Asset Management Caucus

O'Hare Hilton
Chicago, IL

November 13, 2001

BRIEFING BOOK

November 13, 2001

Dear colleagues,

Welcome to Chicago, and CPB's Asset Management Caucus. We are pleased that you could join in this special day of innovation and hard work.

At CPB, we consider it a fundamental duty to convene public broadcasters around issues of critical importance to us all. Asset Management is one of those issues. As I am sure you already understand, without a concerted and cooperative plan to manage our vast library of content, we will be unable to reach our potential for service in the digital age.

The concerns, human and technical, are myriad. Asset Management is the framework upon which many of our largest technology projects will be built, including our future interconnection system, and will also inform the work of our smallest production teams. Ultimately, it is our hope that our licensees, as well as their partners in the university, museum and library community, will work together to build a set of Asset Management solutions.

You have been invited today because we believe that you are able to design projects that, with support from the Future Fund, will explore and resolve key issues. Please give this Caucus your best effort, so that your organization as well as all of public broadcasting will benefit from your expertise and enthusiasm.

Good luck!

Robert T. Coonrod
President and Chief Executive Officer

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MEETING AGENDA

Purpose: find the shortest path connecting asset management know-how in the field to others who can benefit from that knowledge, with help from CPB TV Ops.

8:30-9:30	Morning Refreshments
9:30-10:00	Welcome & Introductions; Review Agenda *General welcome and station-by-station introductions, as well as introductions of other participants; review the day's program.*
10:00-10:15	Elaborating on Our Purpose *Comments and guidance regarding the purpose of CPB's Future Fund and CPB's interest in asset management.*
10:15-11:00	The Work Ahead *What goals should we have in asset management, and what should our priorities be in order to achieve them?*
11:00-11:15	Break
11:15-12:00	Practical Issues & Obstacles *What stands in the way of achieving our goals, and what limits our effectiveness in working on them individually and collectively?*
12:00-1:00	Lunch
1:00-1:15	Charge to the Working Groups *Each group will be asked to develop a hypothetical asset management project that offers the opportunity to achieve at least one of our goals, and that suggests strategies for overcoming the obstacles that impede us.*
1:15-3:00	Working Groups Convene *Three working groups, each with a cross-section of participants and led by an appointed moderator, will develop their recommendations and joint presentation.*
3:00-3:15	Break
3:15-4:15	Working Group Reports & Discussion *Reports and discussion around each of the working groups recommendations.*
4:15-5:00	From Ideas to Action *What are the next steps?*

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Staff Biographies

William Keens
President

William Keens served as president of his own consulting firm for 12 years before joining with Thomas Wolf to create Wolf, Keens & Company. He founded his firm in 1985 after a decade of work with nonprofit organizations and foundations at local, regional, and national levels. Through the firm, Bill developed a spectrum of services to help clients undertake planning, board and staff development, research, evaluation, and other processes to meet a variety of challenges. As a result, Bill has become widely recognized for the skill with which he prepares groups to address complex situations, facilitates their discussion of vexing policy and planning questions, articulates and analyzes issues that emerge, and offers clear guidance on where to go next. Projects in which he has been active include work with The Helen F. Whitaker Fund, The Saint Louis Art Museum, People for the American Way, the Smithsonian Institution, the Getty Trust, and The Kennedy Center.

A graduate of the University of North Carolina at Greensboro, Bill taught for five years before serving briefly as Associate Director of the United Arts Council of Greensboro. He moved on to become Director of Communications for the American Council for the Arts (now Americans for the Arts) and, ultimately, Executive Director. He earned his Master of Fine Arts from the Iowa Writers Workshop.

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Asset Management Questions and Issues

The following list of questions and issues is intended to prompt your thinking about how your organization is approaching the challenge of asset management, and about system-wide issues as well. We are looking forward to a productive discussion that certainly will touch on many of these points:

I. For which aspects of asset management does it make sense from a financial, operational and/or efficiency standpoint to undertake system-wide efforts? For which aspects do individual efforts by individual stations, projects, or applications make sense?

II. What metrics should we use to measure the success of individual or collective asset management initiatives?

III. What is the business model?

a. How do you determine the ROI of your asset management activities? What's the financial incentive for public broadcasting as a whole, and for individual licensees and producers, to invest in asset management?
b. Over what period of time should ROI be calculated?
c. How have you approached the challenge of creating an inventory of your content?
d. Who owns the rights to your material? How have you determined that?
e. Do copies of your organization's content exist elsewhere? Where are the "archival" master copies stored? Where are the original field tapes and production elements stored?
f. What is the existing legacy-system "metadata" for this material? Has it been cataloged and indexed sufficiently so that you know what you have and are able to find it?
g. Have you determined the value of this content? What appraisal methods have you used?
h. In general, what might be the value of your content library for various purposes:
    i. Historic/Research
    ii. K-16 Education
    iii. Repurposing (including sales) for multi-platform distribution
    iv. Delivery to individual users
    v. Delivery to and exchange with community and university partners
i. What new business/revenue opportunities have developed or might arise as a result of your asset management activities?

Asset Management Questions and Issues, Cont'd.

j. Has your use of an asset management system saved operational costs by streamlining workflow and reducing duplication? Or has it added to operational costs with no offsetting efficiencies?
k. What new funding opportunities (e.g. government, philanthropic) have emerged or might develop?
    i. NSF Digital Libraries Initiative (includes NASA and Library of Congress)
    ii. National Archives and Records Administrations
    iii. Institute of Museum and Library Services
    iv. Smithsonian Institution
    v. National Endowments for the Arts and Humanities
    vi. Others?
l. Should an individual station have a role as the "keeper of community records," with the responsibility for preserving the station's local productions, and perhaps for preserving the films and tapes of other community non-profit organizations as well?
m. Does your station's archive of local programming have public service and/or financial value?

IV. What are the metadata considerations?

a. How has your organization's content been described, and by whom? (See below.)
b. At the "production elements" level, who are the key stakeholders?
    i. Production units in all media
    ii. Stock footage purveyors
    iii. Creators of "learning objects" for K-12
c. At the "completed program" level, who are the key stakeholders?
    i. Producers submitting programs
    ii. PBS (Programming, Program Ops, Traffic, Engineering)
    iii. Stations (Programming, Traffic, Engineering, Promotion)
d. For "archive and preservation" activities, who are the key stakeholders?
    i. Stations
    ii. Libraries, national and local
    iii. Museums, national and local
    iv. Universities
    v. Scholars/historians, local and national
e. How might public broadcasters come to agreement on a shared metadata model?
f. How can a single metadata system meet the needs of individual stations, which may have differing service objectives and staff strengths?

Asset Management Questions and Issues, Cont'd.

g. By what process might the metadata needs of public broadcasting's assorted end-users be taken into consideration?
    1. K-12 Teachers (e.g. correlation with curriculum frameworks)
    2. Individual users (e.g. hobbies and areas of interest)
    3. Universities (e.g. possible use in extension services and distance learning)
    4. Museums and libraries (e.g. applicability for a real or "virtual" exhibit or collection)

h. What metadata models exist that we can take advantage of, e.g.:
    1. Dublin Core
    2. SMEF (BBC)
    3. SCORM (US Department of Defense)
    4. MPEG-7
    5. Others?

V. How would or should an Asset Management system be interoperable with other network or station systems?

a. Program production/editing
b. Web content authoring
c. Interactive content authoring
d. PBS Advanced Traffic and Programming System
e. Program scheduling
f. Traffic and Automation
g. PSIP in DTV Transport Stream (includes EPG)
h. Promotion/Program Guide
i. Legal/Contracts
j. Development (e.g. underwriting and membership software)
k. Constituent Relationship Management (CRM)

VI. What are the facility and infrastructure requirements for a content + metadata asset management system?

a. Within an organization with multi-platform production teams:
    i. Ingest/encode/transcode station
    ii. Format conversion station
    iii. Indexing station
    iv. Database and asset management server
    v. Core web server (for interface with in-house users)
    vi. Backup and recovery drives
    vii. Video/audio servers
    viii. Access computers for in-house users.

Asset Management Questions and Issues, Cont'd.

b. Between collaborating organizations with multi-platform productions teams, add:
    i. Standard web server (for interface with external clients)
    ii. Replicated database and asset management server.
c. Within an organization sharing assets across production teams, programming, promotion and engineering/ops?
d. Within the PBS interconnection system, including station hubs or ADDEs?

VII. What is the AM workflow/process within production units, across station departments and between interconnected entities?

a. Select or determine assets eligible for the AM system (Chief Media Asset Accountant)
b. Digitize/ingest (Video/Audio or Document Ingest Specialist)
    i. Encode/transcode
c. Catalog (describe) and index (cross-reference) (Asset Librarian)
d. Maintain AM Database; specify access and permissions (Core Database Administrator)
e. Store (Storage Administrator)
f. Ensure delivery across network infrastructure (Network Administrator)
g. Design web interface (Web Designer/Programmer)
h. Maintain web interface (Internet Distribution Database Administrator)

VIII. What is the ingest process for both legacy and new materials?

a. Who acts as the digitize/encode specialist?
    i. Engineering staff?
    ii. Production assistants?
b. What are the encoding/transcoding requirements?
    i. How many different bitrates?
    ii. Which bitrates work best for which type of access (preview proxies, low res editing, full resolution ("online") editing, etc.?

IX. What is the cataloging/indexing process?

a. What automatic cataloging tools are available?
    i. Speech to text
    ii. Captioning
    iii. Print on screen
    iv. Image recognition
b. Who performs the non-automatic cataloging?
    i. A trained archivist or librarian?
    ii. A production assistant?
c. How should the material be cross-referenced, and by whom?
    i. One person?
    ii. Cross-departmental teams?

Asset Management Questions and Issues, Cont'd.

d. What existing cataloging/indexing systems or protocols can we take advantage of?

X. What are the storage issues?

a. What are the size and functional requirements for a web server that is used as the interface between the core database, the AM server and clients?
b. What are the size and functionality requirements for a database and Asset Management server?
c. What are the size and functionality requirements for rich media storage servers?
d. Which physical media is best for asset storage?
e. What should be kept on line, near line, off line?
f. Based on bitrates and length of asset retention, what are the storage costs?
g. What is the physical space required?
h. Is storage best outsourced?
i. What is the backup or disaster recovery plan?

XI. How are the assets accessed?

a. What is the ideal user interface?
b. Does the interface change, depending on the user?
c. How can we most efficiently match ingest protocols with the user's delivery requirements?
d. Who will have access? How will this be determined?
e. How secure can we make our assets?
f. How will the assets be delivered?
    i. Bandwidth requirements?
    ii. On-demand, or next day?
    iii. Low-resolution proxies or full resolution?
    iv. Packaged media (e.g. DVDs, tapes)

XII. What are the Digital Rights Management (DRM) issues?

a. Tracking rights
b. Controlling access
c. Security
d. Collecting payments
e. Paying royalties and usage fees

XIII. What are the archiving and preservation issues?

a. Is the preservation timeline dictated by which format the media is currently stored on? (In other words, are some formats eroding faster than others?)
b. In general, what should be retained or discarded from a given collection, and why?

Asset Management Questions and Issues, Cont'd.

c. Are we trying to preserve our assets, in the purest sense, or simply make them accessible with digital technology?
d. What are the costs?
e. To what media should we migrate our assets? Is there a Universal Preservation Format?
f. As we "forward migrate" or "refresh" our content assets using changing technologies, how can we maintain the original presentation form?
g. How can we know the obsolescence factor for:
    i. Hardware?
    ii. Software?
    iii. Storage media?
h. How should the collection be monitored; who will perform the "curatorial" function?
i. How can we be sure to include or attach "provenance" (historical context) to our media?
j. Have other organizations developed archiving protocols for rich media?
    i. Association of Moving Image Archivists
    ii. Library of Congress
    iii. IMLS

XIV. What are the operating costs for an Asset Management system?

a. Depreciation?
b. Operations?

XV. What should be our criteria for selecting service and software providers?

a. Interoperability/Open standards?
b. Scalability?
c. End-to-end solutions?

XVI. Who are our potential partners and collaborators?

a. Other broadcast organizations, national and/or local, radio and television?
b. Hardware and software vendors?
    i. (E.g. Artesia, Sun Microsystems, IBM)
c. Universities?
    i. (E.g. University of Wisconsin, Yale Law School)
d. Libraries and Museums?
    i. IMLS?
    ii. Library of Congress?
e. Other information providers?
    i. Department of Defense
    ii. NSF Digital Libraries Initiative
f. Book or Online Publishers?

CONNECTICUT PUBLIC TELEVISION

"CONNECTICUT HISTORY PROJECT – INTO THE DIGITAL AGE"
A PROPOSED PARTNERSHIP BETWEEN WFSB AND CPTV

WFSB, Channel 3 has the most extensive library of video assets in the state of Connecticut. More than 40 years of Connecticut stories reside in WFSB's library.

This archive provides the opportunity for video documentarians, students, teachers, policy makers and scholars to better understand the historical context in which decisions are being made today.

With the digital age fast approaching for broadcasters, CPTV has been engaged in an active process of 'mapping the assets' of the state. CPTV believes that WFSB's library is a key asset, which must be preserved, maintained, digitized and made accessible to the public. This belief assumes fully WFSB's access to the material in perpetuity.

What Value Does This Have To WFSB Channel 3?

WFSB will be moving in the near term. Many stations have lost or discarded valuable material in this process. We propose storing this material in climate-controlled environment, at CPTV's expense, until further work can be undertaken in its preservation.

The archive name will be attributed to Channel 3; thus the public knows its origin and WFSB's sharing of this material with the community.

WFSB's copyright travels with the material for any use that may be made of it. No commercial competition can use the material unless WFSB grants permission.

Professional cataloguing can be done assuring ease of access to the material.

Contributing the library may afford some tax benefits to the corporation.

This process would be groundbreaking and might foster other such arrangements between public and commercial broadcasters throughout the country.

Why CPTV?

As the state's only broadcaster recognized as a 501 C 3.non-profit organization, we can amass grants and partners, such as The Connecticut Historical Society, to join in this effort.

This material is the fodder for much of our essential programming – the historical documentary – and complements our existing archive of Connecticut material.

We are experimenting with IBM technologies, and sophisticated archiving systems, which can make this valuable asset available to interested parties throughout the state on an on call basis, thus allowing educators and others a most important source of information.

The opportunity to protect and preserve this program content is critical to our state's history.

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As an independent production company, David Grubin Productions faces many challenges in asset management.

The premise is simple: if media standardization doesn't work at the very first level – the programming providers – it will inherently be flawed at all other levels because the material that has to be managed will not be done so in a way that works for the entire system, and mismanaged material will permeate this system, rendering it essentially useless.

It is therefore critical to design a system that is simple, cost effective and above all, user friendly.

We should also look at incentives to adhere to standardized formatting and storage. While many production companies take pride in superior deliverables, there are those that, for cost reasons, time constraints, or basic lack of interest, provide the bare minimum. A one hundred percent compliance level may be impossible, but it should be close. Again, failure to comply will weaken the overall structure. The question is, how do you provide incentive? There are several "positive" ways to encourage participation – additional funding, free software, equipment upgrades; and there are more negative ways – no funding without compliance, tech eval failure, etc.

The biggest challenge that we face as a small production company is the standardization of our information databases. To meet this challenge, we have hired a computer consultant to write a series of interconnected Filemaker Pro databases in order to organize and track information and materials gathered for our historical documentary programs. Several examples are attached.

The crucial database that allows us to organize and track all our visual materials is the "Image Database." Every still image and footage clip, whether original, archival or stock, is given a number and entered into the "Image Database," with a distinction made between stills and footage. The database is set up so that once the information is entered it can be exported from Filemaker Pro to Media Log, the logging software used on the Avid editing system. By organizing this way we can search by keyword, description etc.

We can also track material for rights and usage once the cut is finalized. In addition to our images, the database also contains archive contact information, price for still reproductions and research cassettes, price for rights, rights cleared, step up information, dates and type of contact, and still/footage return information.

We provide all of our program commissioners (WGBH, WNET, DDE, PBS, etc.) with complete bibles of our shows. A typical bible table of contents (from last year's "Abraham and Mary Lincoln: A House Divided") as well as one from our most recent series "The Secret Life of the Brain" is attached here. Everything in the bibles is archived on CD-Rom so that we may refer to the information quickly, but it does not take up storage space.

David Grubin Productions also uses a common server to house company-wide information such as general content lists, recently completed shows that are not quite ready to be archived, and older, but frequently needed program information.

We as a company are very interested in a standard system for materials management, but there are concerns regarding cost (how much will we have to pay for software), training required, and additional personnel hours.

Iowa Public Television

1. What is/was the problem you are/were trying to solve?

Briefly in the past:

We have entered the DAM conundrum cautiously, attempting to find partnerships while exploring various content needs of the people we serve. The perceived needs have been the obvious DAM list; repurposing of content, rights management, finding needed content, etc.

a. Partnership with to Fast TV to stream and index presidential election debates produced from our studios for PBS.

Lesson learned: Internet business world is unstable and full of accepted practices that have been traditionally contradictory for public television stations.

b. School To Career is project to document possible careers for students and educators to use classrooms. The web site contains video on demand for schools. Video was encoded, closed captioned, and the search was through web interface with Cold Fusion and Access database.

Lesson learned: Sometimes we can move forward slowly on our own without big projects.

c. American Field Guide participant in cooperation with Oregon Public Television.

Lesson learned: Every Public Television stations will need to learn and apply old practices, as well as new practices, when partnering with other stations. Best Practice begins with what did not work. Everyone wants to focus the spotlight solely on what did work.

Proposed Project:

Partner with WHA to utilize I2 for collaboration of PTV and K-12 educational community and provide wide variety of historical content to educators.

The current system of delivery consists of tapes being shipped around state and use of live sessions with the statewide fiber optic system. Many in educational community do not know what media is available. We need to begin the learning process by discovering viable ways to repurpose our material, work on it collaboratively (with WHA), provide new processes for educators in both states to utilize this material. This would be the beginning of the creation of local/ regional / national databases on history. We will learn to categorize, manage, and share or not share materials (limitations on rights etc)

2.What is/was your funding source?

Federal Education Grants, private grants, partnerships for free, CPB, local grants, and foundations.

3. What is/was the overall strategy and/or mission statement for your activities?

Everything, thus far, has been based on individual solutions to individual problems.

Iowa Public Television

Proposed Project mission:

- appraise I2 possibilities by taking advantage of Iowa's statewide fiber optic system which is already in place and will allow access to schools through I2, at a reasonable cost
- utilize new media tools while integrating with CPB project(s) currently under way at WHA
- share video resources with educators between states and between stations
- bring us closer to basic, ground level solutions with primary customers in educational community
- create new audiences by allowing the possibility of creating new media with the material

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

The overall organizational necessity of DAM is recognized. But truthfully, at this point, it does not play a large role in the daily working thoughts of the staff. This is due in large part to the current state economic conditions and the overwhelming task of the digital transition. However, every opportunity is seized to incorporate DAM principles into all projects or ideas that we consider. The Schools to Career delivery project was made possible by this type of DAM discussion and provided an alternative delivery method.

Proposed Project:

Part of IPTV's mission is to provide educational content and expand the global use of our resources. The proposed project meets both objectives.

5. Summarize your activities or planned project activities.

Expand on past productions and more effectively coordinate the future project

6. What problems and obstacles (especially unanticipated) have you encountered?

The problem is universal: We understand and can define basic needs, but have no overall internal DAM strategy or external template. Additionally, internal structural problems are:

- no task sets or job descriptions available
- finding or reallocating staff time
- funding

7. Who are your project partners (community, station, vendor, university, etc.)?

To this point we have partnered or considered partnering with anyone that wanted to talk to us. So, anybody including the devil, if they have what we want

Proposed Project:

WHA, Iowa State University, I2 specialists at ISU, ISU media library, Area Education Agencies in Iowa, Local school teachers and administrators, Iowa Historical Society, and the devil have all indicated high interest in partnering in this project.

Iowa Public Television

8. What unique resources or skills did/will the partners bring to the project?

- WHA = experience in DAM and ability to piggyback this proposal to existing CPB projects, now underway
- ISU = I2 access and technology at greatly reduced prices (ex. $35K for I2 DS3 router for $5K)
- ISU Media library = content, knowledge, and experience in organization of large quantities of assets and a previously successful, universally used system
- Iowa Historical Society = content, research, and organization skills
- AEA & Iowa schools = research data and feedback from actual users
- The Devil = bandwidth, server space, technological support

9. What is/will be your timeline?

One to two years. Again, we need people to do just this; structural change inside organizations is vital requirement for success.

10. How might your activities inform system wide Asset Management efforts?

Besides the normal DAM talk about establishing consistent metadata standards and tags… this project would provide templates for approaching new ways to create mutually beneficial collaboration with new and long time partners of public television. For example, K-12 teachers. State Universities, and historical societies. We will use real social capital to build foundations that help carry everyone's digital weight. We will not be afraid to document what did not work, while sharing our best!

11. How and when did/will your project outcomes be disseminated?

We will create working document that grows throughout the project and share as a quarterly report on our progress by email to system.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Tom Moore
Manager of Local Programming
Iowa Public Television
1 515 242 3108
1 800 532 1290
tom@iptv.org

KCTS/SEATTLE, WA

Media Asset Retrieval System: A CPB Future Fund Project

Phase One: Internal and external needs assessment for a Web-based user interface that allows users to search and retrieve rich media assets from local public television, public radio and libraries.

1. What is the problem you are trying to solve?

How to provide users the ability to search and retrieve rich media assets from multiple public institutions via a single Web interface.

2. What is your funding source?

Funding for year one provided by CPB Television Future Fund.

3. What is the overall strategy and/or mission statement for your activities?

The Convergence Consortium *Media Asset Retrieval System* (MARS) project is a collaboration between public broadcasters, libraries and schools to assess the needs of their constituents and pool resources to develop solutions to meet those needs. The Project's goal is to create a model for representing, organizing, storing, and facilitating access to audio and audiovisual material broadcast by public radio and television stations, and integrating it with content from public libraries. To achieve this goal, the Project will produce a *digital online resource that will provide access to content produced by public broadcasters and libraries in the Puget Sound Region (KUOW Public Radio, KCTS Television, King County Library System and Seattle Public Libraries).* Long-range plans for the Project include the addition of content partners such as museums and arts organizations.

4. How will your Asset Management activity fit into the overall strategic plan in your organization?

The strategic plan of KCTS, KUOW and the Libraries is to interact with, and bring quality service to, the community, regardless of delivery or platform. The one-way, over-the-air, one-to-many, broadcasting can only provide limited on-demand resources. Indexing, cataloging, storing and serving our video, audio, pictorial, textual and other materials via an asset management system will allow our organizations to deliver this content to users as they request it, in the medium and platform they choose.

5. Summarize your planned project activities.

Review of Existing Research

- What studies and research on providing rich media assets to the public are currently available?
- How are KCTS, KUOW and other public and commercial broadcasters currently organizing their content?

Analysis of System Users

- How will users, internal KCTS & KUOW staff, and external community, use the system? (What type of searches do they do? What categories are most useful? How are they using the assets? , etc.) Interviews with KCTS and KUOW staff.

KCTS/SEATTLE, WA

Community Needs Assessment Survey
- Assess community need for having access via the Internet to locally produced KCTS and KUOW programs

Content Organization
- To answer: How will the content be organized?
- What metadata and software industry standards are used now used by broadcast industry?
- How do you make one vocabulary work for both radio and television content?
- User interface studies, how to navigate through public radio and TV content.

Technology Assessment
- To answer: What technologies will be used to develop the system?
- How will user interface with station's MAMs? External/Industry compatibility
- Work with Virage, Sony, Bulldog and other major MAM players/software companies

Interface with the Library System
- How will the KCTS, KUOW system connect with the library databases?

Final Report
- Executive summary
- Conclusion and recommendations
- FAQ, glossary, contacts in the industry

6. What problems and obstacles (especially unanticipated) have you encountered?

Project just launched. All our problems are a head of us.

7. Who are your project partners (community, station, vendor, university, etc.)?

Pacific Northwest Convergence Consortium: KCTS Seattle Public Television, KUOW Seattle Public Radio, University of Washington School of Information, King County Public Library, Seattle Public Library and Seattle Public Schools.

8. What unique resources or skills will the partners bring to the project?

MARS project partners bring a community focused, not an exclusively broadcast focused, approach to the project. Each partner is bound, not by ownership, but by the mission and the common audience they serve. KUOW, and KCTS are primarily content providers. The libraries are both content providers and home of access stations. The schools are one of the largest potential users of the system.

University of Washington's Information School brings a team of experts in user-centered design and evaluation of information retrieval systems, query expansion, evaluation of ranking algorithms, the study of the searching behavior of end-users, metadata and networked information discovery and retrieval, technology-mediated teaching and learning, cognition and the information seeking behavior of discourse communities, mental models in information system design, and the laws and policies of intellectual property .

KCTS/SEATTLE, WA

9. What is your timeline?

12 months. Report complete in December 2002.

10. How might your activities inform system wide Asset Management efforts?

Phase one of the MARS project will produce an invaluable resource for the system both for research and replication. Other stations can utilize the MARS research for external user analysis, internal needs assessment, external needs assessment, and overview of existing research in the field, content organization recommendations, technology assessment, and a working model for how to set up similar multi-partner collaborations to bring MAM resources to the public.

11. How and when will your project outcomes be disseminated?

MARS report and executive summary will be distributed Winter/Spring 2002. Full dissemination plan to be created with CPB Future Fund officials but likely distribution methods include, posting report on stations.cpb.org, editorial story in Current Newspaper, presentations at PBS/NPR Online Summit, Annual Meeting, and/or Engineering Conference, posting on PBS Connect and NPR Intranet and mailings to key individuals such as those attending CPB Asset Management Caucus.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Tim Olson, Interactive Director, KCTS Seattle
401 Mercer Street, Seattle, WA, 98109
206 443-6777, tolson@kcts.org

Project URL to be created.

KWSU/Pullman, WA

1. What is/was the problem you are/were trying to solve?

Within the ADDE (Advanced Digital Distribution Entity) concept, we are looking at ways to offset or otherwise minimize the cost of the digital transition, by designing an advanced network with which the stations can collaborate on a number of organized or ad hoc activities. This system is intended to bring new capabilities to all stations allowing them to concentrate more on content than on content delivery. In the end the public will benefit from the enhanced services available in every city from local Public Broadcasters.

2. What is/was your funding source?

It is anticipated that a variety of funding sources will be used. The ADDE group is currently evaluating several methods for funding the construction part of the project including federal monies, grants, bonds, and corporate and private donations. It is unclear at this point what the mix of the funding sources will be.

3.What is/was the overall strategy and/or mission statement for your activities?

Our mission is to develop and design concepts, facilities, and processes that will be useful to ALL public broadcasting stations. It is an ambitious goal but it is crucial to build a system that offers something for everyone. Because value of the network is significantly increased by the number of participants, it is our goal to eventually have every station connected to the system for functional and collaborative purposes.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

An asset management system is an integral part of the ADDE core facilities. The ADDE core will provide library and archive functions for all the member stations. While it is not the intention of the initial ADDE project to design and provide the asset management system for the entire system, an adequate subsystem must be in place for the ADDE library to function.

It is our hope that through a separate but coordinated asset management development effort, a system can be designed that will support all the needs of the ADDE facilities and the member stations nationwide.

5. Summarize your activities or planned project activities.

With regard to asset management, the ADDE design team has identified some of the core issues relative to the initial ADDE library and archive. Some of the requirements we are looking for initially are:

a) we must have a system that everyone can access that knows where every asset is stored.
b) we must have a system that will interface with the existing traffic and automation systems.
c) we must have a system that allows for multiple "version" marking of a program with out storing duplicate copies of the program.
d) we must have a system that allows easy content browsing.
e) we must have a system that uses an open database structure.
f) we must have a system that allows users to operate from any location.

KWSU/Pullman, WA

We currently have an RFP in the field that identifies these items as essential elements for our needs. The Northwest ADDE project will not attempt to spearhead a parallel asset management effort but wishes to be integrated into an ongoing effort.

6. What problems and obstacles (especially unanticipated) have you encountered?

Nothing significant so far but we are early in the process.

7. Who are your project partners (community, station, vendor, university, etc.)?

All of the Public Broadcasting stations in the States of Washington, Oregon, Idaho, Montana, plus stations in Eureka, Redding, Sacramento, and Fresno, CA, Reno, NV and we have extended the invitation to the stations in Alaska.

8. What unique resources or skills did/will the partners bring to the project?

Our partners represent a number of different market sizes and funding levels. We feel they are a good cross sectional representation of stations nationally. We will be able to evaluate systems for use and functionality in a collaborative manner.

9. What is/will be your timeline?

We are started in the development of needs for the basic ADDE system and anticipate it will need to be in operation by April of 2003.

10. How might your activities inform system wide Asset Management efforts?

It is our hope that we are involved in the system wide effort. We will be able to represent the needs of asset management for a centralized facility that serves many different market sizes and several different station needs based upon the services available at the ADDE.

11. How and when did/will your project outcomes be disseminated?

Our project outcomes will be disseminated on a continual basis. We have a website that will very soon have a public section where we will publish the results of all our efforts.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

The principal investigator of the ADDE project is Dennis Haarsager, haarsager@wsu.edu The project manager is Tom Handy handyt@wsu.edu. The web address is www.adde.tv.

LOCAL ENHANCEMENT COLLABORATIVE (TPT, WGBH, KCSM, WMVS)

1. What is/was the problem you are/were trying to solve?

Tracking interactive television assets that are similar to web content, but tied to a sequential television production timeline and ideally authored with non-linear tools.

2. What is/was your funding source?

CPB Future Fund.

3. What is/was the overall strategy and/or mission statement for your activities?

The central goal of the Local enhancement Collaborative (LEC) is to enable and inform PBS members stations in the area of Interactive television production. Asset management is one part of this.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Because ITV combines two traditionally separate but rapidly converging areas, Internet and Broadcast, we feel that this type of production effort presents many new and interesting challenges in the area of asset management. We feel that much of our research will be directly applicable to both the coming digital transition and the emerging world of converged technologies.

5. Summarize your activities or planned project activities.

Research industry developments, explore practical models for local stations; develop related recipes with clear step-by-step methods for implementation.

6. What problems and obstacles (especially unanticipated) have you encountered?

The slow rate of ITV/ETV deployment in North America.

7. Who are your project partners (community, station, vendor,university, etc.)?

TPT - Community Licensee
WMVS - Technical College Licensee
WGBH - Community Licensee/National Producer
KCSM - Community College Licensee

8. What unique resources or skills did/will the partners bring to the project?

Diverse views and skills.

9. What is/will be your timeline?

Completion by summer of 2003.

LOCAL ENHANCEMENT COLLABORATIVE (TPT, WGBH, KCSM, WMVS)

10. How might your activities inform system wide Asset Management efforts?

As we research and test deploy interactive television applications, we have and will encounter many new problems in asset management. Our solutions to these problems will inform the community at large through coverage on the ETVcookbook web site.

11. How and when did/will your project outcomes be disseminated?

Via ETVCookbook.org, reports on the CPB web site and regular presentations at system-wide meetings.

12. Who is the primary contact for your project or planned project?

Bruce Jacobs, TPT
David Felland, WMVS
Tim Halle, WGBH
Marilyn Lawrence, KCSM

Is there a useful URL?
ETVCookbook.org

LOUISIANA PUBLIC BROADCASTING

1. What is/was the problem you are/were trying to solve?

Poor tracking of file footage. Little or no exchange of information between producers.

2. What is/was your funding source?

LPB; future TBD.

3. What is/was the overall strategy and/or mission statement for your activities?

Develop a system to track file footage and finished programs. Provide for exchange and re-purpose of footage. Provide security and writes management. Standardize metadata fields and tape filing systems. Provide a system for archive and retrieval of asset.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Provide information/footage exchange. Reduce re-shooting the same material. Track utilization of footage to avoid overexposure.

5. Summarize your activities or planned project activities.

Current: Provide a database to track file footage and finished programs. Encourage data entry. (Manual entry, voluntary system, Metadata only.)

Solution: Production- FilemakerPro database, Avid Medialog
Operations- FilemakerPro database, Myers Protrack

Short-term: Develop a system to simplify and/or automate data entry and file access. Provide a method for mandatory data entry to insure compliance by all producers. (Automated entry, Mandatory system, Metadata and Thumbnails)

Solution: Production- Avid Unity, Avid Medialog, Non-linear SAN
Operations- Myers Protrack, GVG Profile Servers, Automation

Mid-term: Provide a common file access system for file footage and program database. Provide archive system to support tracking, storage and retrieval for on-line, near-line and off-line storage.

Solution: Automation, Archive /Asset Manager, and Ampex 914 archive

Long-term: Provide low resolution proxy footage and method of EDL creation for offline editing. Provide for open file exchange and develop method of distributing A/V files regionally and national.

LOUISIANA PUBLIC BROADCASTING

6. What problems and obstacles (especially unanticipated) have you encountered?

Lack of a global solution. Lack of coordination between vendors. Lack of coordination between users.

Asset management systems, programming software, archive managers, file management systems and automation systems are all doing the same thing, tracking assets.

To provide a management system to program a channel the data is tracked in at least three different systems (Protrack for programming and traffic, an automation system for operations and an archive manager for the server and robot.)

There should be a coordinated effort to develop a central database to track all assets within a station. Each application should access the central database to accomplish its task.

7. Who are your project partners (community, station, vendor, university, etc.)?

Vendors: Grass Valley Group, Avid, Ampex, SGL, Virage
Stations: Louisiana PTV Group: LPB network, WLAE, WYES
Five Star Regional PTV Group: Louisiana, Mississippi, Alabama, Georgia, Arkansas and South Carolina

8. What unique resources or skills did/will the partners bring to the project?

Ampex – Stable, fast archive
SGL – Manage archive for (Operations) GVG servers and (Production) Avid Unity
Virage – Voice recognition and Caption data captured to a field

9. What is/will be your timeline?

In progress.

10. How might your activities inform system wide Asset Management efforts?

Our project is in progress. I hope that through this forum our project will conform to standards set by the group.

11. How and when did/will your project outcomes be disseminated?

Email forum for asset management group. (??)

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Randy Ward, A. D. of Engineering, Louisiana Public Broadcasting, 225-767-4220, rward@lpb.org

NEBRASKA EDUCATION TELECOMMUNICATIONS (NET)

1. What is/was the problem you are/were trying to solve?

We at NET are attempting to more efficiently use the resource that we have and to catalog and make available the large amount of material that we have acquired. We see a need for more collaboration among our various production areas, to reduce the amount of duplication of effort in the creation of projects, and a more efficient use of staff and resources.

2. What is/was your funding source?

NET has received funding for DTV conversion of transmission and re-transmission. At this time there has been no funding allocated for production projects. Since an asset management system has been classified as a production project no funding has been set aside at this time.

3. What is/was the overall strategy and/or mission statement for your ativities?

NET at this time has not published a mission statement for this activity.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

NET is a multifaceted production facility, doing work in television, radio and web design. We are looking for a method to maximize the use of our assets. We would like to develop a system in which all areas have access to stored media and the ability to share the talents and the resources of these areas so the assets may be repurposed for use in multiple products. This would reduce the duplication of efforts by the various units in the acquisition of material and promote a more efficient use of our staff and resources.

5. Summarize your activities or planned project activities.

Our initial planned purchase is a shared scripting system that will be used by television and radio production. The system will allow scripts and stories to be available to all our producers. Producers working on the same or similar topics will be able to collaborate on their projects much easier and allow the repurposing of the same raw material for multiple projects.

6. What problems and obstacles (especially unanticipated) have you encountered?

Our biggest obstacle has been funding. With the limited funds that we have available at this time our research has been concentrated on small portions of the system from various vendors that may be integrated into a full asset management system at a later date. The difficulty comes in finding components that will communicate with each other and give us the desired overall system.

7. Who are your project partners (community, station, vendor,university, etc.)?

As of yet NET has no partners in the venture. We are still assessing the needs of the organization and what approach we should take.

NEBRASKA EDUCATION TELECOMMUNICATIONS (NET)

8. What unique resources or skills did/will the partners bring to the project?

This is yet to be determined.

9. What is/will be your timeline?

NET has not set a timeline for implementation of an asset management system. We are assessing the needs of the organization and surveying the various options available to reach the goals that we develop.

10. How might your activities inform system wide Asset Management efforts?

This is yet to be determined.

11. How and when did/will your project outcomes be disseminated?

This is yet to be determined.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Michael F. Beach
Assistant General Manager
Director of Engineering
Nebraska Educational Telecommunications
(402) 472-3611

OREGON PUBLIC BROADCASTING

1. What is/was the problem you are/were trying to solve?

There are three problem areas that we are trying to solve:

a. Media asset management: Our number one problem is tracking, searching, and storing our large library of production footage, which includes the metadata.
b. Our second problem is tracking rights management for production.
c. Our third is content management: This is more of a future vision +need. We are trying to use our in many different areas of content development and also we would like to offer this asset to the outside world.

2. What is/was your funding source?

Grants, operational capital, and digital capital.

3. What is/was the overall strategy and/or mission statement for your activities?

The Mission of Oregon Public Broadcasting, an independent not-for-profit corporation, is to provide lifelong learning that informs, educates, and enriches people through the development and delivery of exemplary programming and services.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Our Asset management system will provide better utilization of our current assets, and help us to provide more content with new types of content for our viewers especially in the light of the opportunities of new technologies.

5. Summarize your activities or planned project activities.

We are now assessing our current and future needs. At the same time we are starting to co-ordinate how we gather our futures assets and agree on a common system. We are also going to bringing in experts to help us identify what questions we need to ask. Then we will identify what products that will fill that need. And finally start implementation of the project. This project will be implemented in stages.

6. What problems and obstacles (especially unanticipated) have you encountered?

a. Agreement on what information we need to store with our assets.
b. What and how long do we keep our assets
c. What quality level, and format type should our original assets be stored?
d. Combining all the different needs together in one cohesive system
e. Physical storage of the assets
f. Creating a library system that every one can agree on.
g. Dealing with the many levels of asset management.

OREGON PUBLIC BROADCASTING

7. Who are your project partners (community, station, vendor, University, etc.)?

Not identified yet.

8. What unique resources or skills did/will the partners bring to the project?

Not identified yet.

9.What is/will be your timeline?

On going with possible equipment in 3-quarter 2002 if grants come through.

10. How might your activities inform system wide Asset Management efforts?

TBD.

11. How and when did/will your project outcomes be disseminated?

TBD.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Don McKay
Director Engineering Network Center
Oregon Public Broadcasting
7140 SW Macadam Ave
Portland, OR 97219
503-293-4005
don_mckay@opb.org

Public Broadcasting System (PBS)

At PBS the issue of the requirements an asset management system and its development process is multifaceted. Included is the handling of current content, that is, content that has been, or will soon be delivered to PBS and is being readied for transmission to member licensees.

We also have the long-standing issue of archival storage and management. The focus of the Preservation Project is on older materials that have been stored for years, while the Asset Management Project focuses on handling of new video as it arrives at PBS. Storage policies for lengthy periods after airing will be decided in the Asset Management Project in conjunction with the Preservation Project.

And, we are now focusing on the requirements of the next generation interconnection system. The requirements of any future interconnection system will expand with growth in the complexity of interconnection, and this will be amplified should public broadcasting expand its peer-to-peer networking capabilities. Each of these topics is being addressed separately within PBS Technology and Operations but with an eye towards bringing them together. And, the managers of each area are working together to ensure that we end up with a single comprehensive system.

To this end we strongly advocate the development of a comprehensive, open standards-based, and effective metadata reference model and asset management architecture. Comprehensive means that the model can be used in part or in whole for finished content or unfinished works, and for managing current and archival assets. Open standards are critical to adoption by public broadcasting with its numerous organizations. We measure effectiveness by easy use and low cost of ownership.

1. What is/was the problem you are/were trying to solve?

We need to accurately capture and make available to potential users accurate information on the content, location and availability of the content in the finished shows included in the PBS Library. This system will need to support distributed storage architecture (such as a series of ADDEs), interface with existing systems including NOLA, PDB and LICO and support and be supported by future systems such as DTV-ATP.

2. What is/was your funding source?

The funding sources are to be determined but may include the PBS capital budget, grant funds from CPB and others, and research funds from various vendors.

3. What is/was the overall strategy and/or mission statement for your activities?

See opening discussion and response to #1.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

The development and implementation of a comprehensive, open standard-based, and effective asset management infrastructure is one of our key objectives. It is crucial to both the internal activities of the redesign of Technical Operations Workflow, and to the development of the next generation interconnection system.

Public Broadcasting System (PBS)

5. Summarize your activities or planned project activities.

As noted in the previous answer, we have a multi-phase project to restructure PBS TOC to support updated workflow, expand and enhance on-line (server) storage capacity. We are also looking at the possibility to establish spindle or tape based archival storage capability to replace and/or protect the existing tape based library.

The next generation interconnection system is currently underway. The next major step is to have a basic plan established by April 2002. The implementation plan will depend on the prior development of a comprehensive asset management reference model and infrastructure.

To carry out the Preservation Project, PBS proposes to hire a Project Manager, convene an advisory committee, engage one or more Consultants or experts in the field of video and film preservation, and engage all necessary technical and support staff and materials in accordance with the budget. The work will do a thorough inventory of the materials PBS currently holds, will assess the condition of those materials, develop Goals for an Archive of PTV programs and will develop complete recommendations for the transfer and storage of current collections and the handling of future archived materials.

6. What problems and obstacles (especially unanticipated) have you encountered?

We have encountered the usual and corporate challenges of limited funding, scope creep, rapidly changing technology options, imprecise projection of future requirements, and reduced staffing resources. However, these are all to be expected in any actual development project and will require effective management. We have also encountered what was to be expected: that there are open standards, there are many, they don't all fit quite right, and a choice must be made as to which ones fit the need and which do not.

Every week we discover how bad the problems at the storage facility really are. The biggest concern is that it might be too late for some archives when preservation activities actually commence.

7. Who are your project partners?

With respect to the Preservation Project, there will necessarily be an advisory committee of representatives from stations and producers, as well as experts from the Archivist community.

With respect to all projects, the licensees are all necessary partners as are our potential vendors.

8. What unique resources or skills did/will the partners bring to the project?

The vendors bring extensive experience in system integration/design, particularly at PBS. The licensees bring their requirements and unique perspectives.

Public Broadcasting System (PBS)

9. What is/will be your timeline?

We would like to develop for the internal TOC redesign project a basic strategy by February 2002, a final plan and pilot project by June 2002, and a full implementation by December 31, 2002. We would like to develop for the interconnection project a basic strategy also by February 2002, and a final plan element by April 2002. This will be years in advance of any interconnection implementation but is necessary as part of the overall plan and budget development. The Preservation Project timeline is being defined.

Included in any of these projects will also be the development of the common asset management reference model, which must be done jointly.

10. How might your activities inform system wide Asset Management efforts?

The system wide asset management development must begin with a system-wide adoption of a common reference model. Our activities will necessarily move forward, but the model is a key element and it must be jointly developed.

11. How and when did/will your project outcomes be disseminated?

The system that is developed in concert with the TOC redesign will be implemented and used to continue and improve service to our customers, the licensees. The work will be reported in presentations to PBS Conferences, papers at Professional Conferences and articles published in various Technical Journals. The other work will be continually reported in similar manners.

12. Who is the primary contact for your project or planned project?

Jim Seaman of PBS Engineering is the primary contact with respect to the TOC redesign project (after December 3, 2002 it will be Marilyn Pierce). Bea Morse is managing the Preservation Project. Jim Kutzner is managing the development of the next generation interconnection system.

Is there a useful URL?

Not at this time.

WGBH Educational Foundation

1. What is/was the problem you are/were trying to solve?

It is becoming increasingly clear that the editorial materials created, acquired and packaged by WGBH over the last half-century are among the organization's most valuable assets. One of WGBH's principal strategic objectives is to organize, preserve, and facilitate access to these editorial assets to more fully realize their financial and public service value. The original problem in pursuing this objective – which we are currently working on many fronts to resolve – began with the fact that more than 300 separate databases relating to WGBH's editorial assets were created and maintained by a wide variety of projects and departments across the organization, principally to track information of particular relevance to them.

Because there were no standardized data definitions, and there was no centralized record keeping, WGBH faced a formidable challenge in attempting to bring some order to this chaos. Addressing this challenge is now very much a work in progress:

- No consistent policy existed for identifying and maintaining stills, video, film, audio, text, digital files, animation, web content, objects, budgets, contracts, publicity, etc.
- Not all materials were properly archived.
- Storage was not centralized at any level and varied in format.
- Rights and licensing information was not searchable and existed either on paper, in electronic form, or both.
- There was no metadata standard or cataloging scheme, and no single "authority" to implement and enforce standards.
- There was no flexible, broad-based process to search for and retrieve assets.
- No links existed across databases.
- There was no standard plan for or management of asset security.
- There was no centralized logging system for productions in process.
- There were varying levels of technical skill among users dealing with varying levels of technical resources.

2. What is/was your funding source?

At present, there is no "asset management" department or a budget specifically identified for this activity within WGBH. To date, most of the resources that have been applied to addressing these problems have been obtained by re-directing existing staff in I.T., the Film/Video Resource Center, the WGBH Archives and Preservation Center and Applied Technology. (Even the telephone switchboard operator and the IT department secretary catalog CDs while doing their regular jobs.) Increasingly, staff members in affected departments (e.g. Design, Interactive, production units, Legal, etc.) are being recruited into this effort as it involves their work. Contributions of equipment and professional services from Sun Microsystems and Artesia Technologies have been critical to getting the effort launched.

3. What is/was the overall strategy and/or mission statement for your activities?

To realize the maximum value of the editorial content we create and acquire.

Goals

Within defined guidelines, producers will have access to all content at any time after its release. This will enable us to:

- Provide in-house on-demand access to multimedia resources
- Streamline the production process
- Facilitate concurrent production for various media by various production teams
- Support consistent content for broadcast, distribution, publicity, and promotion
- Simplify access
- Economize by reusing WGBH-owned assets before purchasing assets

Educational users should be able to access editorial content**:**

- Provide on-demand access to digital video and other multimedia resources to enhance learning and teaching.
- Include information in a variety of formats – streaming video from broadcast series and selected outtakes including interviews and interview transcripts, animation, archival and field photographs gathered during production, as well as excerpts from significant print sources (articles, books, journals) used in research for our series.
- For teachers and students, editorial content will be organized to facilitate use within curricular frameworks or to meet particular educational goals.

General users should be able to access editorial content:

- As full-length programs or searchable program elements
- Assets should be available in digital or physical formats, accompanied by supplementary and complementary materials
- On a variety of delivery platforms
- At user-specified levels of quality
- In a user-specified format
- At a user-specified time

Archives

Content will be organized, preserved and maintained so that it will be available now and in the future.

WGBH Educational Foundation

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

It is one of five key WGBH strategic objectives.

5. Summarize your activities or planned project activities.

Phase 1 – (completed in August, 2001) Defined functionality. Implemented and tested database application. Designed metadata model for production units. Structured vocabulary to serve the designed metadata model. Ingested metadata for a product. Tested content formats and retrieval options.
Phase 2 – (scheduled to be completed in January, 2002) Refine production metadata attributes. Analyze and design custom Program Log Report. Develop metadata extensions for contract rights management. Assist Artesia in the development of an interface that serves the production metadata reference model.
Phase 3 – (timeline depending upon funding and support from CPB, Sun and Artesia) Project expands to include additional departments and their related assets and workflows. Assist Artesia's customization of the interface to accommodate additional user workflow patterns for metadata reference models that serve business units including contract rights, interactive, design, TV broadcast, and administration. On an ongoing basis, digitize genre-specific program content to test metadata reference models. Conduct discovery and make recommendations to define parameters for distribution of assets under the control of rights management.

6. What problems and obstacles (especially unanticipated) have you encountered?

As in any other project, getting "buy-in" from all participants is critically important.
Be prepared for a total overhaul of work flow – this can be a very emotional issue.
Be prepared for heated disagreements over how to label and organize content.
It might be good to have a family relations therapist on call.
The interface matters: Different groups have different ways of looking at the data.
In evaluating vendors, use due diligence to distinguish between real systems and vaporware. (These days, it seems, every vendor claims to have a "complete, end-to-end asset management solution." None do.)

7. Who are your project partners (community, station, vendor, university, etc.)?

Sun Microsystems and Artesia Technologies.

8. What unique resources or skills did/will the partners bring to the project?

Storage and server system expertise. Professional Services consulting on systems architecture and work flow. Asset management expertise.

WGBH Educational Foundation

9. What is/will be your timeline?

(See #5 above.)

10. How might your activities inform system wide Asset Management efforts?

We have applied to the CPB TV Future Fund for assistance in completing work on the metadata model. If funded, the results of that work and the work from the first and second phases will be shared with the system so that others do not have to reinvent the wheel.

11. How and when did/will your project outcomes be disseminated?

If Future Fund support is secured, information sharing will begin with the start of Phase Three.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Dave MacCarn, Chief Technologist & Asset Management Architect
dave_maccarn@wgbh.org
617-300-2221

Amy Rantanen, Director, Information Technology and Telecommunications
Amy_Rantanen@wgbh.org
617-300-3437

WMVS/Milwaukee, WI

1. What is/was the problem you are/were trying to solve?

We wish to take advantage of the features that large online video servers, powerful database software and lower cost connectivity will provide in order to improve MPTV pre-production, production, post production and presentation of program content.

2. What is/was your funding source?

A variety of sources including bonding, private support grants and public funds are anticipated.

3. What is/was the overall strategy and/or mission statement for your activities?

To reorganize and use our content assets in the most efficient ways possible.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Asset management is driven through our content creation and technology development activities.

5. Summarize your activities or planned project activities.

We are currently implementing large server systems, automated digital television facilities, video indexing technologies, high definition field and studio production systems, linear and non-linear high definition post production suites, distinct digital broadcast and cable services, enhanced interactive digital television applications and attendant staff development activities.

6. What problems and obstacles (especially unanticipated) have you encountered?

Robust industrial support in times of consolidation and economic uncertainty combined with a lack of well developed standards and timely product availability necessary for customer acceptance.

7. Who are your project partners (community, station, vendor, university, etc.)?

Technical Colleges, CPB, PBS, Public Universities, Public Schools, Private Colleges, Equipment Vendors, Friends Organization and other Public Broadcasters

8. What unique resources or skills did/will the partners bring to the project?

Knowledge, money and a will to change the work flow process in order to create products in a better way.

9. What is/will be your timeline?

Phase one research underway. Development of implementation phase ongoing. Timeline will be determined by appropriate product availability and fund allocations. No final deadlines set.

WMVS/Milwaukee, WI

10. How might your activities inform system wide Asset Management efforts?

Information derived from our activities as a medium sized PTV producer should be helpful to other public broadcasters who are considering the features that the new technologies and work processes afford.

11. How and when did/will your project outcomes be disseminated?

Unknown since dissemination in a formal way depends on support individuals who are not currently available.

12. Who is the primary contact for your project or planned project?

David Felland
dcf@mptv.org

Is there a useful URL?

Not that we have created.

WISCONSIN PUBLIC TELEVISION

COLLABORATIVE PRODUCTION

1. What is/was the problem you are/were trying to solve?

It's been said that for public television, the technology is finally catching up with the mission. Rich multi-layered and interactive services are an emerging reality. Shared master control systems are on the near horizon. Notably absent from our national conversation is the coordinated development of new production models which leverage both the unique strengths of local stations, and the efficiencies and new possibilities of shared resources.

Collaboration among video producers and programmers from separate production entities has long been a difficult and time-consuming process. To exchange full motion video, physical dubs must be made and shipped to collaborating partners. The Internet has suggested new possibilities, but the high-bandwidth nature of video has limited on-line collaboration efforts to exchanging scripts and stills or the trading of low-bandwidth proxies. In fact, with the limited amount of materials that are routinely exchanged in any given "collaboration" project between geographically dispersed entities, true collaboration in video production has been at worst nonexistent – or at best extremely difficult.

2. What is/was your funding source?

The project is seeking funding.

3. What is/was the overall strategy and/or mission statement for your activities?

The coordinated development of a "Rich Media Utility" (RMU) supporting new production models which leverage both the unique strengths of local stations, and the efficiencies and new possibilities of shared resources.

The emergence of Internet2 opens the possibility that new video collaborative environments and communities may now be possible and reasonably cost effective. Wisconsin Public Television, in partnership with IBM, proposes the creation of a collaborative production utility that will demonstrate and test the value of shared content and production skills between public television stations. Using the broadband capabilities of Internet2, and the system integration skills of IBM, this RMU will complement the development of ADDEs, and begin to build out the framework for the next generation of local station services.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

As a local public television station, WPT must continue to provide valuable services to our community. We must also become more efficient in our operations. The RMU has the potential to underlie both of these areas that are key to our survival, while at the same time contributing to health of the overall PTV system.

WPT COLLABORATIVE PRODUCTION

5. Summarize your activities or planned project activities.

WPT will partner with five station/university partners with I2 connections, during the research and development phase of the project. In phase two we will beta test the utility, exploring its scalability while partnering with three to five additional stations. The overall system supports the exchange of both "Ready To Edit" and "Ready To Air" video. In the case of "Ready To Edit," the intent of uploading media assets is to offer them into the collaborative environment. In the case of "Ready To Air," uploaded assets are meant to be shared in their entirety with other contributors.

The RMU is an investment in "intellectual equity," which will develop both technical and process models for shared production activities. The content base will begin with two common station needs: promotional and interstitial branding messages; and production of short segments (such as for daily or weekly news and public affairs programs). This is simply the starting point, to provide focus. Different uses for the RMU will develop as we gain experience. But we must begin somewhere, and these relatively simple production models provide a workable foundation.

We will experiment with a variety of collaborative production formats, including:

Localization of national content: The RMU will facilitate the CPB and PBS goals of allowing stations to localize national content. While such shows as NewsHour and Zoom are promoting such localization, resources keep the number of participating stations to a minimum. We propose to discuss with The NewsHour an expansion on their Web-based video archive ONIX by using the RMU.

Localization of peer (local) content: The RMU will allow stations to share various segments, rather than each inventing their own. For instance, recent terrorism events have prompted almost every station in the country to produce their own local program in response. The Rich Media Utility would allow for collaborative editing and shared production. Experimentation will also have ramifications on future pledge production, allowing several stations to work together while still designing content for their targeted markets.

Shared Promotion: the variety of programs that don't make the NPS schedule demand a large amount of local station effort. Collaborative production of interstitials and editing that can be locally individualized will provide resource-sharing and cost-efficiency from the utility. One of the reasons that promos and other interstitial elements are a good starting point is the nature of their production: They're short, which allows for many more completed "programs" than longer forms; and promo producers are already comfortable with "shared" materials.

In addition to the use of shared content by the producers, we believe this technology will support a mentoring activity among producers as they are able to review and critique shared material.

WPT COLLABORATIVE PRODUCTION

6. What problems and obstacles (especially unanticipated) have you encountered?

While the many parts of digital asset management exist, no one has put them together in a way that does what we want to do. The biggest current problem is clarifying the value proposition, and finding a way to begin that combines a relatively low entry cost, with relatively high performance.

7. Who are your project partners (community, station, vendor, university, etc.)?

IBM, and these proposed stations for the initial phase: WPSX/Penn State, KWSU/Washington State University, Iowa Public Television/Iowa State University, and Alaska One Network.

8. What unique resources or skills did/will the partners bring to the project?

Each station brings its local content base, and specific production and editorial skills. IBM brings extensive experience in systems integration, data management, and networking.

9. What is/will be your timeline?

Early 2002 through 2003.

10. How might your activities inform system wide Asset Management efforts?

What's learned in this project will be applicable to future video and rich media services that stations offer to their constituents. Managing and working with video assets will likely be part of our evolving relationships with local communities. But the infrastructure needs to be in place; and it's a sensible starting place to work station-to-station before we attempt to develop public services.

We recognize that ultimately, the RMU suggests a complete re-working of how station production is conceived and carried out. In the end, the RMU may provide “back-office” functions for a host of station-to-station and station-to-public services. This partnership will give member participants the opportunity to define and shape the utility services that will protect their independence, but give them access to resources not otherwise within their financial or technical reach, affording them the ability to not only compete with new service providers, but to grow.

Using a new collaborative paradigm, many specific questions emerge. Among them:

Can a viable and cost-effective system be created that will allow real collaboration for disparate production groups?

Once created, how will producers and programmers actually use the new environment, and will it contribute positively to the production and programming capabilities of participants?
What is the impact on the changes to process flow within these new collaborative communities?
How will collaborative communities work together? What changes must be made in station production processes?

What is the scaleability? Will the RMU gain efficiencies through growth in number of stations? Or will it behave more like streaming video, with growth raising costs? Is the proposed utility model an economically viable solution for public broadcasting?

11. How and when did/will your project outcomes be disseminated?

Demonstrations, progress reports, final reports, at professional sessions; training workshops; on-line and CD/DVD distribution.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

James Steinbach
Director of Programming and Production
Wisconsin Public Television
821 University Ave., Madison, WI 53506
Phone (608) 263-1232
Fax (608) 263-9763

Reports and associated information will be available through Reforging the Links <http://www.reforginglinks.uwex.edu/library.html> and Evolving the Links (tba)

WISCONSIN PUBLIC TELEVISION

UW Extension – Digital Asset Management

1. What is/was the problem you are/were trying to solve?

With four divisions, 26 campuses, 147 departments, 1,600 faculty and staff and 36,000 Web pages spread over a 72-county area, UW-Extension has an extraordinary amount of content and knowledge to share. In the near future it will be possible through digital asset management to organize accessibility to this wealth of information by making it available at the click of a mouse button or even a TV remote control. From the Web to CD-Rom, DVD and broadcasting, the increasingly digital world is making it possible to archive and catalogue information that can be freely and easily searched by subject or keyword. From print to audio to video, every "asset" of the UW-Extension system – every program, course, paper, interview, documentary, publication – can and will eventually be part of a vast digital repository that Wisconsin residents (and others) can search and access from their home, school or office. Whatever the mode of delivery – classrooms, county offices, on-line, broadcast or other media – the core of these services is an integrated digital asset management system. Drawing on its unique cross-divisional resources, and long tradition of service throughout Wisconsin, UW-Extension is perfectly positioned to take a leadership role in developing and implementing a DAM system, which can serve as a model within the UW system, and across the country.

Our ultimate goal is the creation of a University of Wisconsin-Extension "Content Repository," containing digital assets from across the organization (TV, radio, small business development, cooperative extension, continuing education, and distance education). Our premise is that we can improve workflow practices, and provide better service to internal and external users, through a shared index and repository.

Currently (11/01) we are surveying to understand user needs, internal workflow practices, organizational cultures.

2. What is/was your funding source?

A mix of sources. Much of the work is based on relationships and processes built during "Reforging the Links" and "Evolving the Links", both funded by the CPB Future Fund. There is also internal funding from the various divisions within UWEX. And, the UWEX chancellor has given a grant for the current survey and planning work.

UW Extension – Digital Asset Management

3. What is/was the overall strategy and/or mission statement for your activities?

The strategy is three-fold:

Bring the divisions together on a regular basis with the goal of creating a common vision and mission for asset management, even though we do not yet have a commonly shared understanding nor valuation of DAM; and require that such a vision andmission emerge from the other end. Externally, work with many interested parties, both internal to UWEX and external, such as the State Historical Society.
Leverage the high visibility of WHA-TV's digital broadcast roll-out (December, 2001) to develop a number of small demonstration projects that involve all divisions of UWEX.
Keep the larger institutional picture in view, but continue to work on (relatively) smaller pieces, such as video indexing for K-12 education, TV production workflow, and collaborative production.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

WPT intends to provide a broad range of new and enhanced services, which will rely on our ability to identify, access, and deliver digital content. The University of Wisconsin will contribute much of this content. DAM will be a necessary prerequisite.

5. Summarize your activities or planned project activities.

Steering committee from all divisions with three subgroups, focused on content, workflow, and technology. Survey of internal practices and plans; survey of external activities (e.g., Utah, Arizona, WGBH, CNN, etc.). Digital broadcast demonstrations of services enabled by DAM system. Concept demos for public information, trade meetings, and so on. Creation of report and recommendations; possibly a UWEX-wide demonstration project.

6. What problems and obstacles (especially unanticipated) have you encountered?

Several general areas:

Complexity of UWEX culture and methods of operation.
Lack of clear value proposition for UWEX-wide DAM system, and few directly relevant models.
Dollar cost of available DAM solutions.
Staff time for development and implementation.

7. Who are your project partners (community, station, vendor, university, etc.)?

University of Wisconsin-Extension; participating organizations within the "Links" projects; other major content providers (State Historical Society, UW libraries). We are evolving relationships with several vendors (Virage, TeleStream, IBM).

UW Extension – Digital Asset Management

8. What unique resources or skills did/will the partners bring to the project?

WPT and other UWEX divisions bring project management, computer set-up and maintenance, and editorial skills, as well as the content base. Specific divisions have specific content, technology, and service resources and skills. Libraries bring experience in cataloging and managing content.

9. What is/will be your timeline?

Survey from September 2001 - March 2002. WHA digital broadcast begins December 2001. First quarter 2002 will see several broadcast experiments that will help show the value of DAM/

10. How might your activities inform system wide Asset Management efforts?

A re-defined and re-invigorated view of how public television and institutions of higher learning can relate on levels of service, content creation, and organizational structure.

11. How and when did/will your project outcomes be disseminated?

Project outcomes will be contained in final reports, available in various forms, including presentations at meetings with organizations such as NASULGC, IMLS, CPB, and PBS. Reports will also be available on the web, and as CD-ROM's.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

James Steinbach
Director of Programming and Production
Wisconsin Public Television
821 University Ave., Madison, WI 53506
Phone (608) 263-1232
Fax (608) 263-9763

Reports and associated information will be available through Reforging the Links<http://www.reforginglinks.uwex.edu/library.html> and Evolving the Links (tba)

VIDEO INDEXING

1. What is/was the problem you are/were trying to solve?

We are attempting to figure out how a local public TV organization can create and make deliverable a searchable database of digitized video.

For the Candidate Indexing Project we wanted to make available to the public, on demand, videotaped platform statements of candidates on the ballot for local Wisconsin offices in the November 2000 elections. Our goal was for any voter with access to a computer and modem to be able to easily search for a particular candidate (or district or race or party) and watch each candidate stating his or her position on issues. Our intention was to provide a service that would assist the voters of Wisconsin in making informed voting decisions.

The goal of the K-12 Indexing Demo Project is improve teacher access to video clips that are correlated to the Wisconsin Educational Standards. Teachers want the ability, when creating lesson plans that include video, to locate clips containing specific content. They also want to be able to create (and save) 'bins' of selected clips, and use them in the near future or distant future. They want video on demand, instead of waiting for a tape to be mailed.

2. What is/was your funding source?

Hardware, software, training, internal staff hours and outsourced work hours between March 2000 and April 2001 were all funded by a grant from CPB specifically intended for indexing R&D. The current work being done related to indexing, including continuing work on the K-12 project, is being funded partially by a CPB grant covering various DAM activities and projects. The remaining funding for indexing work comes from internal funds.

3. What is/was the overall strategy and/or mission statement for your activities?

Our strategy was to purchase the tools (hardware and software) necessary to set up a functional indexing system, and utilize existing staff and skills in order to implement the project. This is in contrast to the option of outsourcing services, and renting server space, from vendors. Our strategy included working with partners (UWEX, ECB, WMVS) to share resources and skills, and in the process learn together. Our mission was to learn from this experience and share our findings with other PBS organizations interested in exploring video indexing on their own.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Video indexing is a subset of the larger DAM effort. Our indexing projects give us experience with hardware and software tools related to DAM, as well as with new types of workflow issues. Some of the tools will be scalable to our future DAM systems. What we learn from indexing will ultimately inform decisions we make about DAM.

WPT VIDEO INDEXING

5. Summarize your activities or planned project activities.

For Candidate Indexing we invited Wisconsin candidates for state and local elections to send us videotaped campaign statements up to five minutes in length. The tapes were dubbed to a standard format, closed captioned, then simultaneously encoded in Real and indexed. The searchable Web interface was created as part of our existing Wisconsin Vote Web site. The public could search for candidates by name, party, district or race and view the streaming candidate statements. MediaSite software was used for indexing and for the video server.

Our current indexing project is the demo K-12 searchable database of educational video. The project will involved six schools from around the state along with six teachers to test the search-and-deliver indexing system. From any computer with a modem, and using a password-protected Web interface, teachers will be able to search for video clips by topic, class subject, grade level or WI Educational Standard and then preview low-resolution streaming video clips. The teachers will be able to create a bin of selected clips and request that high-resolution versions of the clips be sent to their school server or lan. Teachers will at the same time be able to request auxiliary materials such as lesson plans, still photos, etc. to be sent to the school with the video clips. In the classroom, the teacher will be able to play back the high-resolution clips for the students.

The content for this demo will be Wisconsin History programs, provided by WPT, ECB and WMVS. The instructional development experts at the ECB will also correlate the video clips to WI Educational Standards.

For this project we are using Virage VideoLogger as the indexing tool, and Virage software for the video server. To achieve the multiple encodes and manage the storage and delivery of the various encoded versions of clips we are using Telestream's FlipFactory.

In April, 2002, the project will be demonstrated as a digital datacast to the University of Wisconsin Board of Regents.

6. What problems and obstacles (especially unanticipated) have you encountered?

These are documented in detail in our Final Project Report, but I will summarize here:

With the indexing technology as it currently exists, it would not be easy or reasonable for most organizations to set up their own indexing system. We expected the tools to be (more or less) 'plug-and-play' products, but found that they required advanced computer skills – especially in system integration, networking, and database development – not standard for a mid-sized PBS station. The technology – and the vendors themselves – are still new and need to be improved. We also did not anticipate the need for a continuous relationship with – and assistance from – the vendors. We could not have predicted the amount of time needed to make the indexing system fully functional, nor the time required working with the content to guarantee that the indexed video clips are coherent, relevant and effectively searchable.

WPT VIDEO INDEXING

7. Who are your project partners (community, station, vendor, university, etc.)?

Partners for indexing are WPT, The University of Wisconsin-Extension, The Wisconsin Educational Communications Board and WMVS – Milwaukee.

8. What unique resources or skills did/will the partners bring to the project?

WPT provides project management, computer set-up and maintenance, and editorial skills; and the content base.UWEX provides Web development, database and IT skills. ECB provides instructional design skills and knowledge of the WI Education Standards, contact with public schools, and content for the K-12 indexing demo. WMVS provides, indexing and encoding time, connections to the Milwaukee Public Schools, and experience with digital broadcasting.

9. What is/will be your timeline?

The K-12 indexing timeline (including purchase of tools and set of up hardware and software; designation of team members; selection and 'instructional design' of video and auxiliary content; development of Web interface; identification of demo schools and teachers; set up of schools and training of teachers; closed captioning of tapes; encoding and indexing of programs; one-month trial by teachers; and reporting back) has a one-year timeline, from May 2001 to May 2002.

10. How might your activities inform system wide Asset Management efforts?

Practical experience with setting up and managing an indexing system.

11. How and when did/will your project outcomes be disseminated?

Project outcomes will be contained in two final reports. The Final Report for Candidate Indexing is soon to be completed. The Final Report for the K-12 project will be part of the Evolving the Links Final Report. Both will be presented in meetings; on the web; and as CD-ROM's.

12. Who is the primary contact for your project or planned project? Is there a useful URL?

James Steinbach
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WXXI/Rochester, New York

1. What is/was the problem you are/were trying to solve?

Expand our existing facility to provide multiple-channel services while minimizing or reducing the operational costs incurred.

2. What is/was your funding source?

Local capital investment.

3. What is/was the overall strategy and/or mission statement for your activities?

Re-invention of how we do broadcasting... from the log generation to the broadcast as-run log. Provide a 'Tight Fit', an almost seamless integration of the traffic and automation system. Minimizing the number of duplicated activities and consolidating the library database with current actual data rather than estimated data. Deal effectively with the meta-data portion of the archived data. Move toward a 'tape-less' environment within the production and transmission plant.

4. How does/will your Asset Management activity fit into the overall strategic plan in your organization?

Our Asset Management system will archive and manage all types of data, from standard definition video to transport stream, from closed caption text to HTML pages. In short, anything that can be digitized can be archived and managed within our system... with lots of capacity, both near-line and off-line. The system can archive storyboards, scripts, Avid Media files, project budget spreadsheets, ancillary documents, bit-mapped graphics, and QuickTime files. This robust storage will prepare our facility to provide multi-media datacasts as well as additional services and in many ways 'future-proof' the facility.

5. Summarize your activities or planned project activities.

After goals were set, anticipated results were defined and timetable was set (outside of the total redesign and renovation of our broadcast facility):

Select Storage Hardware Vendor (Ampex)
Select Automation Vendor (Novus Development)
Select Middle-ware vendor (Archive Management Software - SGL)
Coordinate with traffic management vendor (Myers Information Systems)
Setup Software and Hardware Development Workshop (on station site)
Review User Interfaces for ease of operation
Begin Alpha Testing – Test for interface with Traffic system
Test and Debug
Beta Test Group training
Begin Beta Testing
Develop Enhancements
Staff Training
Bring First Automation Channel On-line (Non-Broadcast – City Cable Channel)
Test and Debug
Bring the primary broadcast channel on-line
Bring two additional channels on-line
Bring Digital Television (perhaps with stream grooming and rate management) programming stream on-line.

WXXI/Rochester, New York

6. What problems and obstacles (especially unanticipated) have you encountered?

First, Marketing Trade Arrangements between hardware (server) vendors and software (archive management) vendors that tend to force purchases and related costs based on what the Vendor wants to sell and support vs. the buyers actual needs.

Second, unique program identification. NOLA codes don't provide a unique, never duplicated, program ID. We require a unique ID to measure our library against the program log.

Third, may be restrictive pricing structures for software enhancements. We're seeing some hesitation to quote for a scope of work, within certain traffic management software providers, when they hear that more than one or two stations might want the same enhancements made to the traffic software.

7. Who are your project partners (community, station, vendor, university, etc.)?

The lead project partner is Novus Development (Mark Fine & Frank Ivan), along with other PBS stations that are now becoming part of the development partnership. Software Generation Ltd. (SGL) is also a development partner for the middle-ware portion.

8. What unique resources or skills did/will the partners bring to the project?

Novus Development brought many years of broadcast automation experience as well as an open mind and a good understanding of the highly specialized needs of the public television broadcaster. Novus was willing to start on a clean slate and develop a software platform that will fill the needs of our facility (and many other PBS Stations).
SGL provides an open system interface to many different brands and models of archive systems. SGL was willing to open their software model to provide a more robust interface to Novus with an API library, Command Line and GUI controls. SGL also has extended experience with the graphics market

9. What is/will be your timeline?

First channel on-line December 1, 2001.

10. How might your activities inform system wide Asset Management efforts?

This project has developed several cost cutting measures, and could become a prototype for medium to larger stations, and could contribute to any multiple-station consolidation project. We have strived to project an 'Open System' attitude so as not to limit the archive, server or other broadcast hardware. This allows stations that have already made investments in video servers, archive hardware and other broadcast appliances to maintain those investments, and capitalize on those purchases. This also allows those stations that have not made the investment in digital equipment to purchase and integrate their system in an open environment.

11. How and when did/will your project outcomes be disseminated?

A formal paper, now in planning, to be presented early spring 2002 to the NETA technical group and others.

WXXI/Rochester, New York

12. Who is the primary contact for your project or planned project? Is there a useful URL?

Primary Contact: Kent Hatfield, VP Technology & Operations, WXXI, Rochester NY, mailto:khatfield@wxxi.org

No web site as of yet… watch www.novusdevelopment.com as some data may be posted there… If enough requests we (WXXI) may place a web based version of the spring paper on the WXXI web site and a posting on PBS Express.

CPB Asset Management Caucus
O'Hare Hilton, Chicago, IL
November 13, 2001

The Future Fund

CPB's TV Future Fund provides a source of funds for projects that will lead to new information, methodologies and/or practices that will strengthen stations and public television as a whole. It is open to all public television stations and station consortia, and to any person, foundation, institution, partnership, corporation, or other business whose project is expressly intended to benefit public television. CPB is constantly seeking to grow the base of partners who will work with us to address and meet the needs of the communities we serve.

Philosophy of Funding Criteria

Changing technology and the changing demographics of the U.S. population challenge us to be proactive in our efforts to reach out to new audiences while maintaining loyalty to our current devoted viewers. The funding goal is to continue providing the services communities have trusted us with for generations while exploring the potential of advances in technology and ways to offer new services. We are also challenged to find efficiencies in governance, structure and delivery of these services. The Future Funds represents an opportunity to create and test the models necessary to meet these exciting and sometimes daunting challenges.

Upcoming Future Fund Deadlines

February 22, 2001
July 1, 2002

Application and Review Process

An RFP and guidelines for submission can be found online, at http://stations.cpb.org/tv/grants/ff_transition/rfp.html.

The guidelines are meant to help applicants develop their proposal in a form that provides a sufficient amount of information for CPB staff and the Future Fund Advisory Panel to gauge a project's potential. It has proved to be a valuable tool for previous applicants, however it is meant to be a guide and should not discourage a good idea from consideration.

CPB TV Operations project officers are available to work with applicants to offer direction that may strengthen a project or assist applicants in developing a proposal. (See following pages for a list of TV Ops staff members.)

Proposals are reviewed by TV Operations staff and by the Future Fund Advisory panel. (See following pages for a list of the current panel members.)

CPB Asset Management Caucus
O'Hare Hilton, Chicago, IL
November 13, 2001

Future Fund Asset Management Project Parameters

1. Must attempt to solve a clearly defined and commonly held problem.
2. Must explore or develop a model that is replicable by a substantial number of PB licensees or organizations.
3. Must be scaleable to varying licensee needs, budget constraints and timelines.
4. Must take advantage of existing or ongoing AM research/activities in PB.
5. Must involve, to some extent, at least three PB licensees or organizations.

Future Fund Asset Management Project Deliverables

In general, project deliverables serve two functions:

- To demonstrate that the tasks assigned have been satisfactorily completed.
- To disseminate critical information to the Public Broadcasting community.

Required:

1. Interim and Final Narrative Reports that indicate that all workscope tasks have been accomplished.
2. Interim and Final Executive Summaries.
3. Regular contributions and updates to be posted to CPB's Asset Management web site.
4. PB Conference Presentations.
5. Independent Project Evaluation.
6. Final Financial Accounting.

Optional (TBD):

1. Station Toolkit (organized by typical station departments).
2. Glossary of Terms.
3. Frequently Asked Questions (approximately 20 questions and answers).
4. Bibliography (articles, websites, books for further reading).
5. Mentoring and training of other PB personnel.
6. Tech specs and/or engineering diagrams.
7. Recommendations for software and hardware purchases.
8. Sample letters, RFQs and contracts.
9. Surveys and analysis of survey results.
10. Trade journal articles.

CPB Future Fund Panelists

Joyce Herring
General Manager
KACV
Amarillo, TX

David Liroff
Vice President & Chief Technology Officer
WGBH Educational Foundation
Boston, MA

Mark Erstling
Chief Operating Officer
Association of Public Television Stations
Washington, DC

Pat Fitzgerald
General Manager
WBGU-TV, Bowling Green University
Bowling Green, OH

Paula A. Kerger
Vice President & Development Director
WNET Thirteen
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John King
President & CEO
Vermont ETV
Colchester, VT

Byron Knight
TV Director & Station Manager
WHA-TV
Madison, WI

Edward Caleca
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Public Broadcasting Services (PBS)
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David Othmer
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Portland, OR

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Senior VP Marketing and Development
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