

**Introduction to the
Media Research and Instructional Value Evaluation Ranking System
(MediaRIVERS)**

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I. Introduction to MediaRIVERS

A. Summary Overview

MediaRIVERS is a points-based research and instructional value assessment tool designed to aid the process of prioritizing time-based media collections for preservation action. The tool asks collection evaluators to take action in the following categories:

Category	Key Question(s)	Comments	Action
Subject Interest (25% of final score)	How much actual or potential interest is there in the topics/subjects documented by the collection?	Includes consideration of significance, importance of a creative work, experiential potential, past use and potential for future use, and local and functional value.	Assign points on a 0-5 scale
Content Quality (25%)	How well, how thoroughly, or how substantially does the collection document its topics or subjects?	Encompasses the quality of the collection's documentation of its topics or subjects. Includes consideration of extensiveness, detail, and thoroughness.	Assign points on a 0-5 scale
Rareness (25%)	To what extent is the collection's documentation of its topics/subjects rare or unique? To what extent are there other sources of information that could substitute for it?	May require curatorial knowledge and/or research to identify similar collections at other institutions.	Assign points on a 0-5 scale
Documentation (15%)	How substantial and appropriate is the supporting documentation provided with the time-based media objects?	Refers to documentation that identifies, interprets, and/or complements the content of the media collection. Serves research and instruction, provides context for creative works. This category helps differentiate time-based media collections from other types of archival holdings.	Assign points on a 0-5 scale

Technical Quality (10%)	How well recorded/filmed or poorly-recorded/filmed is the media in the collection?	Refers to the level of care, craftsmanship, and expertise applied in the making of the recordings and/or the quality of the equipment and media used.	Assign points on a 0-5 scale
Generation	Does the collection consist of originals or copies?	If the collection consists of copies then further research to locate the originals may be necessary.	No points. Track status of generation using a controlled vocabulary.
Intellectual Property	What IP issues restrict the collection's use, if any?	Copyright law, intellectual property concerns, donor restrictions, and ethical issues—these issues may change over time.	No points. Track IP status using controlled vocabulary.

Scores for each category are added together to provide an overall collection research and instructional value rating score on a scale of 0-5. This final score is the result of points assigned in each of the five categories discussed above, all of which combined provide a number that represents the overall value or priority for a collection. A low score in one category does not necessarily mean that a collection will rank low overall.

The final score places the collection in one of the following categories:

Collection Research and Instructional Value Rating Scale

Points	Research and Instructional Value Statement
4.5-5	Collection has <i>exceptional</i> research, instructional, or experiential value. It is a top priority for preservation services. For example, it may contain detailed and/or unique or very rare content presenting a full and deep look at highly significant topics, subjects, people and/or the human experience or is an exceptional creative work.
3.5-4.4	Collection has <i>high</i> value and is a high priority.
2.5-3.4	Collection has <i>moderate</i> value and is a moderate priority. For example, it may contain spotty detail about significant subjects or rich detail about less significant subjects.

1.5-2.4	Collection has <i>minor</i> value and is a minor priority. For example, it may contain routine or scattered material providing only superficial information.
0-1.4	Collection has <i>no</i> value or has minimal value and is a very low priority.

B. Characteristics and Functions of Time-Based Media

A time-based media work can be placed on a timeline--a linear representation of events in the order in which they occur or occurred--that starts at the beginning of the work (usually with a time reference of 0) and continues to the end of the work (with a time reference equal to the work's duration). The work typically is played sequentially from beginning to end. By "time-based" media, we mean those formats that may be represented using a fixed timeline by which a machine renders or "plays" content for people to see and/or hear in real time. For the time-based formats we are concerned with this occurs at such a rapid rate that individual data points are scarcely perceptible. The dimension that corresponds to time might be physical (e.g., successive frames on a strip of motion picture film), or it might be an element of a digital data structure (e.g. the order of samples in a digital sound file). Following this definition, for our purposes time-based media is limited to audio or video recordings or motion picture film.

Several successful systems exist for ranking the research value of collections of *non*-time-based media, such as manuscripts or still images. However, none of them seemed suitable for assessing the various collections of time-based media found at Indiana University, which led us to ask: How does the value of time-based media differ from that of other archival formats? Should this affect how we rate the value of collections of time-based media? Are they different enough from collections consisting of other types of formats such as manuscripts or still images that a tool designed for rating them would be unsuitable for time-based media collections?

In certain contexts, time-based media are perceived simply as carriers of information that could be expressed just as well—and perhaps more conveniently—in writing. Oral historians often take this position, for example, by treating sound recordings as the raw material for definitive transcriptions. In such cases, the *content* being assessed for value would be indistinguishable in nature from that in a collection of texts written on paper. At issue would be the *words*, as they could be represented in writing. The recordings themselves, or the original pieces of paper, would have "evidential value" only—that is, they might help establish the provenance of the words.

However, sound recordings and moving images can marshal a different power than the written word and we must consider value judgments of a very different kind, in this case focusing on recorded sound:

A sound recording is a piece of historical evidence. It has an impact that goes well beyond the written word or photographic image. Records enable us to listen in on history, to hear it again as it happened. The crash of the airship *Hindenburg* in New Jersey in 1937 is well preserved on film, but it is the spoken account of the disaster that brings the event to life and stirs the emotions.
—Andre Millard, *America on Record*, p. 10.

Mr. Speaker, it is not just music that would be robbed from us if we do not pass this critical legislation. Events from bygone eras have been recorded in sound as well as on paper. These recordings humanize the events we read about in textbooks and transport us to an understanding of our past more comprehensive than any history volume.
—Representative Karen McCarthy of Missouri, in discussion of the National Recording Preservation Act of 2000 (P.L. 106-474)

From the mid-1920s until well into the 1950s, radio was the nation's major source for entertainment and news, as well as a mirror of the times. Threatened here is more than the loss of sound recordings—it is the loss of an irreplaceable piece of our sociocultural heritage.
—*The State of Recorded Sound Preservation in the United States*, p. 4.

Statements such as these shed light on what people find valuable not just about individual sound recordings, but about sound recordings in general. Similar statements can be made about moving images—video and film. They can “humanize” and “bring to life” events, “stir the emotions,” “transport us,” and enable us to “listen in on history, to hear it again as it happened,” having greater “impact” and giving a more “comprehensive” understanding than ordinary written sources. These concepts are all rather vaguely expressed, but they center on a particular *experience* that time-based media offers and are concerned more with vividness of impact than factual documentation. That is, time-based media has the potential to *enchant* as well as inform.

Paper documents might also help “bring events to life” or constitute parts of a “sociocultural heritage,” but they are more likely to be rated as sources of factual information about something other than themselves—at least, that seems to be the thrust of the various rating schemes we have examined. Time-based media, by contrast, is *more* likely to be perceived as a source of heightened experience and as objects of interest in their own right.

There's also the matter of what it means to “quote” an item. Traditionally, a researcher would transcribe and quote the words of an archival paper document, and might sometimes include a facsimile or a still photograph, when presenting research in print. Researchers might also transcribe or describe a sound recording or film, or include a still from a film, in a print publication. But audio or video/film can be incorporated more directly into what users do or make, for instance by inserting it into radio or TV documentaries, into new creative works, into the classroom, into ebooks, or into conference presentations—taking advantage of the heightened experience such objects can offer. There are likely to be different intellectual property issues in this case, or at least issues with higher stakes, because of the higher economic value placed on time-based audiovisual content as potential “entertainment.” Users' criteria for valuing and choosing such material may also differ considerably from those they

would apply to textual source materials. Think about what a teacher, conference presenter, or documentary maker might opt to show or play as audio or video, as opposed to what s/he might opt to read aloud, assign to a class for reading, or show as text onscreen. This is why “technical quality” is considered relevant in such cases in a way that it isn’t for more traditional archival documents.

In general, the uses of primary time-based audiovisual content seem less likely to be limited to what has been ordinarily considered “research” than are the uses of primary written source material. This is not to argue that time-based media doesn’t have research value—just that it has other sources of value too. For example, researchers studying the gestures and intonations of an impassioned orator or the subtle stylistic nuances of a celebrated musical performance are likely to find time-based media indispensable. It is important to note that the information time-based media offer for research purposes can differ qualitatively from that available from other sources. Acknowledging and factoring in this diversity of likely uses is important for generating ratings that accurately reflect the actual value of time-based media collections. Not only can time-based media enchant, but they can also help us to *understand* whatever it is that enchants us.

Four Functions of Time-Based Media

The “value” of a recording can be assessed in terms of its prospective functions for both custodians and users. These functions fall into four broad categories:

1. Experiential

The recording (or film) enables someone to have an aesthetically heightened experience. This might be compared to the “literary value” of a text or the artistic value of visual art—a highly subjective call, but one that is nevertheless intuitively powerful. Does listening to an audio recording give the listener goose bumps? Does watching a film transport the viewer vividly back into another time, or might it enthrall the community for a night in the IU Cinema?

2. Research

The recording enables someone to make a new contribution to knowledge or it provides evidence or data in a research endeavor. The knowledge should be “new” (or at least “rediscovered”) in the context of some substantial community—perhaps an academic field, but not necessarily.

3. Instruction

The recording enables someone to convey or acquire existing knowledge. This includes its use in teaching, including self-instruction, but also everyday consultation as a reference source. The emphasis here is on well-established factual information.

4. Production

The recording enables someone to incorporate its content into a new work. This encompasses transcriptions (e.g., in a book or article) as well as direct incorporation of audiovisual content (e.g., into a radio or TV documentary or even an individual's PowerPoint presentation).

These functions of time-based media inform the criteria used by MediaRIVERS to assess the value of media collections as discussed below.

C. Development of MediaRIVERS

MediaRIVERS draws upon work originally completed by the Historical Society of Pennsylvania, later adopted by the Philadelphia Area Consortium of Special Collections Libraries (PACSCL) and adapted by Columbia University and the University of Virginia. This points-based survey tool was developed specifically for text-based collections consisting of manuscripts and still images. The tool has been both successful and influential, adopted by other consortia projects around the country as well as being included in the Archivists' Toolkit Assessment Module.

Pennsylvania's original scheme asks evaluators to rate (1) how much *interest* there is in the topic documented by a collection and (2) how *well* the collection documents that topic (quality of documentation) based on such factors as rareness, depth, and extensiveness. This scheme is conceptually elegant, has been widely adopted, and enjoys a solid track record. The first two categories in MediaRIVERS—Subject Interest and Content Quality—correspond directly to the Interest Ranking and Quality of Documentation Ranking in the research value part of the Pennsylvania tool.

In addition, MediaRIVERS takes the concept of uniqueness or rareness and places it in a separate category called Rareness. The remaining two scored categories in MediaRIVERS—Documentation and Technical Quality—have greater implications for media collections than other types of archival holdings and are necessary to prioritize them by their own merits as discussed below.

D. Overview of the Evaluation Process

Rating field collections for research value is in part a subjective process—as much art as science. This is unavoidable, as the process requires judgment calls in comparing one collection to another. It is also difficult to gather full information on every variable for every collection, requiring that educated guesses be made. Using a specific, well-developed tool and following a structured process may lessen the subjectivity of the process while encouraging consistency.

It may simplify and focus the rating process to analyze collections in terms of the key topics or subjects that they address and document. That is, it might be beneficial to define the key topics documented by a collection and to rate those, but not to bother with minor topics.

Prioritization Process

The archival field generally considers that the related activities of appraisal and selection for preservation are best guided by a set of institutional policies that define the goals of the archive. This may include an acquisitions or collection development policy or a mission statement that provides a touchstone for prioritizing and choosing. The frame of reference for evaluating research and instructional value then is the single unit or institution—if a collection is judged of high value, it is valuable to the holding unit as defined by that unit’s priorities articulated in policy documents.

MediaRIVERS was originally developed on behalf of the Indiana University Media Preservation Task Force, created in 2010, as a tool for prioritizing media collections on the Bloomington campus. This was a challenging proposition as the campus itself does not maintain an archival collection development policy. The campus also includes more than eighty units with media holdings, each with different notions of what is or is not valuable to their mission. It is difficult to imagine ranking collections with consistency and integrity across units, not to mention reaching agreement across campus on the relative value of the various and diverse media collections. For these reasons, the Media Preservation Task Force recommended trying to achieve consistent rankings within each unit only, so that each unit’s top priorities could be highlighted as campus preservation priorities. This approach was intended to enable unit curatorial staff to maintain significant control over the prioritization process for their content.

Defining Collections

A collection, as defined by the Society of American Archivists, is “a group of materials with some unifying characteristic.” Fundamentally, collections are groupings of objects that have some intellectual or historical commonality that enables them to be assessed for their value. That is, a heterogeneous, minimally related group of objects cannot be effectively assessed for its research and instructional value, or by extension, prioritized for preservation treatment. Collections may range in size from small to large; practically, it may not be possible to meaningfully score a collection that is very large. For example, it may be difficult to gather data on a collection of 10,000 open reel tapes or to evaluate its many variables. In addition, it may not be possible to place a collection of this size on a list of priorities due to the resources this one grouping would consume during the preservation stage. In this case, the collection must be divided into multiple parts or sub-collections that are manageable and lend themselves to prioritization.

We found that we sometimes needed to work with campus units that don’t typically archive their media holdings in formal collections to devise ways to create groupings of their media items for evaluation and prioritization. Although such groupings may be somewhat artificial,

they are best based around an intellectual, historical, thematic, or format commonality that binds them together into a logical grouping.

II. Components of MediaRIVERS

A. Introduction: Usefulness

MediaRIVERS asks evaluators in a number of places to assess the importance of the topics, subjects, or people documented by a collection. To be clear, it is the importance of the *content* that must be assessed. For example, a video of an undergraduate class presentation on the interactions between FDR, Churchill, and Stalin during World War Two involves highly significant *topics/people*, but its *content* probably isn't very significant. If the *content* of a collection is significant, on the other hand, it doesn't matter for rating purposes whether this is because it involves significant people or topics or for some other reason. A fiction film might be significant in its own right as a work of creative art. The film doesn't necessarily address a "topic," but is itself a subject of interest.

The central question, then, is how important or valuable is the collection's content? (Note that MediaRIVERS is designed to rate the value of the time-based media objects in a collection, not complementary or ancillary materials that support the media objects). Considering this from a functional standpoint, bearing in mind the four functions of time-based media discussed above, the question might be reframed as how *useful* is the collection's content? A collection is valuable because of its usefulness—what it enables users to do with it for themselves and for each other in a concrete way. The content of a collection may prove useful, for example, if

- its content is important or significant historically, politically, or culturally in ways that enable researchers to shed light on their research questions;
- its content is a significant creative work that enables users to have a heightened aesthetic experience or explore the human condition;
- its content is high in quality—it is thorough in its coverage, providing researchers with much to choose from in addressing their research questions or instructors in choosing material for teaching;
- its content is rare or unique, providing information and perspectives that cannot be found elsewhere, enabling the discovery of new knowledge or the exploration of new aesthetic experience;
- its content is well documented with rich ancillary information that enables accurate and detailed understanding and interpretation of the collection's information or aesthetic experience;
- its content is of high technical quality or fidelity, which enhances the discovery and interpretation of information as well as the aesthetic experience of creative works.

All of these contribute to the overall usefulness of a time-based media collection and, hence, its value to the unit or institution that holds it. The concept of usefulness provides a strong theoretical framework for assessing the value of media collections, encompassing the evaluative categories Subject Interest, Content Quality, Rareness, Documentation, and Technical Quality.

B. Subject Interest

1. Key question

How much actual or potential interest is there in the topics or subjects documented by the collection?

2. Scope

In this category, the evaluator assesses the significance or importance of the content in the collection. Collections may be significant at a number of levels including international, national, regional, and/or local. Evaluators may also consider such things as the importance of a creative work, potential for a heightened aesthetic experience, past use and potential for future use, and functional value within an institution.

Local value refers to the value of a collection within a local context. In our case, this meant its value to Indiana University as an institution or the state of Indiana. Most of our campus collections may generally be considered valuable to IU, since someone associated with the institution acquired them at some point in time. However, assessing this element within this category is for determining which collections possess particularly strong local value because they, for example, support a subject strength or document the work of an IU faculty member, document an Indiana tradition or cultural expression, or document IU itself. Of course, the specifics of local value will vary according to the local context.

Functional value is determined from an analysis of who created the collection and for what purpose and is considered by many archivists the strongest way to document institutions. It relies upon an understanding of the relationship between the collection and the institution's functions to judge the collection's value. It may not be applicable to many media collections or to collections that chiefly present cultural information. Useful questions to ask include: At what administrative level is the office or person that created the collection? What are the most important functions of the office or person that created the collection? Does the collection have evidential value? That is, does it provide critical information about the origins, functions, and/or activities of the office or person that created the collection?

3. Evaluator questions

Here are a few suggestive questions for evaluators to consider when assigning points in this category:

- Are the topics/subjects documented in this collection important historically, politically, culturally or in other ways?

- How likely will the content of the collection facilitate an understanding or appreciation of historical, political, cultural or other phenomena?
- Does the collection consist of content that is significant as creative works or artistic creations?
- How often has the collection been used in the past? What is the perceived potential for future use? Bear in mind that many time-based collections have not been widely used simply because they have not been available or discoverable.
- Does the collection consist of content that is valuable for international, national, or regional research? Is it valuable for local research?
- Does the collection consist of content with strong functional value that provides important documentation of an institution?
- Does the collection contain content that facilitates a heightened experience of historical events, human emotions, or aesthetic phenomena?

4. Points

Points	Description	Selected Examples
4.5-5	Of the highest interest	<ul style="list-style-type: none"> • The topics/subjects or creative works in the collection are of central historical, political, cultural or other importance at any level (international, national, regional or local) <i>and/or</i> • Collection has been constantly used in the past and has the highest perceived potential for future use <i>and/or</i> • Collection is essential for documenting the workings and functions of a unit or institution
3.5-4.4	High interest	<ul style="list-style-type: none"> • Topics/subjects or creative work are of high importance... • Collection has been consistently used... • Collection is very important for documenting an institution
2.5-3.4	Moderate interest	
1.5-2.4	Minor interest	
0-1.4	No or minimal interest	

B. Content Quality

1. Key question

How well, how thoroughly, or how substantially does the collection document its topics or subjects?

2. Scope

In this category, the evaluator assesses how well the underlying content of the collection documents topics/subjects or fulfills its reason for existing. This does not include technical quality, which is treated separately below.

This is a relative question for given time periods. That is, content quality may be very good for its time but not up to current standards in the field. The objective for evaluators is to rank collections according to current standards.

One variable to consider is the comprehensiveness or thoroughness of the content of the collection in relation to its documentation of topics/subjects or reason for existing. Evaluators may consider such things as the extensiveness or detail of the content. A creative work may provide its own reason for existing and can be evaluated for the presence or absence of all of its component parts.

3. Evaluator questions

Here are a few suggestive questions for evaluators to consider when assigning points in this category:

- How comprehensively does the collection cover its topics?
- How detailed is the content in this collection?

4. Points

Points	Description
4.5-5	Collection content is top quality and very rich. For example, it may be complete and comprehensive
3.5-4.4	Collection content is high quality and rich. For example, it may be thorough, but not complete
2.5-3.4	Collection is of moderate quality and richness and is moderately complete

1.5-2.4	Collection content is of low quality, is only incidentally valuable, and is limited or narrow
0-1.4	Collection content is of poor quality, slightly valuable or not valuable and is extremely limited/narrow

C. Rareness

1. Key questions

*To what extent is the collection's documentation of its topics/subjects rare or unique?
To what extent are there other sources of information that could substitute for it?*

2. Scope

In this category, the evaluator assesses the level of rareness of the *content or subject matter* in the collection. Note that the physical media object itself (as opposed to the content *on* the object) may be unique but this is tracked in the section on generation below.

The level at which this analysis is applied is important to consider. This evaluation is for the general type of content, not the specific content embodied in a specific recording. Take, for example, a collection of recordings of Christmas caroling in Martinsville, IN from the 1940's. The appropriate question to ask is how many collections exist that document caroling in central Indiana during the 1940's? In other words, how rare is this subject matter? We are not concerned with the rareness of this particular collection of carols sung by five women and two men on December 15-17, 1949 that was recorded on paper-based open reel tape—it is understood that this was a unique recording session that is not represented in other archival collections. The fact that it is unique does not necessarily mean that it is of high value.

The content of the collection may provide unique documentation of its topics/subjects. That is, there are no other known collections or sources of information that provide the same documentation. The content of the collection may provide rare documentation that also exists in varying numbers of other institutions.

3. Evaluator questions

- How likely is a prospective user of this content to be able to access other, different source material that would serve the same purpose equally well? Are there other collections that document the same topics and subjects?

4. Points

Points	Description
5	Unique. The topics/subjects documented in the collection are not documented anywhere else
3.5-4.9	Very rare. Similar content may be found in one other collection
2.5-3.4	Moderately rare. Similar content may be found in several other collections
1.5-2.4	Fairly common. Similar content is widely available
0-1.4	Common. Documentation of the topics in the collection is ubiquitous

D. Documentation

1. Key question

How substantial and appropriate is the documentation provided with the collection?

2. Scope

Media collections are not easily browsed nor subject to speed reading. They are more quickly evaluated using ancillary documentation, whether in the form of notes on tape boxes, liner notes in record jackets, or indexes from a field collector. Documentation can make a collection more useful in multiple ways. Without it a user may be unable to identify the collection's content (even after watching or listening to it) or, in the case of a larger collection, may be unable to locate material of interest. Documentation may also help identify outtakes or materials that were not integrated into a finished product. Alongside mere identification, however, documentation can contextualize and complement the content of time-based media collections. Extensive field notes might shed additional light on issues treated in a collection of field recordings, for example, or teaching booklets might help reveal how educational films were originally used and understood. Such documentation serves research and instruction and provides context for creative works. This category helps differentiate time-based media collections from other types of archival holdings in the ways in which ancillary documentation is essential to their use.

Different types of media collections call for different kinds of documentation. For example, documentation needed and/or expected to facilitate understanding a field collection is quite

different than that needed for a collection of commercial 78 rpm discs, although either may include complementary documentation that provides information beyond basic identification to help users understand and interpret the content. Examples of complementary documentation include field notes, essays, articles, booklets, drawings, diagrams, photographs, press packs, press books, study guides, and others.

3. Evaluator questions

- Is the content of the time-based media appropriately identified either through written documentation or spoken announcements? Does it contain complementary documentation?
- Is the documentation provided *with* the time-based media (field notes, transcripts, etc., *not* the content of the media itself) substantial?
- Is the time-based media accompanied by material in other formats that substantially enhances the overall value of the collection, apart from merely identifying the content of the time-based media?

4. Points

This category is weighted at 15%, which is less than the more central categories of Subject Interest, Content Quality, and Rareness. Its purpose is to push collections with complementary information slightly higher in the final rankings while pulling collections with less than adequate documentation slightly lower. If two collections are otherwise equal, one with complementary information that aids in interpreting and understanding its content is a slightly higher priority for preservation treatment than one with no complementary information. Likewise, a collection with less than adequate documentation is a slightly lower priority than one with adequate documentation. In all cases, the more central categories discussed above will have greater impact on the final score than the Documentation category.

Points	Description
4.5-5	Collection documentation is as substantial as can be imagined for the type of collection. Basic documentation is available plus there is much complementary information that helps users interpret the content.
3.5-4.4	Collection documentation is highly substantial. Basic documentation is available plus there is some complementary information.
2.5-3.4	Collection documentation is adequate, but basic. It may be considered moderately substantial and there is no complementary information.

0.1-2.4	Collection documentation is limited and may be considered less than adequate or basic in some way.
0	No documentation with collection.

E. Technical Quality

1. Key question

Is the collection well-recorded/filmed or poorly- recorded/filmed?

2. Scope

Many possible uses specific to media collections depend on the quality of the recording or filming process. For example, does listening to an audio recording give the listener goose bumps? Does watching a film transport the viewer vividly back into another time? That is, does the media work enable someone to have an aesthetically heightened experience? This basic function of time-based media is realized more successfully with a well-recorded or filmed collection. It may be less successful or not possible at all if the user is distracted by a poor recording that is unintelligible or only partly understandable (unless it is part of the aesthetic or formal design of the work). The production function of media—enabling the incorporation of content into a new work—is also accomplished more successfully with high fidelity recordings. In addition, researchers may learn more from well-recorded items by hearing and/or seeing details that would be masked if they were poorly recorded. Even instructional uses are likely to have greater impact with higher quality recordings.

3. Points

Quality of the recording process and fidelity of the work should be judged in relation to today's standards, not in relation to what is technically achievable for any given format. This is necessary to achieve a consistent scale in this category. It does not imply that the content is necessarily less valuable overall if its fidelity is characteristic of the 1930s, for example. It may be of somewhat less value for certain purposes, but other categories scored in this tool provide plenty of opportunity for such a collection to rise to the top. Note also that Technical Quality is weighted at 10% of the final score—significantly less than other variables so that other factors such as Rareness, if ranked highly, will automatically push a collection higher on the research value scale. Finally, this category may simply be dropped if there is not enough data for an accurate assessment. As discussed below, the application will produce a final score based on the remaining four categories. With this flexibility built into the tool, the Technical Quality category can function to slightly boost collections that score highly in this area rather than penalize those that do not. The exception is collections that score at the bottom of this category as discussed below.

The application uses a cut-off point for this category to prevent collections that are so compromised technically as to be unintelligible from rising to the middle of the rankings due to high scores in other categories. Collections scored in the bottom category—0-1.4 points—are automatically removed from consideration for preservation treatment.

Points	Description
4.5-5	Collection fidelity is outstanding, of the highest quality
3.5-4.4	Collection fidelity is high, better than average
2.5-3.4	Collection fidelity is moderate, average or satisfactory
1.5-2.4	Collection fidelity is seriously flawed, poor, below average
0-1.4	Collection is so poorly recorded or filmed that it cannot be understood, it is unintelligible or catastrophically compromised

F. Generation

For our purposes, generation can be defined as a class of objects that developed from a common ancestor. Some of the terms used to describe the generation of a media object include:

- An original recording is an audio or video object recorded directly by the recording machine that first captured the sound and/or image at the time it originated.
- A negative is the film element that captures the image in the camera. A positive or print is made from the film negative for projection or, in the case of reversal film, the film from the camera is processed into a positive. Other film elements may include sound in the form of magnetic tracks stored on film.
- A master recording may or may not be an original, but is the audio or video object designated to carry the content into the future.
- A first copy is a copy (or copies) made directly from an original and it may or may not be a master. A second copy is made from a first copy.
- A commercial copy is created from the production process for commercial release. It typically exists in multiple versions in multiple locations although it may be rare, in which case (as we define the term) only a few institutions or private collectors may hold a copy. Note that the *content on the recording* may also be rare—this is evaluated in section C on Rareness, above.

Originals—the audio or video objects produced by the recording machine—typically present a higher quality source with the best possible fidelity for preservation work. The working

assumption is that original recordings are assessed, not copies, and that preservation work is performed on the originals as recommended by media preservation best practices documents. There are occasions where originals have deteriorated to the point that copies, which may even be located at another institution, sound or look better. It is also possible that a collection is made up of copies and the disposition of the originals is either unknown or known to be lost. If originals are not available, it may be necessary to substitute copies. Because preservation work is expensive and there is much to preserve, it should be done only once. Therefore, it is worth researching the location of the best available source to pass on to future generations.

Because it may be necessary to undertake further research and/or perform preservation work using copies, evaluators do not assign points for this category. Instead, information on generation is tracked within MediaRIVERS to support additional research and curatorial decisions.

G. Intellectual Property

A collection that is currently not available for use by researchers may be a lower priority for preservation regardless of its significance. A collection that may never be available for research use may not be a candidate for preservation. Barriers to use include copyright law, intellectual property concerns, donor restrictions, and ethical issues. These are not always static. For example, donor restrictions may lapse or be renegotiated, new ethical issues may come to light or older ones become resolved, and intellectual property concerns may be heightened or lessened with research. Even copyright law changes over time. For these reasons, this category is not used directly to prioritize collections for preservation treatment. However, MediaRIVERS will track information relating to intellectual property issues to support curatorial-level decision-making. In some cases—a collection with stringent donor restrictions that make it unusable, for example—it will be necessary to exclude items from preservation work. We believe that this type of decision is best made by unit curators provided with accurate information, not by a software application.

H. Score Weighting

Final scores for a collection are calculated by averaging the points assigned in each of the five scored categories. The application calculates a weighted average as follows:

Category	Weight
Subject Interest	25%
Content Quality	25%
Rareness	25%

Documentation	15%
Technical Quality	10%

Subject Interest, Content Quality, and Rareness are fundamental to meaningfully determining the research value of a collection. They are considered equal in importance and receive the same weight. Documentation is particularly important for media collections as discussed above but is not considered central to determining value. Technical Quality is also not considered central but plays a useful minor role in distinguishing between collections. For example, if two collections are equal in every other respect, the one that scores higher in technical quality is a slightly higher priority for preservation treatment.

It may be difficult to identify appropriate data to use in assigning points in some of the categories. This is especially true for Technical Quality. The evaluator and/or curator may simply not have enough information on which to judge in this area. The application will allow the evaluator to drop this category and calculate a final score based on the remaining four. In this case, the weight of Technical Quality is distributed evenly between the other categories. No other category may be dropped. Scoring without Technical Quality results in the following weights:

Category	Weight
Subject Interest	27.5%
Content Quality	27.5%
Rareness	27.5%
Documentation	17.5%