally in preparation for this proposal we have been encouraged by the enthusiasm and encouragement from CUNY's academic faculty, special collections staff, and stakeholders and have gained a more substantive impression on how significantly these collections and their potential users may benefit from this project.

Principal Investigators/Primary Staff

In this section, summarize the relevant qualifications of up to three individuals who will be responsible for the deliverables named in the proposal, or other work specified in the project or technical plans.

The qualifications of all named Principal Investigators (PIs) must be included here.

If the project includes fewer than three PIs, applicants may optionally use this space to describe other important staff members.

If any of the three individuals included in this section has not yet been identified, applicants should explain the nature of the qualifications required of a candidate for that role in the project. Individuals may not be named as PI on more than one proposal and may not serve as PI on two funded projects simultaneously.

(250 words max.)

David Rice, Director of Archives of CUNY TV, and Catriona Schlosser, Archivist at CUNY TV, will serve as the principal investigators of the project (resumés attached). Dave Rice is an audiovisual archivist and technologist whose work focuses on independent media, open source technological preservation applications, and quality control analytics. Rice has worked as an archivist or archival consultant for media organizations such as the City of the University of New York, Democracy Now, the United Nations, WITNESS, and Downtown Community Television. A graduate of the L. Jeffrey Selznick School of Film Preservation, and a Co-Chair of the Association of Moving Image Archivists' Open Source Committee, Rice has partnered with BAVC on numerous digital preservation endeavors, including the Dance Heritage Coalition's Secure Media Network and the NEH-supported Quality Control Tools for Video Preservation. In working with digital samples of digitization errors or irregularities, Rice has developed methodologies to automate the detection, diagnosis, and qualitative reporting of digitization errors in order to ensure greater validation and responsiveness within the digitization process.

Catriona Schlosser is a graduate of NYU's Masters program in Public History and Archives. She has worked as an archivist in a variety of television organizations such as A&E Television Networks, NBC News, and currently at CUNY Television. Catriona has also worked in mixed media collections at the Archive of David Byrne and New York University.

How many staff will be assigned to this project?

You may include students and volunteers in this list. List the number of applicable staff that will be assigned to the project and briefly describe their roles (e.g. professional, graduate student, etc.), noting how many are full- and how many are part-time staff.

(75 words max.)

1 part-time staff will be hired for this project administered by the CUNY Research Foundation. 3 in-place staff would contribute time in support of the project. Interns may be involved in the project at the discretion of the project manager. The project also reserves funds to provide 3 stipends to originating collections to support interns to facilitate collection transfers and to support cataloging.

Will special skills or training be required?

Explain the nature of any required skills or training to undertake the project and how the applicant institution intends to solicit or provide it.

(250 words max.)

The staff hired under this project would require specialized training in audiovisual preservation and accessibility. This would include training in audiovisual signal calibration, audiovisual metrics and quality control, cataloging and accessibility standards, and training on the originating collections. This project proposal reserves time from onsite staff including the archives director, archivist, and captioning specialist to provide specific training and mentorship throughout the project.

Section 7. Sustainability

Upload a digital preservation and discoverability plan explaining how project deliverables will be made secure and discoverable for the long term. This document is uploaded as a separate task in the application system.

Section 8. Institutional Capacity

Institutional Priorities

Describe the applicant's institutional priorities for digitization, digital collection development, maximizing access, and supporting scholarship, learning, and/or the public good, as well as those of any collaborating institution(s). Explain the relationship of the proposed project to those priorities. Applicants may mention or cite relevant details given elsewhere in the proposal and supporting documentation but need not repeat those details in their entirety. The purpose of this section is to provide space for additional evidence of the applicant's motivation to undertake the proposed project and sustain its outcomes beyond the project term.

(250 words max.)

CUNY Television serves as an educational access television station to extend the educational mission of the City University of New York through the creation, dissemination, and preservation of audiovisual content. Supporting scholarship, learning, and the public good are core parts of the mission of both CUNY Television and CUNY as a whole, and this project directly aligns with our goals of disseminating and preserving scholarly knowledge. The institution's basis as a television station also provides the CUNY Television archive with a generous supply of audiovisual technology, data resources, project management skills, and expertise in support of the project. The outcomes of CUNY TV's involvement in two National Digital Stewardship Residency projects has also stabilized and standardized our audiovisual preservation infrastructure so that this project proposal can document an efficient and effective application of that infrastructure to outside collections.

Institutional Strengths

Describe the institutional strengths that justify the undertaking of the proposed project by the applicant and any collaborating institutions. Strengths may include existing infrastructure, partnerships, professional associations, staff experience, access to local expertise (scholars, volunteers, students), financial or other resources, etc. Applicants may mention or cite relevant circumstances that are described in greater detail elsewhere in the proposal but need not repeat those details in their entirety.

(500 words max.)

CUNY Television offers a center of expertise in creating, preserving, and disseminating audiovisual information. This includes onsite expertise in all aspects of audiovisual preservation, digital stewardship, obsolete audiovisual formats, web development, media accessibility, cataloging, project management, copyright and licensing, financial management, and collaboration. The staff of CUNY Television's archive are professionally active in archival

associations, standards organizations, open source development, and collaborative archival efforts. The participating collections nominated within this proposal may or may not be held within organizations with formal preservation and access policies; however, they are represented by staff or faculty which are highly engaged and invested with the collections and eager to find an opportunity to overcome the technological challenges of these audiovisual collections to facilitate access, research, and re-use.

Diversity and Inclusion

Describe your project team's approach to diversity and inclusion by answering the following questions:

How will the proposed project help to broaden representation within and access to your collections?

In what ways will you encourage the participation of people with diverse perspectives in your project activities, and how will these efforts be supported by the applicant institution(s)?

How does the project plan reach new audiences and engage underrepresented communities? (if applicable) How have past experiences have informed the project team's approach to diversity and inclusion?

(250 words max.)

The City University of New York is one of the most diverse school systems in the United States. As discussed in CUNY's mission statement, the school ["is of vital importance as a vehicle for the upward mobility of the disadvantaged in the City of New York."](#) Townsend Harris, the founder of CUNY, stated as far back as 1847 that there must be a school to ["educate the whole people."](#) By uncovering the school's audiovisual history, we hope to preserve the school's ongoing mission to educate people from all backgrounds. Certain collections in particular represent groups of people that are underrepresented, the gay Latino community in *Homovisiones* being a prime example. Other collections, such as *Criminal Justice Close Up*, *Baruch College Specials*, and *City Club* focus on issues such as police corruption, the privatization of jails, healthcare, voting rights, housing and domestic violence that impact certain underserved communities.

In this project, and in many other projects at CUNY Television, we strive to offer opportunity for engagement. Throughout our NDSR projects we encouraged engagement and inclusion by working in public online spaces as much as possible. As a result, our NDSR residents interacted with a diverse set of perspectives as onlookers would comment upon their work in GitHub repositories. We strive for openness of ideas and the opportunity to collaborate. We believe that collaborating with such diverse institutions, such Bronx Community College and the Center for Puerto Rican Studies, in these public spaces we will continue CUNY's mission to educate all people.

Provide up to three examples of prior initiatives that demonstrate preparedness of the institution(s) to undertake project work.

Initiative #1

(100 words max.)

The Herman Badillo website at <http://cuny.tv/badillo/>. Herman Badillo was a significant politician and education leader in New York City. At the time of his death, the archive at CUNY Television gathered resources that depicted his work from multiple collections, digitized and cataloged these resources, and developed an Omeka website to make the collection accessible.

Initiative #2

(100 words max.)

CUNY Television hosted an NYC-NDSR and AAPB-NDSR project to standardize a set of archival microservices, develop strategies for LTO-to-LTO data migration, integration perceptual hashing into audiovisual archiving, and other research and implementation opportunities. For the NYC-NDSR project the resident's blog can be found at <https://ndsr.nycdigital.org/author/dhandel/>, the project description at http://ndsr.nycdigital.org/wp-content/uploads/2015/04/standardized_proposal_CUNYTV.pdf, and the final report is at http://ndsr.nycdigital.org/wp-content/uploads/2016/08/handel_final_report.pdf. For the AAPB-NDSR the resident's blog is at <https://ndsr.americanarchive.org/tag/andrew-weaver/>, project description is at <https://aapbndsr.files.wordpress.com/2016/01/cunytelevisionaapbndsrprojectproposal-projectplanonly.pdf>, and final report is at https://aapbndsr.files.wordpress.com/2017/08/cuny_tv_ndsr_host_assessment_public.pdf.

Initiative #3

(100 words max.)

Vrecord is an open-source utility to facilitate audiovisual digitization and available at <https://github.com/amiaopensource/vrecord>. Vrecord is maintained by CUNY Television staff, including two of the principal investigators. This software was made in response to the obsolescence of most of the software used in audiovisual digitization as production staff moved away from such tools as Final Cut 7, Live Capture Plus, and other formerly-supported digitization tools. Vrecord connects digitization card software development kits with FFmpeg, mpv, and qctools to create an efficient workflow for digitizing audiovisual works. Vrecord currently has 13 contributors and is in use in several archives.

Building capacity

Describe how this project contributes to building local institutional capacity, as well as the professional development of all staff involved.

(250 words max.)

Within this project, CUNY Television will use administrative structures similar to those it used in the AAPB-NDSR project. The CUNY Research Foundation will administer the hiring of one project staff on behalf of CUNY Television. CUNY Television will provide space, technology, mentoring, and systems within which those staff will work. The new hire will be specifically assigned to the goals of the project but working alongside CUNY Television staff who are performing the same steps and goals on CUNY Television's own collection. We find that applying CUNY Television's own well-tested and developed workflows alongside this project will facilitate a very efficient and reliable project.

Section 9. Funding

Budget Documents

CLIR requires all applicants to complete and upload two budget documents:

- 1) Budget Narrative. (No page limit, max. 2MB, .pdf format only.)
- 2) Budget Detail (must be submitted using CLIR's Excel form. (Max. 2MB, .xls or .xlsx format only)

Note: These documents can be uploaded after the Application Form is complete.

Section 10. Applicant Information

Applicant Institution Address

The address of the lead applicant institution. If selected for funding, recipients will have another opportunity to specify the address(es) to which the official award letter and check shall be sent.

CUNY Television
David Rice
365 5th Avenue, Suite 1423
New York, NY 10016

Principal Investigator(s) Contact Information

Provide the contact information for the proposed project's primary Principal Investigator(s) (PIs). The PI(s) will take direct responsibility for completion of the project, should funds be awarded. They must be significantly involved with the project's direction and execution and will be responsible for submitting required narrative and financial reports to CLIR.

The primary Principal Investigator, to be listed first, is the person who will take direct responsibility for completion of the project, should funds be awarded. They should be significantly involved with the project's direction and execution and will be responsible for submitting required narrative and financial reports to CLIR and for all other project-related communications with CLIR. Normally the primary Principal Investigator is formally affiliated with the Applicant Institution.

Note: Applicants may propose up to three PIs for their project. All applicants must assign at least one PI.

Principal Investigator #1

David Rice
Director of Archives and Library
CUNY Television
david.rice@tv.cuny.edu
365 5th Avenue, Suite 1423
New York, NY 10016

How many additional PIs would you like to propose?

1

Principal Investigator #2

Catriona Schlosser
Archivist
CUNY Television
catriona.schlosser@tv.cuny.edu
365 5th Avenue, Suite 1423
New York, NY 10016

Representative Thumbnail Image

See Adam's email

List of collections to be digitized

https://docs.google.com/spreadsheets/d/12egUxSRrVOEJdrBlSdKcgl-9lxJrAQCGkw_LUbIJCZc/edit?usp=sharing

Representative samples of materials to be digitized

[instructions: Upload a PDF document containing images of up to ten (10) selected items from the collection(s) to be digitized, and provide a brief description of the contents of the file, below. Each image should be accompanied by a description and full citation that includes the name of the holding institution, the collection title, any identification numbers or shelfmarks, and any available information about rights or licensing. The document may contain embedded URLs linking to additional content, such as sample audio or audiovisual files, but must contain samples of no more than ten items.]

<https://docs.google.com/document/d/14Vt-RxwZIs-F7E8LkNxzk88k6nnIJ8FRjKcHxXohzPk/edit#>

Rights, Ethics, and Re-Use statement

[Instructions: Upload a description of up to four pages that:

Summarizes all known rights, embargoes, and access or legal restrictions applicable to the source materials to be digitized and describes how these rights, embargoes, or restrictions will be communicated to the public (such as employing the standardized statements offered by RightsStatements.org);

Identifies and explains any ethical considerations that affect circulation of, access to or re-use of the digital copies::

Explains the basis upon which the proposed activities are justifiably legal and ethical;

Explains the specific terms under which users of the collections will be able to access and re-use the digital copies created through the project;

Describes any other measures to be taken to restrict access to or re-use of the digital copies in order to comply with the law or with applicable, pre-existing agreements or contracts;

Describes how the institution will uphold ethical and moral claims and the rights of interested individuals or communities if personally or culturally sensitive information is present (or could potentially be present); and Clarifies and strongly justifies decisions that led you to tick any of the boxes in the section above.

This statement should not be a “boilerplate” institutional policy or template, but should be tailored to this project and to the requirements above. Applicants may include copies of institutional policies, deeds of gift, or other additional documents in this section as an optional appendix. (See Section 11: Additional Information). Note that approaches that shift the responsibility of determining usage rights to the users have been viewed unfavorably by reviewers. This appendix must be combined into the same PDF as the statement, led by a cover sheet identifying each additional document.

(max. 4 pages plus optional appendix)]

Rights, Ethics, and Re-Use statement

As opposed to our original proposal draft, this resubmission focuses more so on audiovisual collections that has a relatively clear and simple rights status. The collections now involved include series such as HoMoVisiones, Criminal Justice CloseUp, and Cinema Then, Cinema Now which are educational television series created within a studio environment. Other collections such as those from City Club and Baruch College are comprised of recordings of public events. Because of the production style of these programs, there are very limited and very manageable underlying rights to require research or processing. An earlier draft of this proposal included more complex works, such as a segmented, magazine-style, cultural series and a series of student-produced works which included substantial amounts of third-party rights. In reflection on the earlier proposal and its comments, we've elected to consider the underlying rights in addition to scholarly value while refining which collections we sought to address in this smaller-scoped Hidden Collections project.

In response to the comments from our initial application in April 2019, we reviewed the rights of these collections even further through engagement with collection managers, surveys, and pilot programs. We reached out to each institution to gain a better understanding of the collections and throughout this process we received strong support for making this material accessible to the public. We were assured from these institutions, some of them the rightsholders themselves, that the items have very few, if any, roadblocks, to sharing them online. Many, including the creators of the HoMoVisiones collection, stated that they would support making the material freely accessible via a Creative Commons license. The only collection that appeared to have a complicated rights history was the Robert Garcia Collection from the Centro de Estudios Puertorriqueños. Since this collection was only 110 items and would present a hurdle for accessibility, we decided to remove this collection from the list of tapes to be digitized. As a result of our research, outreach, and clearance work, we've secured permission and support for approximately 98% of these items online, with the small remainder requiring a further review and coordination. To summarize our recent work at assuring permission and access, we've added detailed information regarding the IP status of these collections in the "List of Collections to Be Digitized 2019 spreadsheet."

Within this project, CUNY TV will extend the rights management approaches that we use internally to cover these hidden CUNY collections. We'll use of our established rights management database which works in conjunction with our descriptive record database, where we can describe underlying rights, constraints on use, obligations on use, and permission statements, so that the extent and certainty of our knowledge of the rights of each item are clear. We will also collaborate with CUNY's General Counsel Office to produce forms and agreements that participating collections may use with collection donors and any identified rights-holders in order to efficiently clear material for use as needed.

Within the past year, CUNY Television has also been expanding an initiative to produce new educational programming with a Creative Commons license as well as to re-license its historic education under Creative Commons licenses. Such an effort follows in the footsteps of projects from the larger academic community such as MIT's OpenCourseWare project and CUNY's own projects such as Open@CUNY and CityTech OpenLab. Within the next few weeks, CUNY TV will see it's first made-for-Creative-Commons programs become available, starting with an educational series focusing on Taiwanese filmmakers. CUNY TV has also applied Creative Commons to selections of its own legacy programming, such as Charlando con Cervantes (a Spanish language series on Spanish authors produced with the Instituto con Cervantes). CUNY TV's Creative Commons initiative also includes our efforts to contribute segmented audiovisual collection to open knowledge resources such as Wiki Commons and Wikipedia in order to propagate supporting open knowledge with open audiovisual content. These experiences have helped us develop a culture of integrating rights and reuse considerations into our preservation and access work so that scholars and educators are better enabled to reuse or integrate educational materials into new knowledge-based works.

Being inspired by our collaboration with the American Archive of Public Broadcasting, we will require that the collaborating organizations offer sufficient rights so that a representation of the resulting items can be made properly accessible in support of our discoverability plan, including allowing public streaming video and research use. Going beyond this, if the collaborating organization does manage the rights to the item (which is true in most cases), we will provide options so that they can make items available under a Creative Commons license or under a selected statement from RightsStatements.org in support of content re-use, educational use, or integration into curriculum.

In order to communicate rights, embargoes, and restrictions to the public, we will ensure that each item is presented within a context that clearly informs as what use is permitted, including specifying the copyright holder (or if the copyright holder is unknown), the terms of use for the collection, and any applicable licenses or rights statements for each item or collection. The user will be supported in understanding what specific use is allowed and what copyright holder should be contacted if additional rights are necessary. In addition to clarifying the terms and ownership, we want to learn more information about the material being made accessible and will provide contact information for those who may either want to offer additional details about the item in order to contribute to its description or to clarify our rights information. For instance, if a user finds content in our collection that they believe is not properly attributed, then we'd like to ensure that the user has efficient and effective means to communicate with project maintainers.

Within this project, we will be working with audiovisual materials created collaboratively between many parties often working in informal production environments. We are aware that appearance releases, production records, and permission statements may likely not exist for much of the content to be considered within the project. We hope to make this situation clear within our terms of use statement and within our project agreements, so that users are aware of the

copyright details which are available and understand what reuse is permitted or who to contact with questions or requests.

For content to be considered for inclusion within this project we'll ensure that the custodial organization, known copyright holder, and CUNY TV agree to make the content accessible online in its entirety without watermarks or manipulation, editing, or distortion of the content. In some cases if content is found to be not suitable for online access (such as containing personal or sensitive information or complex ethical issues in facilitating open access), we will still make efforts to provide access to the metadata about the online content and information necessary to obtain any possible onsite access to the resulting materials at either CUNY Television or the originating collection. Audiovisual content will be accessible as streaming video via multiple sources such as the Internet Archive and YouTube and curated in display in the website of CUNY TV and potentially within the website of the participating collection. If the custodial organization is the copyright holder and agrees to a Creative Commons license, in such a case we will provide download links to access copies in addition to the streaming.

All metadata offered within this project will be released under a CC0 license and the project managers will make all efforts to support the rights requirements and spirit of the CLIR Hidden Collections grant.

Project Plan

[3 pages]

[instructions: Upload a project plan that includes all major project activities and deliverables, including a project timeline with deliverable deadlines.

The timeline for the project should be as explicit as possible.

- *The plan should identify major activities to be undertaken during each quarter of the proposed grant term and name the parties who will participate in those activities.*
- *The plan may include tables, diagrams, images, references, etc. at the applicant's discretion, but may not exceed the three-page limit.*
- *To insure clarity for reviewers, the language used to describe project activities and deliverables should be the same as that used elsewhere in the proposal, such as in the list of project deliverables or in the technical plan.]*

Project Plan

Upon the start of the project, CUNY Television will embark on several concurrent activities to establish the tools and environment for the overall project. This includes expanding our website to provide portals to these collections, hiring project staff, procuring any tools needed, and establishing working partnerships with collaborating collections. We intend to hire a project technician dedicated to digitization, collection processing, quality control, cataloging, outreach, and collaboration. CUNY Television will contribute and allocate time from select staff (including our archives director, archivist, and captioning coordinator) to the administration and oversight of all aspects of the project and for liaising with participating collections.

The project plan anticipates that the participating collections will contribute efforts to the project in supplementation of the potentially-CLIR funded work at CUNY Television. This includes working with any collection donors or underlying rights with rights agreements prepared by CUNY Television to establish the rights status of collection objects. Additionally participating collections will review automated transcripts produced by CUNY Television systems to support advanced content description, effective research navigation of collections, and support for content accessibility. The participating collection's contributions are designed to make the most use of their subject-matter expertise and collection knowledge as well as to encourage their expanded understanding of the collection contents to prepare for using those collections more effectively.

Timeline

The timeline is split into an early phase to establish the project, involve the stakeholders, bring on and train staff, and build out the project resources. After the establishment of the project from this early phase, the remainder of the project is anticipated as more routine ongoing work focused on moving audiovisual objects through treatment, digitization, quality control, cataloging, and accessibility procedures.

Before project start

- Publish press release about project.
- Hire project technician.

Month 1

- Train project technician in digitization, accessibility, cataloging.
- Develop guidelines for preparation and transfer of collections from originating institutions to CUNY Television.

- Begin drafting project agreements, covering a limited ranges of rights given, terms of use to accessible collections, and other needed documentation.
- Develop plans for expanding our existing websites to meet project goals.
- Begin digitization work with first participating collections.

Month 2

- Host a strategy conference with representatives from collecting institutions, project advisors, and project staff to focus on encouraging and enabling all parties to participate in outreach efforts, collaboration with research communities, involvement with related subject-matter faculty, and approaching this project in a manner that can be publicly seen.
- Finalize project agreements.
- Develop methods to push media, metadata, and accessibility aids from archival packages into online resources.
- Review and optimize workflow.
- Publish documentation of workflow and automation scripts for public review.
- Expand website features and share prototypes with contributing collections.

Ongoing

- After establishing project resources, agreements, and workflow, the bulk of the project will be a loop of the following tasks applied to participating collections:
- Per Collection:
 - Execution of project agreements between the collecting institution and CUNY Television.
 - Acquisition, assessment, and identification (assigning barcodes) of collection components.
 - Processing of the collection (see 'Per Collection Object').
 - Collection-level cataloging.
 - Return of the collection.
 - Supporting originating collections to advise as to facilitating re-use of digitized material, receipt of copies of the preserved work, supplementation of created cataloging metadata.
- Per Collection Object:
 - Object treatment or preparation for digitization if necessary.
 - Digitization of object.
 - Quality control of resulting digital representation.
 - Generation of derivatives, logs, checksums, reports, and other archival information package components.
 - Migration of copies of archival packages to multiple geographically-separated LTO tapes for long-term storage.
 - Generating accessibility aids for digitized objects (transcripts, captioning).
 - Cataloging objects with PBCore.
 - Content review, assignment of content flags or warning if needed, assess content for sensitive materials.

- Push media with its metadata, accessibility aids, and supporting resources to website.

The deliverables per each collection will include:

- A set of representative images of the collection.
- Descriptive metadata of the collection in PBCore form with series descriptions, scope notes, copyright and access information, any customized changes to a terms of use agreement.
- Agreement between the originating institution and CUNY TV.

The deliverables per object will include:

- An audiovisual preservation file, losslessly encoded following fixity and self-description best practices (see the technical plan for more details).
- Access copies (generated by our microservice set) including:
 - 2 mp4 files at different bitrates and frame sizes suitable for uploading to websites or online distribution.
 - An mp3 audio file to facilitate audio-to-text assessments.
 - An iso file of a DVD master for burning to disc if needed.
 - An edit-ready file in either ProRes or IMX format in QuickTime.
- Technical metadata including:
 - Checksums and file attribute data in Digital Forensics XML.
 - Technical metadata reports generated by ffmpeg, mediainfo, and exiftool.
 - A METS XML document to depict the structure, technical metadata of the archival package.
 - Quality control data including audiovisual metrics, loudness data, and a technician's review of the material.
 - Logs of preservation events.
- Multiple copies of all resulting data on geographically-separated LTO tapes.
- Database records with descriptive metadata per object in PBCore.
- A cleaned-up transcript of the audio to facilitate discovery and temporal search.
- A web page containing a representation of the audiovisual work along with its descriptive and administrative metadata, a searchable transcript, terms of use, copyright metadata, and accessibility features.

Technical Plan

[4 pages]

[instructions: This document should explain how the equipment, technologies, standards, specifications, and methodologies to be employed for the project relate to one another in a step-by-step workflow that will result in the project's major deliverables.

It is highly recommended that this document include at least one “mock-up” image that gives reviewers a clear idea of the context within which newly created digital files will be presented online, including examples of all descriptive information or metadata to be created and associated with those files. Any metadata or content that will be restricted in some way should be clearly marked.

After outlining the proposed workflow in detail, applicants should briefly explain how the proposed methods and tools relate to current practice at their institution or in their community, mentioning any particularly innovative features of their approach within this context.

Describe the proposed approach for quality control of the project deliverables.

Applicants must explain the standards or technologies to be employed and explain why these best suit their project. Any deviations from the selected standards should be explained and justified. Applicants might find information from the Digitizing Special Formats wiki, which is curated by CLIR's Digital Library Federation (DLF) program, helpful in planning project proposals.

For technical specifications (e.g. resolution, bit depth, etc.), reviewers typically expect applicants to adhere, at a minimum, to the recommendations by the Federal Agencies Digitization Guidelines Initiative (FADGI), unless an alternate standard is proposed. See FADGI guides for digitizing still images and film collections; information on digital reformatting for audio material can be found [here](#).]

Technical Plan

This technical plan for this project builds upon digital preservation, digitization, and accessibility workflows that have evolved at CUNY Television, particularly through collaboration with two National Digital Stewardship Residencies¹. With this project we hope to apply and extend the infrastructure, systems, and workflows that we have developed at and for CUNY Television's collections to apply to hidden audiovisual collections within select partnering CUNY research institutes, academic departments, and libraries. We believe this approach will provide a cost-efficient, reliable, and engaging opportunity to reveal valuable audiovisual collections across a network of public university institutions.

Digitization

After identification, preparation, and treatment, audiovisual objects will be grouped according to their technical properties and sent into a digitization workflow. The settings used in digitization will be selected to maintain the significant properties of the source audiovisual objects. Thus, the resulting digital files should maintain the frame rate, aspect ratio, frame size, chroma subsampling, and audio channel arrangements of the original. CUNY TV currently has the resources to digitize 5 videotapes concurrently, using 5 separate ingest stations each connected to a Mac Mini, a hard drive, and a Black Magic capture card. We also have an audio digitization station that works with 1/4" audio reels, audio cassettes, and other common analog audio formats. Our digitization stations use the open source digitization software called [vrecord](#) and we serve as the leading maintainers on this project. This software allows the technician to digitize a video signal to produce an archival digital record and performs quality control checks within the digitization process (such as warnings about illegal saturation levels, illegal broadcast safe levels, dropped frames, and audio sync issues) allowing the technician to detect and fix any problems. Vrecord also generates a number of logs that help with quality control, including ffmpeg logs, framemd5s, capture logs, and a [QCTools](#) XML. Each digitized object will undergo a quality control that will include analysis to make sure the file adheres to the technical specifications listed below.

Videotapes will be digitized to Matroska files with FFV1 video and PCM audio. These open formats are well-supported in archives, such as New York Public Library, Indiana University, VIAA, the British Film Institute, and [many national television archives](#).

Container = Matroska

- The use of Matroska container will meet recommendations developed by the PREFORMA project in so each Matroska file will include internal CRC checksums to document fixity at a granular level within a large file and include self-descriptive metadata to clarify significant characteristics such as interlacement, field order, color space data, creating libraries, timestamps, and sample range.
- The attachment feature of Matroska will be used to embed attachments of logs from each step of the creation process within the Matroska container. This enables the technical conditions of the digitization event and environment to be stored as a part of the preservation file even if that file is separated from its archival information package.
- The Ordered Edition feature of Matroska will be used to distinguish the intended presentation of the audiovisual recording from the full extent of it. In practice, we elect to digitize audiovisual recordings in their entirety, including color bars, countdown, slate, or other non-presentational data.

¹ The 2 National Digital Stewardship Residency project plans are included as Appendix C and D to provide an overview of the digital preservation practices of CUNY Television.

- Matroska is standardized by the [Internet Engineering Task Force](#) (IETF). More information about this format is available at the Library of Congress' Sustainability of Digital Formats [page for Matroska](#). CUNY TV's principal investigator is actively involved in the IETF standardization process for Matroska as well as a contributor to FADGI and LOC's Sustainability of Digital Formats resources.

Video Encoding = FFV1

- Lossless FFV1 video encoding will be used to store the digitized video signal for all digitized analog audiovisual objects (and select digital videotapes) within this project. To ensure digital resilience we will use only interframe encoding and a high slice count.
- The latest stable release of FFV1 version 3 will be used, which ensures a highly self-descriptive and interoperable encoding as well as mandated storage of granular fixity data within the encoding to ensure that any future digital damage is well-identified and pinpointed.
- FFV1 is standardized by the [Internet Engineering Task Force](#) (IETF). More information is available at the Library of Congress' Sustainability of Digital Formats [page for FFV1](#). CUNY TV's principal investigator is actively involved in the IETF standardization process for FFV1 as well as a contributor to FADGI and LOC's Sustainability of Digital Formats resources.

Audio Encoding = PCM

- Digitized audio will be encoded with Pulse Code Modulation and stored in association with the FFV1 encoding with Matroska. Matroska's internal fixity features will provide granular checksums per audio frame, so any future damage to audio damage may be pinpointed even if PCM itself does not incorporate any fixity features.

Video Frame Characteristics

- Bit Depth: Video sampling of analog audiovisual objects will be at 10-bit to preserve the detail that our audiovisual hardware supports. If 8-bit digital videotapes are found with the project (such as Betacam SX) then we'll use 8 bit to best preserve the characteristics of the original encoding.
- Frame Size and Frame Rate: We expect most audiovisual content within the project will be standard definition NTSC video and thus digitized to a 720x486 frame size and 30000/1001 (~29.97) frames per second to best match the characteristics of the original object. If non-NTSC objects are found in the project, we'll make efforts to sustain its own native characteristics during digitization.
- Color Space and Chroma Subsampling: Video will be digitized with a 4:2:2 chroma subsampling pattern and YCbCr color space to match the characteristics of the analog videotape.

Audio Characteristics

- Sample rate = 48000; Bit depth = 24 (20 bits of SDI audio sampling padded to 24)
- Audio Channel Configuration: We find that clarifying the audio channel configuration is best done during digitization. We will assess each object to set the likely intended audio channel configuration.

Supporting Accessibility and Content Integration

CUNY TV will utilize its existing success at wrangling open source tools into an assembly line of microservices to process digitized content to create a package of access formats, reports, and metadata to support a wide variety of access. Each digitized video file will be processed to create several forms of h264/mp4 files for online access as well as files suitable for podcasting, audio derivatives, representation thumbnail images, an iso image of a dvd representation, and mezzanine files to support editing or production. CUNY TV will work with contributing collections to determine which of this files (or all of them) that they would like delivered, so that potentially both CUNY TV and the participating organization can work to make these materials available under a variety of technical context.

Description and Accessibility

Most content considered in this collection includes accessibility challenges from very sparse description. In most cases, the description is constrained to what limited text is available on a videotape label and in some cases the audiovisual content is in formats that are not supported by the custodial institution. The lack of contextualization, description, and accessibility further hides these resources in addition to what access could be provided through onsite research access. In some cases, such as with John Jay College, a researcher seeking access to the undigitized audiovisual collections would have to pay a fee to support the college sending the videotape to a vendor for digitization before any access can be supported. This approach creates a barrier where access to undigitized legacy video objects is limited because so much about the content is unclear and a potentially costly initiative is required from the researcher to digitize the materials for further analysis. Taken the encompassing initiative to digitize these materials, removes these barriers and makes description much easier to perform, then such description drives research and requests.

Audiovisual content processed through this project will be cataloged using the PBCore standard to provide titles, descriptions, keywords, genre data, the names of people associated with the content, and subject matter descriptions. We'll utilize our current website development resources to apply linked data and name authority records to help link resources, improve navigation, and better contextualize the material. Rights metadata will be cataloged in an ODRL-inspired template to track known information on rights; rights metadata will be selectively shared to the online interface to guide and inform use.

CUNY Television strives to adhere to the federal regulations of the FCC, ADA, and Rehabilitation Act as well as using [Level AA](#) of the Web Content Accessibility Guidelines 2 as a reference model for the accessibility of public resources. Applying accessibility best practices to online audiovisual content ensures that more people may better access the knowledge contained in the material. Additionally, accessibility data is invaluable to facilitate search, navigation, and discovery of material. In order to ensure that the collections placed online follow ADA requirements, we will use a speech-to-text service (based upon the work of PopUp Archive) supplemented with work (from the participating organization when possible) to review and correct the computer-generated text, correct proper names, and set the placement and arrangement of on screen captioning. The resulting text will be stored in Scenarist (scc) and webvtt formats. Audiovisual content placed online will be viewable with an option to enable subtitles and the accompanying transcript will be available for search and synchronized with the video. Thus if a user is seeking information on a particular topic within a long video recording, the searchable transcript can help the user identify and review that specific content more efficiently.

The authors of this proposal are aware that CLIR does not prefer to fund transcription of digitized works; however, a public institution that receives federal funds, CUNY must consider the accessibility of resources that we offer to the public. To use CLIR funds as intended, our technical plan is designed to emphasize a use of scalable, automated audio-to-text services already in use at CUNY TV and to work with the participating collections (which are not funded directly with the CLIR grant) to contribute review and correction to these automated transcripts.

Online Access and Open Licensing

The objects created from the Hidden Collections grant will be showcased using the framework of the CUNY TV website, but will include even more features to increase discoverability of these collections. The [Herman Badillo](#) website we created a few years ago, is an example of how we would like to showcase these collections, but it would be much more expansive. We will also create a separate section of the

website with a description of the project, the institutions involved, and an abstract for each collection. Each page will include streaming video, a possible download link when rights permit, descriptive metadata, a transcript, and a way to link out to a pbcore xml record. We will also link objects based on subjects, guests, and date to support the navigability, accessibility, and overall website traffic.

Mockups of what we anticipate the site to look like, with much more accessibility and navigability features, can be found here.

HERMAN BADILLO

CUNY TELEVISION DIGITAL COLLECTIONS

[Browse Items](#)
[Browse Collections](#)

Herman Badillo (August 21, 1929– December 3, 2014) was a lifetime public servant. A graduate of the City College of New York, Badillo had an illustrious career as the first Puerto Rican Bronx Borough President as well as the first Puerto Rican elected to the United States House of Representatives. At the City University of New York, Herman Badillo served on CUNY's Board of Trustees for 13 years, acting as Chairman of the Board from 1999-2001. During his tenure, Badillo helped raise CUNY's academic, curriculum and graduation standards. The former congressman championed education reform and became a symbol of how education can "transform lives of hardship."

The Herman Badillo digital collection focuses on Badillo's time at CUNY and includes interviews and speeches from the statesman. A significant portion of the collection focuses on the series *Education Forum* with Herman Badillo, a show dedicated to discussing education policy with prominent leaders and officials.

RECENTLY ADDED ITEMS

CUNY TV SPECIAL

Herman Badillo speaks at the Manhattan Institute about his recent book, "One Nation, One Standards" introductions by Manhattan Institute President...

METROVIEW

Herman Badillo, Chairman of the CUNY Board of Trustees, and Benito Sison, Vice Chairman of the CUNY Board of Trustees, speak at an ABNY Breakfast...

SEARCH

TYPE HERE AND PRESS ENTER

FEATURED ITEM

THE OPEN MIND

Herman Badillo, Chairman of the Board of Trustees of the City University of New York, discusses challenges in urban education, social promotion, and...

BARUCH COLLEGE SPECIALS

Episode Title

The 4th Annual Public Affairs Week: Closing the Educational Achievement Gap

Player

Description

Baruch College School of Public Affairs presents "The Fourth Annual Public Affairs Week: Closing the Achievement Gap". Welcome remarks by David Birdsell. Moderator: Dorothy Shapiro. Panelists include Herman Badillo and Richard Rothstein. Closing Remarks by Sonia Jarvis.

Date

3/20/2007

Identifier

BCSPW072

Collection

[Interviews](#)

Additionally deliverables will be made available back to the participating collections such that they may use these resources in their own online platforms such as <https://centropr.hunter.cuny.edu/> and <https://bccgreats.commonsc.gc.cuny.edu/>.

CUNY Television also has a set of microservices that are used to scale the publication of audiovisual content into multiple online resources, such as YouTube and the Internet Archive using their contribution API. This process calls to retrieve PBCore data from our database and uploads both metadata and access files into that online platform. Applying this approach to processed collections, as rights permit, will allow us to distribute the content widely.

CUNY Television has also been working in an initiative to applying Creative Commons licenses to both newly produced educational audiovisual works as well as to legacy collections where rights permit. CUNY Television intends to re-license several collections in this project with a Creative Commons license as we move forward, this commitment is verified with the Cinema Then, Cinema Now collection and through discussions with partnering collections we hope to add other collections into this initiative. Making this digitized content under a Creative Commons license will enable users and researchers more opportunities to reuse the material in educational contexts. Within this project we also hope to gather segments from Creative Commons licensed digitized works to integrate that material into online open knowledge centers such as Wiki Commons and Wikipedia so that this content may contribute to the greater world of open, online collaborative knowledge resources.

PI Resumes/CVs

[Resumes are required for all Principal Investigators named on the project.

Although a project may have more than three assigned persons, no more than three resumes may be uploaded. Only include resumes for the primary personnel on the project.

If a project does not have three listed Principal Investigators, any remaining slots may be used to upload resumes of other key personnel.

In cases where key personnel have not yet been identified, a job description may be provided instead.

All proposals must adhere to the limit of three resumes, including those for large multi-institution or consortial initiatives.]

dave_rice_cv

MonteAmyResumeApril2018

Resume 2018_Clr

Digital Preservation and Discoverability Plan

[2 pages]

[instructions: Upload a digital preservation and discoverability plan explaining how project deliverables will be made secure and discoverable for the long term.

The digital preservation and discoverability plan should identify where digital files created through this project will be stored, how they will be backed up, and the steps the applicant will take to ensure that the files and metadata are checked regularly for continued integrity (i.e., lack of corruption, loss and/or errors) and monitored for possible future migration

This plan should identify clearly the parties accepting responsibility for sustaining those preservation activities after the conclusion of the project; the basic terms under which they would provide such services; and the qualifications of the parties to provide them. Should any such activities be outsourced, applicants can upload the relevant subcontracts (or proposals/requests for proposals, as appropriate) on the Funding tab.

The plan should describe actions to be taken in the event technical or other circumstances require the migration of project files and metadata from one system to another.

The plan should also explain how digital files, their associated metadata, and any software developed through the project will be made easily discoverable and accessible to relevant user communities for the long term. It should justify why these platforms are appropriate given the subject matter and/or users of the source materials to be digitized. This explanation should include any measures to be taken to maintain, update, aggregate and publish project metadata for external harvesting.

If access to digital copies created through the project will be restricted or controlled in some way, the digital preservation and discoverability plan should explain how these access policies will be re-assessed and adjusted in the future. Applicants may choose to cite or briefly mention plans detailed elsewhere in the proposal rather than repeating such information.]

Digital Preservation and Discoverability Plan

CUNY Television has a well documented and refined set of practices for the management of preservation data, inspired by the OAIS framework. All digital preservation content managed at CUNY Television is packaged into a standardized directory structure that files preservation material, submission documentation, event logs, technical reports, access derivatives, depictions, and checksums. The standardized storage of preservation data allows us to support a set of programs, referred to as microservices, that may be applied to a package to produce a narrowly defined result. These microservices accomplish things such as verifying a checksum manifest, creating a derivative file, creating or updating technical reports, publishing content online, or delivering dissemination copies for use. All packages will contain a Digital Forensics XML to document the fixity and file attributes of all preserved content. A microservice also gathers technical metadata, fixity, custodial information, and administrative metadata in order to store a [METS](#) xml file within each package.

Copies of the Archival Information Packages (AIPs) created through this project will be stored on multiple redundant and geographically-separated LTO 7 tapes. To ensure that we comply with the NDSA Levels of Digital Preservation, we will create 2 complete copies. CUNY TV will maintain these files and, upon request, provide access files to the institutions involved in the project. The CUNY Television archive already maintains over 1 Petabyte of data, so many of the workflows for this project are already well-tested and active. We are also in the process of migrating LTO 5 tapes to LTO 7 tapes, so we have a rich experience in obsolescence monitoring, package verification, and data migration². To facilitate ongoing digital preservation of archival data, CUNY Television leads maintenance of a repository of LTO workflow scripts called [ltopers](#), which is publicly managed in GitHub with the support of several other collaborating institutions.

CUNY Television actively works to ensure that it can properly control, maintain, and facilitate access to its collections. This includes a substantial amount of automated technical reporting, ongoing technical assessment, and reformatting of material to manage obsolescence risk. We've also developed shared tools such as [verifytree](#) (to assess and verify that the structure and contents of an AIP meet our requirements), [verifypackage](#) (which verifies that the contained audiovisual preservation and access files adhere to our standards), and [checksumpackage](#) (which documents the fixity of AIP components by reporting on checksums and file attributes in DFXML, Digital Forensics XML, and allows ongoing verification and reporting of the package against the prior DFXML reports). As our AIP requirements, expectations, and standards have become more clarified, standardized, and refined over time, thus as we are in the midst of migrating our earlier AIPs from LTO-5 to LTO-7, we use these verification tools to assess our earlier preservation work against our current standards and develop fixes or extensions to address gaps as they are found. As a result, through the data migration process there are steps to not only verify fixity and data accuracy but also to ensure that packages are adjusted to include our current requirements as they develop. As an example of this, a few years ago we added a step in our process to create a web-ready video access file to include standardizing the volume to a common loudness (inspired by the FCC Calm Act and other accessibility guidelines), thus the access file within migrated collections

² More information about our data migration work can be seen in an article by our NDSR resident Dinah Handel at <https://ndsr.nycdigital.org/media-micro-services-and-archival-workflows-at-cuny-television/>, <https://ndsr.nycdigital.org/ltowoes/>, and <https://ndsr.nycdigital.org/check-your-aip-before-you-wreck-your-aip/>.

created before we added this step may be assessed for loudness compliance and adjusted where needed with proper event logging to document all ongoing changes to a package.

Following the conclusion of this project, CUNY TV will be responsible for maintaining this digital collection and we are confident that we have the qualifications, resources, and organizational continuity to ensure the long-term preservation of this material. Following digitization, we also have the capability to ensure that all physical objects are stored at our offsite storage unit, Entertainment Services (formerly Iron Mountain), and we will maintain all information regarding locations.

Discoverability

After digitization, cataloging, captioning, and preservation efforts, we will publish access files, metadata, and caption files and make the same content available for contributing collections. The access files will be stored on YouTube, the Internet Archive, and linked to the CUNY TV website. Using YouTube as another platform will help further the discoverability of these collections. CUNY TV works with a website development team to make the station's current programming available to the public by using controlled vocabularies and name authorities. Users can search the site by series title, episode title, descriptive keywords, and guest names. This established workflow and platform will be used for the collections digitized from the Hidden Collections grant.

Our project technician will also collaborate with faculty to promote these resources as educational assets. Bringing in workflow from our own Creative Commons initiatives, we plan to segmentize parts of the digitized collections which can be relicensed with Creative Commons to incorporate into Wiki Commons and Wikipedia when such content can support those knowledge resources. Presently open, online knowledge centers such as Wikipedia require the contents of their articles to be openly licensed, but the lack of openly licensed audiovisual content creates an opportunity for which we hope this project can fill, by supplementing educational, online resources with a rich set of openly licensed digitized works.

Another way to make these collections discoverable is through the use of metadata harvesting and the inclusion of transcripts. We plan of using the [AAPB API](#) to harvest metadata by linking out to a PBCore XML that can then be used to harvest the metadata from these records. This will make the content even more accessible and useful to the public. The addition of transcripts to the webpage will also significantly increase the discoverability of these collections and in the future, we want to develop a tool that allows the user to navigate the video with the use of the transcript. These transcripts will significantly increase the accessibility of these collections and the creation of a tool to navigate audiovisual collections via transcripts will be a great asset to the larger archival community.

CUNY TV also has an agreement to donate material to the American Archive of Public Broadcasting. When applicable, we will supply the AAPB with files and PBCore metadata to be uploaded to their [online archive](#). By working with the AAPB, this rich content will then be available to a much large audience.

CUNY TV is a major advocate of Open Source software and many of the scripts and workflows we use are already accessible via Github. For example, our CUNY TV [Mediamicroservices](#), the main tools we use to process and maintain our audiovisual collections, are open to anyone who wishes to use them. Github also serves as a great platform for collaboration and we are actively involved in developing [Vrecord](#), open source digitization software, and [Ltopers](#), scripts developed to work with LTFS (Linear Tape File Systems) aka LTO tapes. Since much of our work is already open to the public, we will try to make any new software developed for this project available to the community.

Budget Narrative

Budget Line Item Explanation

Project Technician Salary and Fringe Costs

CUNY Television plans to hire one dedicated project technician at 32 hours per week for 18 months to focus on assessment, digitization, cataloging, accessibility, outreach, and project management. The technician's position would be administered by the [CUNY Research Foundation](#) and paid at an hourly rate of \$32 with a fringe benefit rate of roughly 35%. At that rate, the annual salary would be \$53,248 with a fringe benefit cost of \$18,817.84.

Data Tape and Digital Storage

The project will create a large amount of data so \$1,500 is reserved for LTO tapes to create multiple geographically-separated copies of the resulting data for long-term storage and management. Ongoing costs related to sustaining the data beyond the first LTO tape will be presumed by CUNY Television.

Cleaning Supplies

A budget of \$120 is reserved for cleaning supplies, such as isopropyl alcohol, lint-free wipes, tools, and other costs related to treatment and cleaning of audiovisual recordings to support optimal digitization.

Re-housing and storage supplies

Another supply cost of \$400 is reserved for boxes, labels, containers, and hard drives. This cost includes those associated with creating and applying unique identifiers for all audiovisual objects involved in the project. These costs also help us supply contributing collections and the vendors with the physical and digital containers needed to move the content around within the project.

Internship Stipends

This project focuses on preserving and making accessible collections in other institutions and the success of that collaboration requires some time from the institutions with expertise in those collections. In order to foster collaboration with the collecting institutions, we have included 3 \$2,250 internship stipends to use with select institutes to facilitate collaboration and discovery with the collections. In other instances, the project staff member will work with the collection directly as needed to support collection movements and information gathering. CUNY TV has a successful internship program derived from its experience with the National Digital Stewardship

Program and would mentor interns in aspects of supporting the project effectively with roles in support of centralized efforts at CUNY TV and in collaboration with participating collections to ensure and to encourage that the resulting materials are well used.

In-house digitization costs

CUNY TV has excelled at developing an active, cost-efficient, well-documented and auditable set of in-house digitization workflows. We've applied these workflows for nearly a decade to tens of thousands of audiovisual objects and thus subsequently safeguard multiple petabytes and millions of digital files. From our experience in training, optimizing, and performing preservation activities on similar audiovisual collections of our own, we are confident about our presumptions in regards to applying those workflows to other collections. From our experience and expertise in such work and in consideration of the substantial list of deliverables and the meticulousness and trustworthiness of our work, we have established a well-considered set of expectations of time for the various technician actions required within this effort and the potential impacts that affect the scaling or outliers of that work. We've also taken in consideration our collaborations with contributing organizations to promote and enable their own outreach work with the results. With our experience and by extrapolating statistics of our progress out, we understand that we can meet and exceed our expectations of this proposal with an 18 month appointment of a qualified technician who works within our well-resourced environment with mentorship and guidance.

Vendors

All digitization, processing, storage, and other efforts will rely on our own well-established and well-tested workflows at CUNY Television. The project is arranged to address what video formats that we can treat in the most effective manner and thus no vendor costs are included in this budget.

Grant Management

CUNY Television will collaborate with the CUNY Research Foundation to fulfill its budgetary obligations and the requirements of the CLIR grant. The CUNY Research Foundation is dedicated to supporting the grant management of CUNY's grants and offers significant expertise, toolkits, and frameworks towards ensuring that grant-based projects are managed successfully. The CUNY Television archive in particular has a successful history of managing collaborative grant-funded projects with the CUNY Research Foundation, such as its two recent NDSR projects. For non-staffing funds the CUNY TV business office will manage budgeting, expenses, and purchasing and support any reporting requirements for CLIR.

Cost Share

While not providing a formal cost share, CUNY TV will contribute significantly in expertise, mentorship, and oversight from three existing staff (David Rice, Director of Archives; Catriona

Schlosser, Archivist; and Amy Monte, Captioning Coordinator). CUNY TV will also offer time from other staff on occasion for skills in graphics design or drafting agreements.

CUNY TV will additionally contribute workspace, computers, hardware and resources in support of the project. Additionally the participating CUNY collections are contributing time to prepare, inventory, and deliver their collections for digitization as well to as contribute to reduce accessibility challenges by assessing, verifying and documenting the rights status of related collections, applying open licenses to those collections where feasible, and reviewing and correcting the automated transcripts from CUNY TV's voice-to-text transformation services.

The project will rely significantly on open source software. Derivatives will be generated via FFmpeg. Audio-to-text transformations will be handled by a local instance of Pop Up Archive's kaldi system. Quality control will be facilitated by QCTools and various scripts developed by CUNY Television. CUNY Television's archival workflow builds upon the expertise of its staff in the application of open source tools in archival environments, thus open source tools contribute significantly to the value, efficiency, and reliability of the project but not to its overall costs.

Budget Detail

clir app cunytv budget detail_v1

Proof of Nonprofit Status

Tax Exempt Letter January 2018 (Donors)

CUNY Research Foundation Info and EIN

Appendices A-D

Appendix A: Assessment of the Audiovisual Holdings of Centro de Estudios Puertorriqueños/
The Centro de Estudios Puertorriqueños (Centro) at Hunter College, CUNY

Pages 2-65

Appendix B: John Jay College Special Collections Media Assessment

Pages 66-94

Appendix C: NDSR Project: Harnessing Media Micro-Services for Stewardship of Digital Assets
at CUNY TV

Pages 95-99

Appendix D: Preservation at the Next Level: Utilizing Preservation Metadata and Fixity Features

Pages 100-109