DIGITAL PRESERVATION 2014

Free and Open Tools

av͡ps

Chris Lacinak
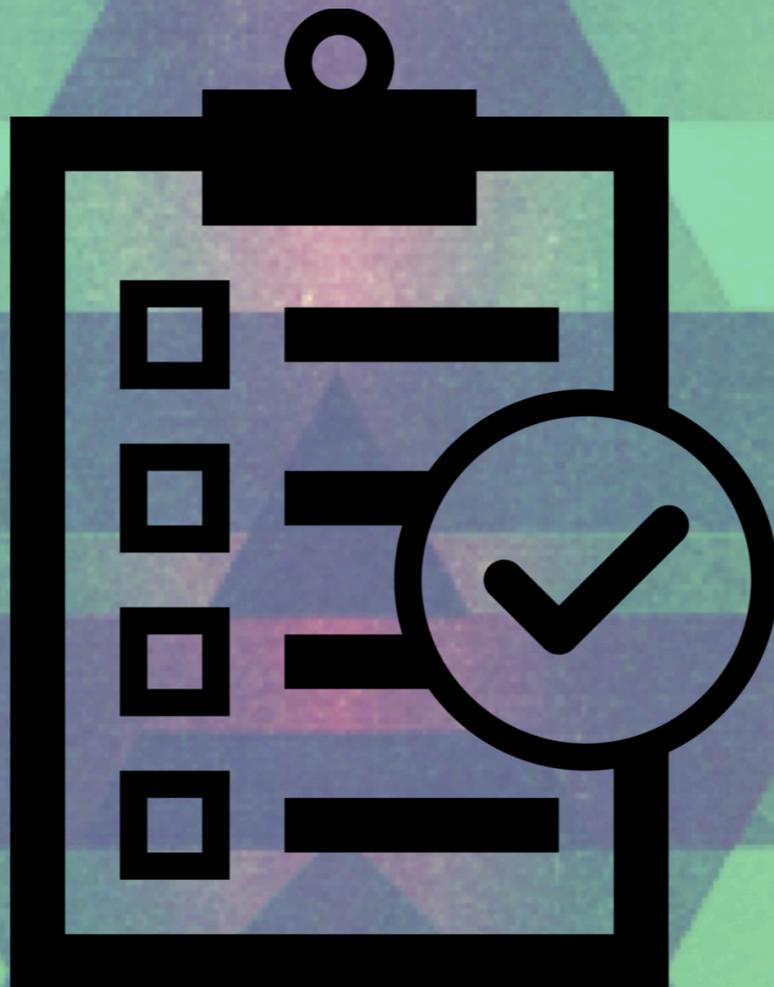chris@avpreserve.com
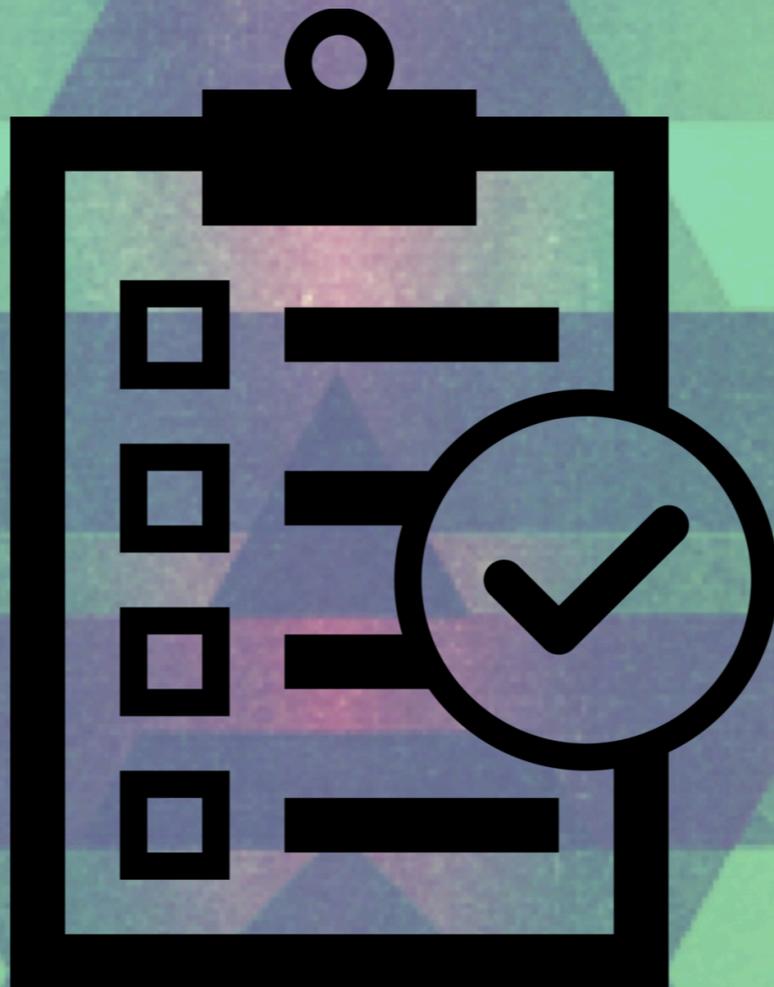
WHAT DOES IT DO?
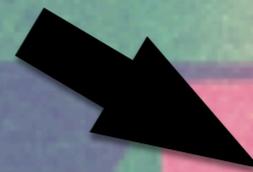
Fixity

Projects

New_Project

Scheduling

○ Monthly
◉ Weekly
○ Daily

00:00

Saturday

☑ Email only upon warning or failure

Last checked:
2014-07-19 01:19:04

Directories

Folder/Fixity_Test_Case   ...   X

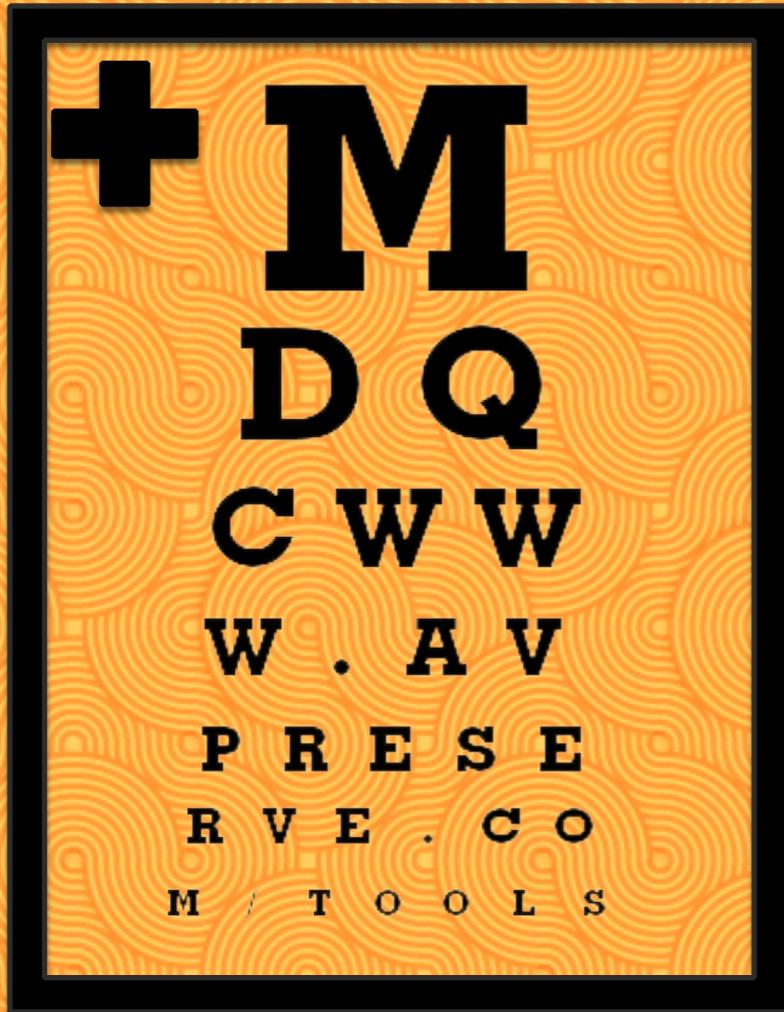y Clean Desktop Folder   ...   X

...   X

...   X

...   X

...   X

...   X

Recipient Email Addresses

chris@avpreserve.com

+ M D Q C W W W . A V P R E S E R V E . C O M / T O O L S

MDQC

WHAT DOES IT DO?

EXAMPLES OF EMBEDDED METADATA

Statement of Work Sample.docx Properties

| General | Summary | Statistics | Contents | Custom |

Title: Sample Statement of Work

Subject: Outsourcing Digitization

Author: Chris Lacinak

Manager: Chris Lacinak

Company: AVPS

Category:

Keywords: Sample, Statement of Work, Digitization, Video

Comments: Used as a reference for demonstrating an appropriate level of detail to provide to vendors when outsourcing reformatting.

Hyperlink base: www.avpreserve.com

Template: Normal.dotm

☑ Save preview picture with this document

Cancel   OK

EXAMPLES OF EMBEDDED METADATA

# EXAMPLES OF EMBEDDED METADATA

```
ExifTool Version Number        : 8.30
File Name                      : 5245486755_20acdcb626_o.jpg
Directory                      : /Users/chris/Downloads
File Size                      : 3.7 MB
File Modification Date/Time     : 2011:05:31 00:45:44-04:00
File Permissions               : rw-r--r--
File Type                      : JPEG
MIME Type                      : image/jpeg
JFIF Version                   : 1.01
Exif Byte Order                : Little-endian (Intel, II)
Image Description              : President Barack Obama looks over the view of the ci
ty from the InterContinental Yokohama Grand Hotel in Yokohama, Japan, Nov. 13, 2010. (
Official White House Photo by Pete Souza)
Make                           : Canon
Camera Model Name              : Canon EOS 5D Mark II
X Resolution                   : 240
Y Resolution                   : 240
Resolution Unit                : inches
Modify Date                    : 2010:12:01 10:58:42
Artist                         : Pete Souza
Copyright                      : This photograph is provided by THE WHITE HOUSE as a
courtesy and may be printed by the subject(s) in the photograph for personal use only.
 The photograph may not be manipulated in any way and may not otherwise be reproduced,
 disseminated or broadcast, without the written permission of the White House Photo Of
fice. This photograph may not be used in any commercial or political materials, advert
isements, emails, products, promotions that in any way suggests approval or endorsemen
t of the President, the First Family, or the White House.
Exposure Time                  : 1/200
F Number                       : 11.0
Exposure Program               : Manual
```

EXAMPLES OF EMBEDDED METADATA

Name	Artist	Time	Date Added ▼	Album
☑ File 3 copy 3		0:05	5/20/10 11:01 PM	
☑ File 3 copy 4		0:05	5/20/10 11:01 PM	
☑ File 3 copy 5		0:05	5/20/10 11:01 PM	
☑ File 4 copy 3		0:05	5/20/10 11:01 PM	
☑ File 4 copy 4		0:05	5/20/10 11:01 PM	
☑ File 4 copy 5		0:05	5/20/10 11:01 PM	
☑ File 5 copy 3		0:05	5/20/10 11:01 PM	
☑ File 5 copy 4		0:05	5/20/10 11:01 PM	
☑ File 5 copy 5		0:05	5/20/10 11:01 PM	
☑ File 6 copy 3		0:04	5/20/10 11:01 PM	
☑ File 6 copy 4		0:04	5/20/10 11:01 PM	
☑ File 6 copy 5		0:04	5/20/10 11:01 PM	
☑ File 7 copy 3		0:05	5/20/10 11:01 PM	
☑ File 7 copy 4		0:05	5/20/10 11:01 PM	
☑ File 7 copy 5		0:05	5/20/10 11:01 PM	
☑ File 9 copy 3		0:05	5/20/10 11:01 PM	
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☑ File 9 copy 5		0:05	5/20/10 11:01 PM	
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☑ File2 copy 4		0:05	5/20/10 11:01 PM	
☑ File2 copy 5		0:05	5/20/10 11:01 PM	
☑ File 3		0:05	5/20/10 10:59 PM	
☑ File 3 copy		0:05	5/20/10 10:59 PM	
☑ File 3 copy 2		0:05	5/20/10 10:59 PM	
☑ File 4		0:05	5/20/10 10:59 PM	
☑ File 4 copy		0:05	5/20/10 10:59 PM	

EXAMPLES OF EMBEDDED METADATA

WHAT DOES IT DO?

WHY?
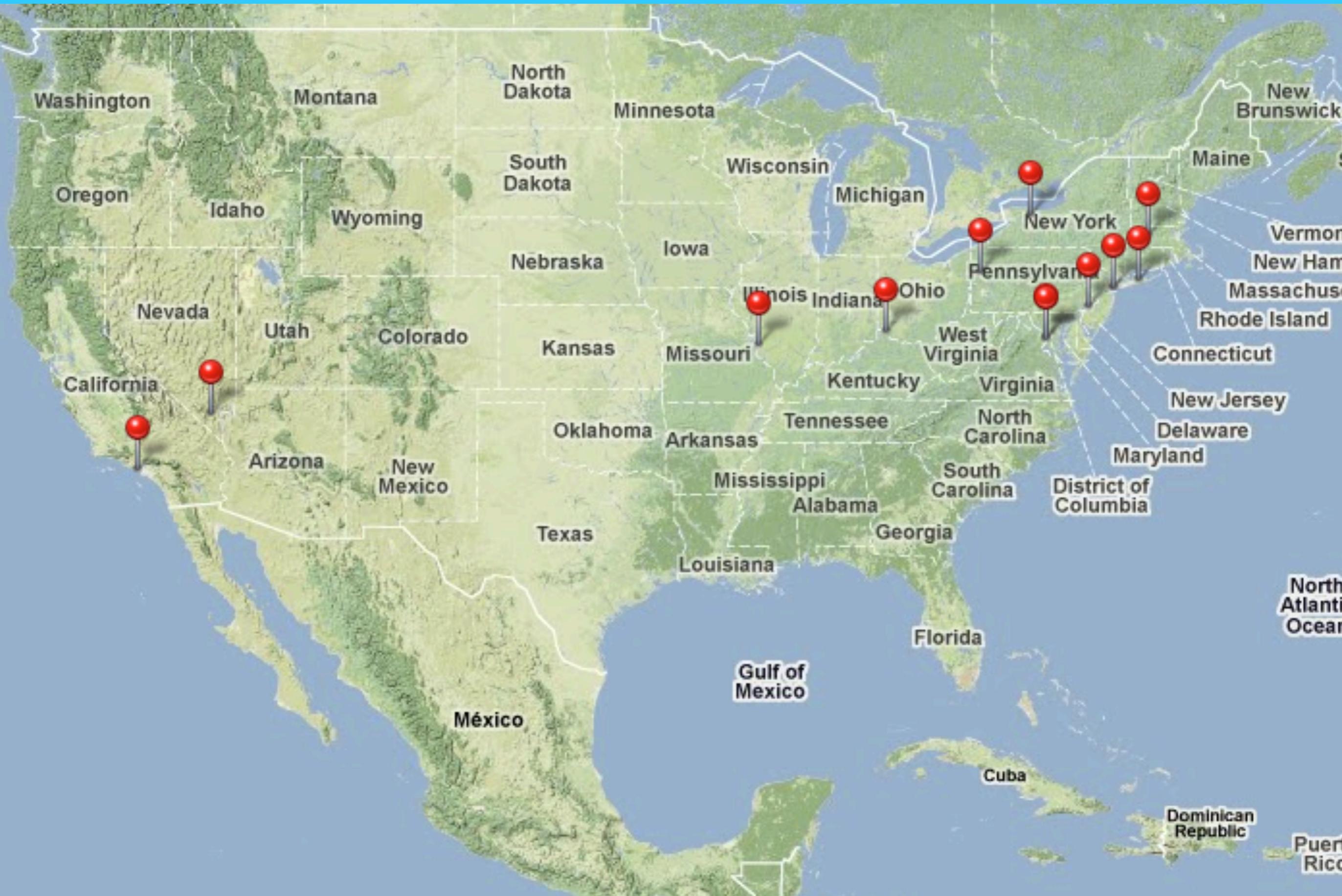
d. **DESTINATION FILE FORMAT SPECIFICATIONS**
Identify the target format specifications in the necessary detail to avoid miscommunication. For instance:

A Preservation Master, Access Master, and Access Copy shall be created for each tape, according to the specifications detailed below.

I. Preservation Master

QuickTime wrapper (.mov extension)

Video encoded using 10-bit YUV 4:2:2 uncompressed codec with the FourCC 'v210'.

Audio encoded as uncompressed PC

Maintain the original aspect ratio, rec channels and auxiliary information su

ii. Access Master

QuickTime wrapper (.mov extension)

Video encoded using the FourCC 'dv

Audio encoded as uncompressed PC

Maintain the original aspect ratio, rec channels and auxiliary information su

iii. Access Copy

QuickTime wrapper (.mov extension)

Video encoded using the H.264 code

Audio encoded as uncompressed AA

11. METADATA
Identify your metadata requirements. Specify the fields, vocabularies, definitions, controls and provide example values. Also specify the form of delivery and formatting required. For instance:

a. **EXTERNAL**

CLIENT will furnish basic descriptive and technical metadata associated with the originals. All data shall be verified to be accurate and match the media throughout the reformatting process. Differences between furnished data and data and/or content on the originals shall be brought to the attention of CLIENT before dissemination of the data.

The metadata fields and structure required for capture and delivery by the vendor are defined in the attached schema titled "CLIENT_reformatting_metadata_spec.xls"

b. **EMBEDDED**

The following data shall be embedded into the designated field within the QuickTime container for each file. All information with the exception of Reference File will be provided by the client:

Information	QT field
Full Filename with extension	Description
Organization Name	Producer
"Reference File": Corresponding full reference filename	Comment
Source Item ID	Information
Rights Statement	Copyright
Title information	Title

Rule Generation

Set Rules

Aperture	[Ignore Tag] ✓	2.0	+
	Exists		
	Does Not Exist		
Aperture Value	**Is**	2.0	+
	Is Not		
Application Record Ver	Contains	2	+
	Does Not Contain		
Bits Per Sample	Is Greater Than	8	+
	Is At Least		
Blue Matrix Column	Is Less Than	0.14307 0.06061 0.7141	+
	Is At Most		
Blue Tone Reproduction	[Ignore Tag]	(Binary data 2060 bytes	+
CMM Flags	[Ignore Tag]	Not Embedded, Indeper	+
Camera Model Name	[Ignore Tag]	Canon PowerShot S100	+
Caption-Abstract	[Ignore Tag]		+
Circle Of Confusion	[Ignore Tag]	0.006 mm	+
Coded Character Set	[Ignore Tag]	UTF8	+
Color Components	[Ignore Tag]	3	+
Color Space	Is	sRGB	+
Color Space Data	[Ignore Tag]	RGB	+
Components Configurati	[Ignore Tag]	Y, Cb, Cr, -	+
Compressed Bits Per Pix	[Ignore Tag]	3	+
Connection Space Illumi	[Ignore Tag]	0.9642 1 0.82491	+
Create Date	[Ignore Tag]	2013:11:20 09:36:17	+
Current IPTC Digest	[Ignore Tag]	6f627b35ada5610342a9	+

Metadata Quality Control

Reference File: 022_IMG_3973.JPG [...] [Metadata Rules]

Directory to Scan: [   ] [...] [Scan Rules]

[Begin Test]
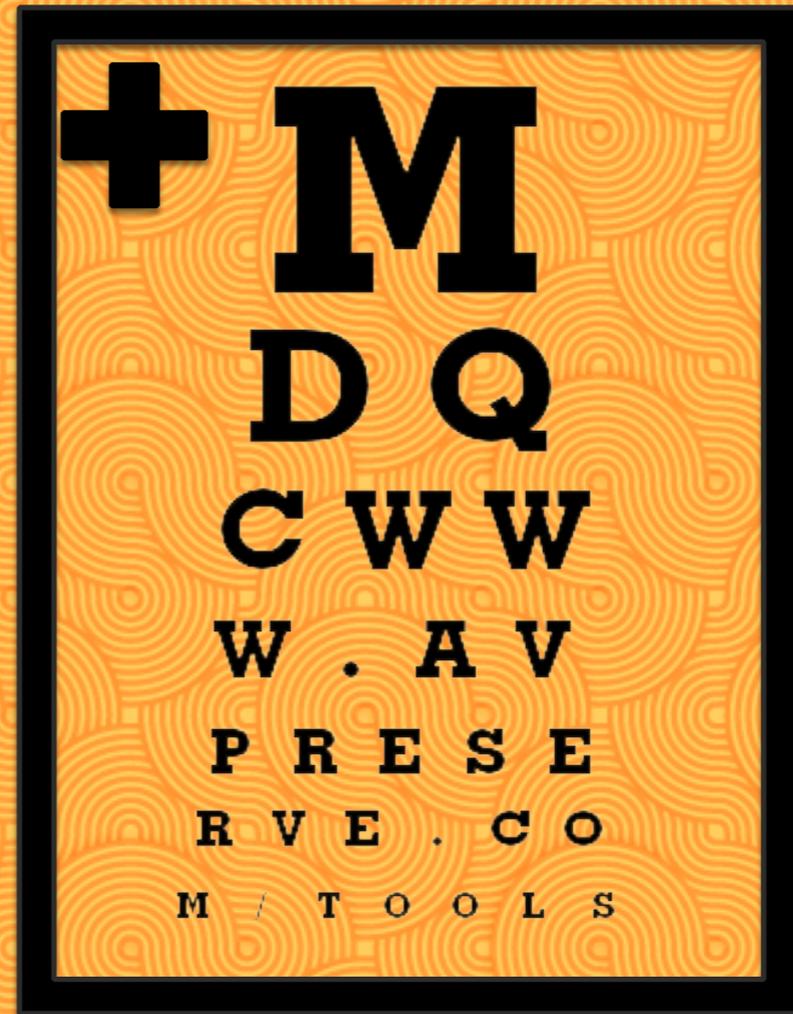
avpreserve.com/tools

COST OF INACTION
CALCULATOR

You've invested time and money to preserve the physical objects in your media collection.

However, over time audiovisual materials will become unusable due to decay and obsolescence.

The only way to save your collection is to reformat through digitization.

The cost of digitization may be great, but the cost of inaction may be even greater.

ANALYZE YOUR COLLECTION »

Use our calculator to analyze your Cost of Inaction

Provides concrete data points to help

Offers financial and non-financial

Generates a timeline for planning and
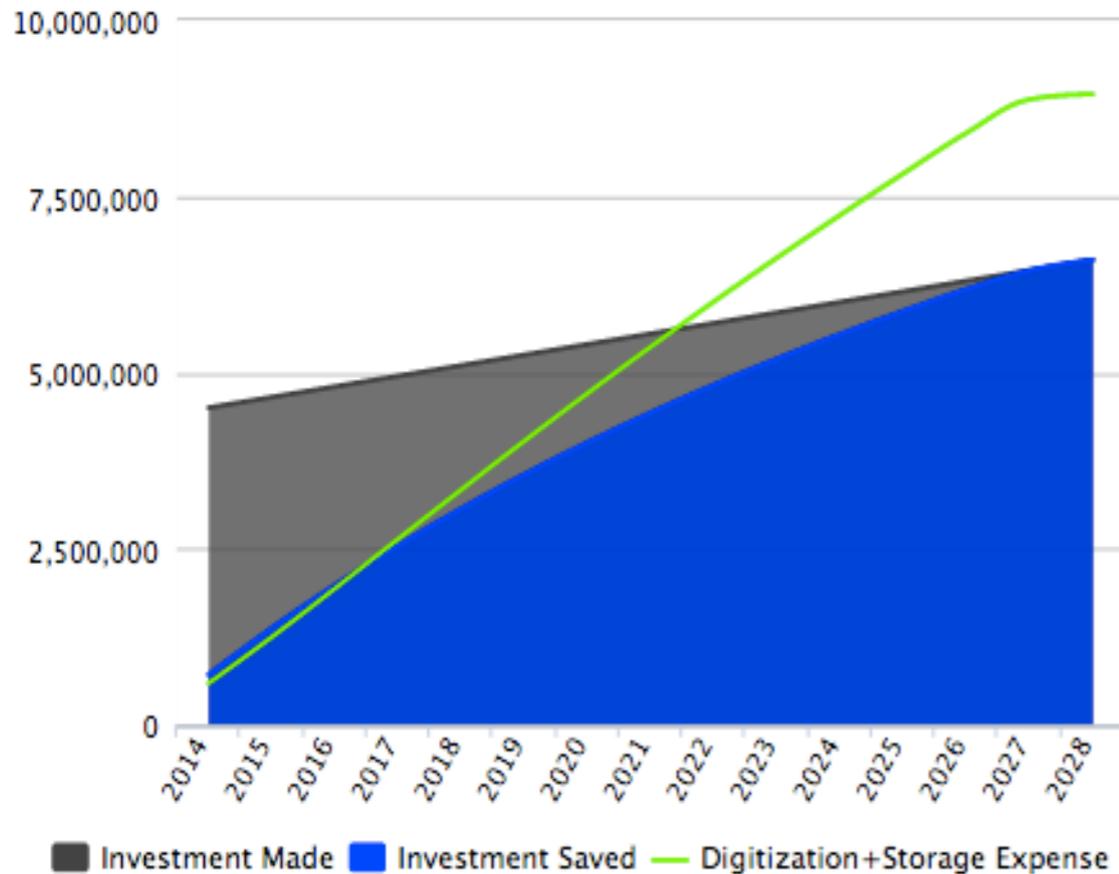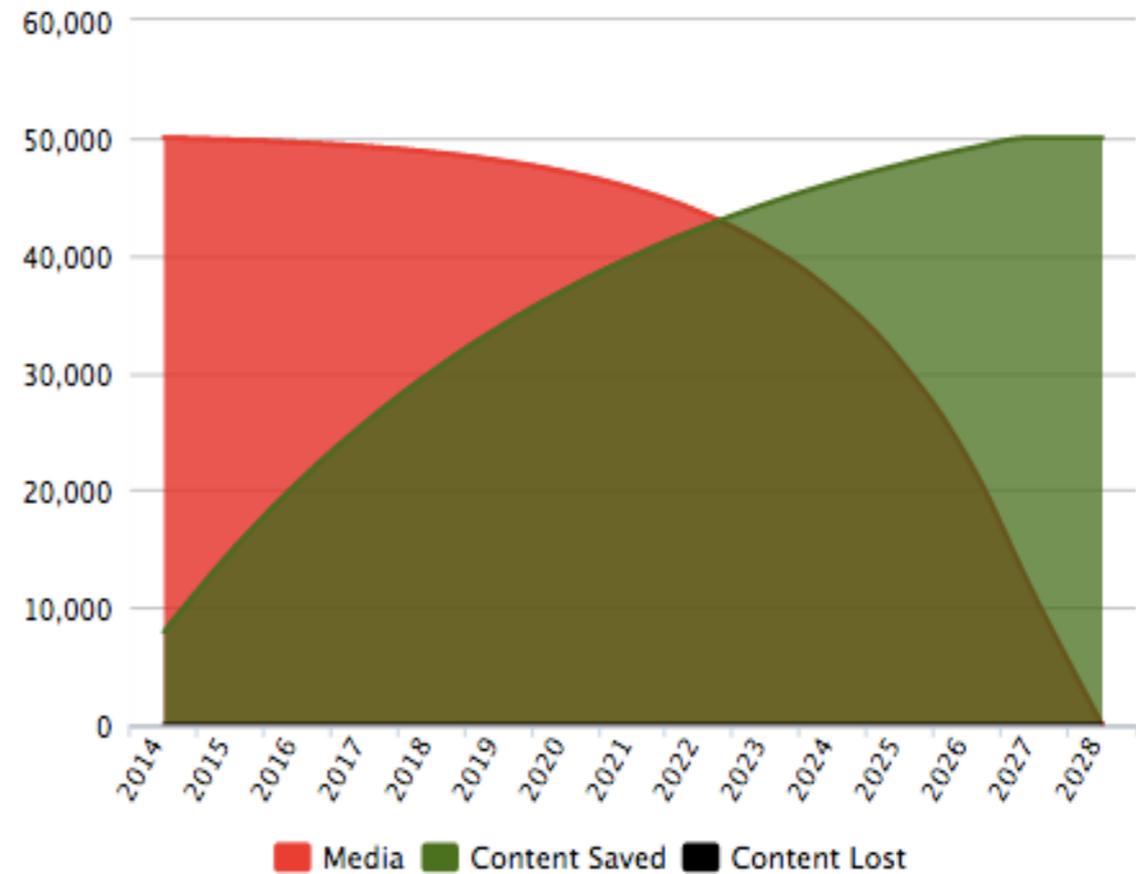
Enables comparative analysis of

💾 Save | 🔗 Get Link | ☰
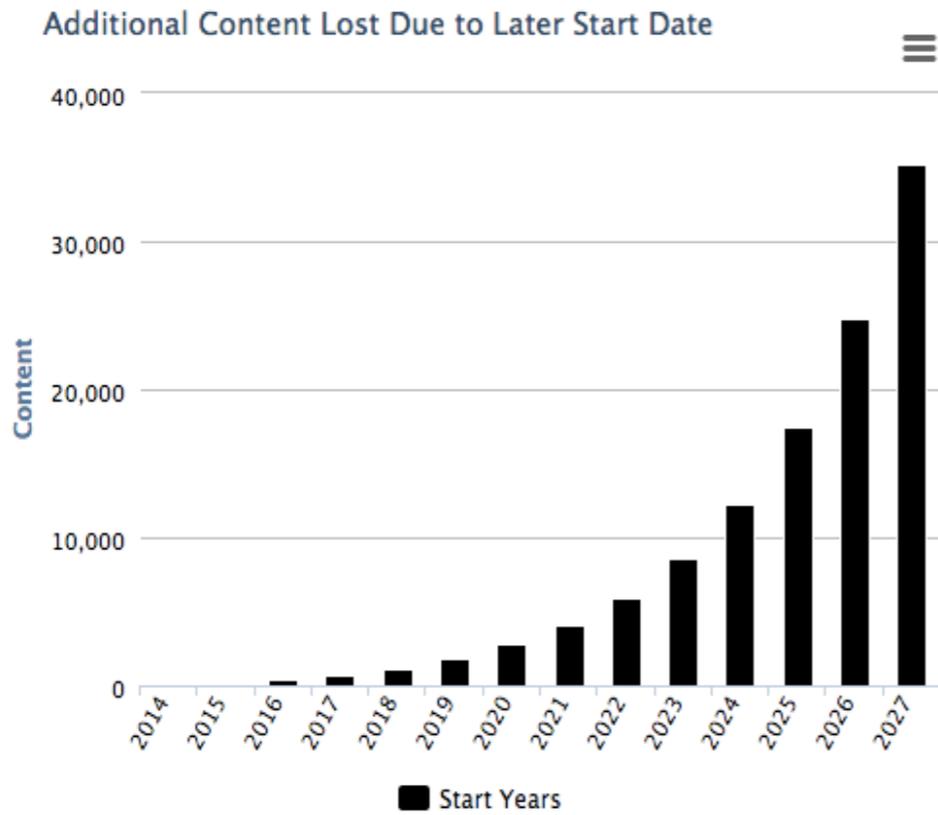
Enter your collection details

Last year for magnetic media?

`2028`

2015 — 2050

Number of objects in collection?

`50,000`

1 — 10,000,000

Collection's audio-video percentage?

50% Video

50% Audio

Investment to date for media?

`$4,500,000`

$1 — $100,000,000

Annual cost per media item moving forward?

`$3`

$0.01 — $20

Digitization cost per

`$60`

$0.01 — $10000

Year you will start digitizing items?

`2014`

2014 — 2028

Annual digitization

`$475,000`

$1 — $50,000,000

Storage service?

Amazon ▾

Annual decrease in cost of storage?

`15%`

0% — 100%

Annual increase in cost of digitization?

`16%`

0% — 100%

Investment Analysis

☰

Y-axis: 0, 2,500,000, 5,000,000, 7,500,000, 10,000,000

X-axis: 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028

Legend: ■ Investment Made ■ Investment Saved — Digitization+Storage Expense

Item and Accessibility Analysis

☰

Y-axis: 0, 10,000, 20,000, 30,000, 40,000, 50,000, 60,000

X-axis: 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028

Legend: ■ Media ■ Content Saved ■ Content Lost

Additional Content Lost Due to Later Start Date

Start Years

Additional Money Spent/Lost by Starting Later

Start Years

⬇ **Export to CSV**

Year Digitization Started	Annual Digitization Budget Required	Storage Cost by 2028	Total Spent by 2028	Investment Lost	Add'l Spent due to later start	Spent + Lost by 2028	Content Lost	$ Spent + Lost Cumulative Difference	Content Lost Cumulative Difference	% More $ Spent + Lost	% More Content Lost
2014	$473,012	$1,136,391	$7,758,559	$0	$0	$7,758,559	0	$0	0	100.00%	0.00%
2015	$559,699	$953,798	$8,229,885	$21,787	$471,326	$8,251,672	165	$493,113	165	106.36%	0.33%
2016	$664,271	$797,830	$8,769,082	$52,563	$1,010,523	$8,821,645	398	$1,063,086	398	113.70%	0.80%
2017	$791,080	$664,418	$9,366,298	$96,038	$1,607,739	$9,462,336	728	$1,703,777	728	121.96%	1.46%

Key Findings

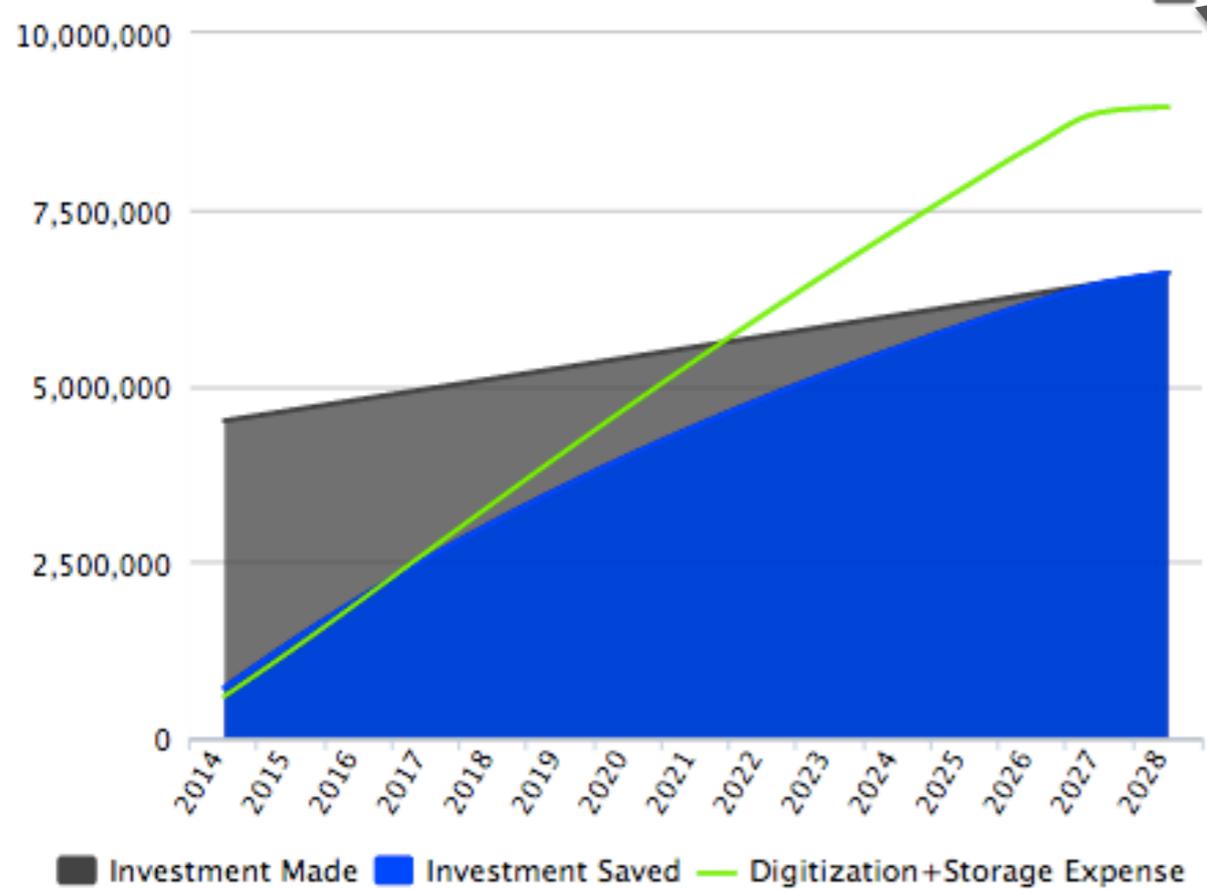| Investment saved per $1 of expense	Return	Investment Lost	Content Lost
$0.74	73.75%	$0	0

⬇ **Export to CSV**   ☰

Year	Media	Content Saved	Excess Items Digitized	Investment Made	Content Lost	Investment Lost	Investment Saved	Digitization Expense	Storage Expense	Digitization + Storage Expense	Investment Saved per $1 of expense	Quality of Selection
2014	50,000	7,917	7,747	$4,500,000	0	$3,787,500	$712,500	$475,000	$113,993	$588,993	$1.21	100.00%
2015	49,831	14,741	6,583	$4,650,000	0	$3,279,052	$1,370,948	$950,000	$294,417	$1,244,417	$1.10	99.66%
2016	49,589	20,625	5,540	$4,800,000	0	$2,820,024	$1,979,976	$1,425,000	$508,984	$1,933,984	$1.02	99.18%
2017	49,246	25,697	4,583	$4,950,000	0	$2,406,034	$2,543,966	$1,900,000	$736,216	$2,636,216	$0.97	98.49%
2018	48,756	30,069	3,676	$5,100,000	0	$2,032,969	$3,067,031	$2,375,000	$962,228	$3,337,228	$0.92	97.51%
2019	48,060	33,838	2,778	$5,250,000	0	$1,696,993	$3,553,007	$2,850,000	$1,178,419	$4,028,419	$0.88	96.12%
2020	47,068	37,087	1,838	$5,400,000	0	$1,394,551	$4,005,449	$3,325,000	$1,379,828	$4,704,828	$0.85	94.14%
2021	45,657	39,889	791	$5,550,000	0	$1,122,361	$4,427,639	$3,800,000	$1,563,955	$5,363,955	$0.83	91.31%
2022	43,647	42,303	0	$5,700,000	0	$877,409	$4,822,591	$4,275,000	$1,729,938	$6,004,938	$0.80	87.29%
2023	40,785	44,385	0	$5,850,000	0	$656,939	$5,193,061	$4,750,000	$1,877,967	$6,627,967	$0.78	81.57%
2024	36,711	46,180	0	$6,000,000	0	$458,434	$5,541,566	$5,225,000	$2,008,878	$7,233,878	$0.77	73.42%
2025	30,910	47,727	0	$6,150,000	0	$279,608	$5,870,392	$5,700,000	$2,123,880	$7,823,880	$0.75	61.82%
2026	22,651	49,060	0	$6,300,000	0	$118,386	$6,181,614	$6,175,000	$2,224,364	$8,399,364	$0.74	45.30%
2027	10,892	50,000	0	$6,450,000	0	$0	$6,450,000	$6,563,180	$2,311,411	$8,874,591	$0.73	21.78%
2028	0	50,000	0	$6,600,000	0	$0	$6,600,000	$6,563,180	$2,385,401	$8,948,581	$0.74	0.00%

Enter your collection details

💾 Save   🔗 Get Link   ☰

Last year for magnetic media?	Number of objects in collection?	Collection's audio-video percentage?	Investment to date for media?	Annual cost per media item moving forward?	Digitization cost per
2028	**50,000**	50% Video / 50% Audio	**$4,500,000**	**$3**	**$60**
2015 — 2050	1 — 10,000,000		$1 — $100,000,000	$0.01 — $20	$0.01 — $10000

Year you will start digitizing items?	Annual digitization	Storage service?	Annual decrease in cost of storage?	Annual increase in cost of digitization?
2014	**$475,000**	**Amazon ▾**	**15%**	**16%**
2014 — 2028	$1 — $50,000,000		0% — 100%	0% — 100%

Investment Analysis   ☰

Legend: ⬛ Investment Made   🟦 Investment Saved   🟢 Digitization+Storage Expense

Item and Accessibility Analysis   ☰

Legend: 🟥 Media   🟩 Content Saved   ⬛ Content Lost

Key Findings

Investment saved per $1 of expense	Return	Investment Lost	Content Lost
$0.74	73.75%	$0	0

⬇ Export to CSV ☰

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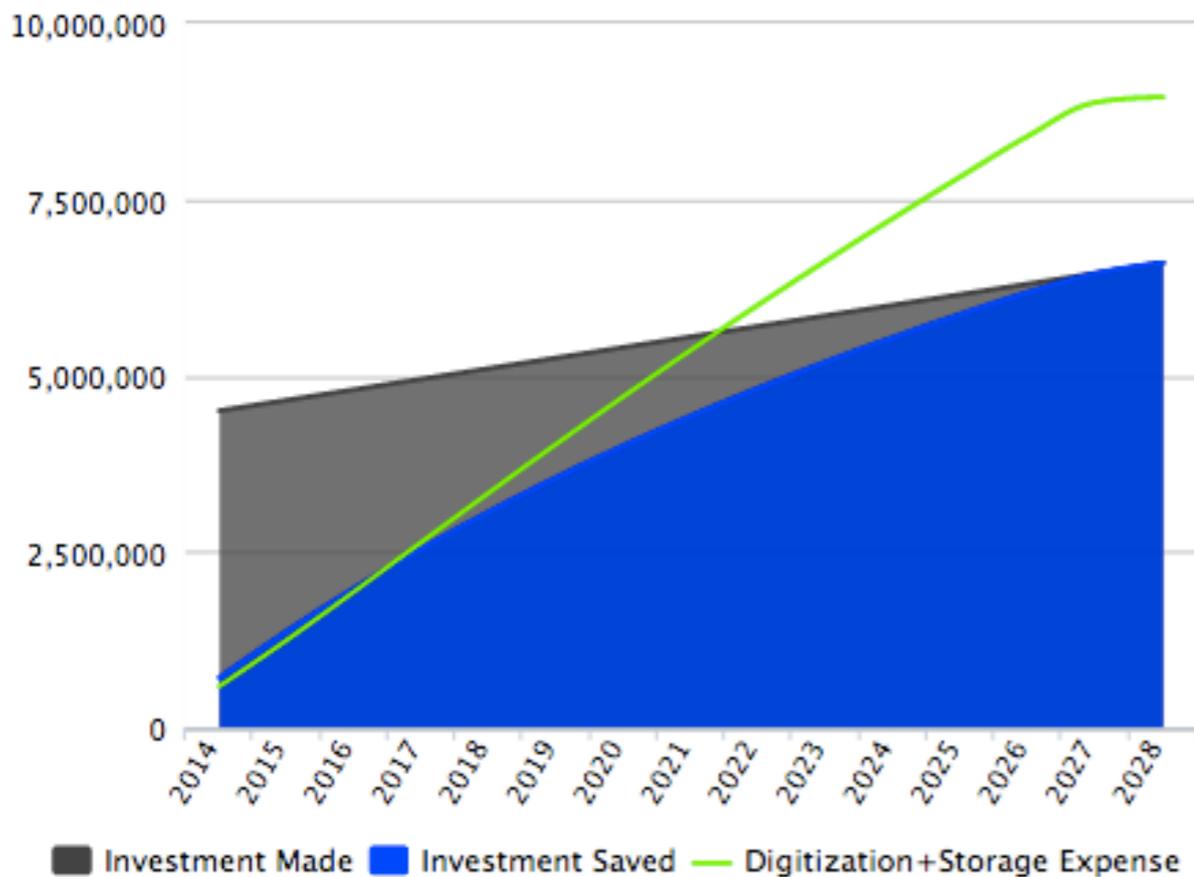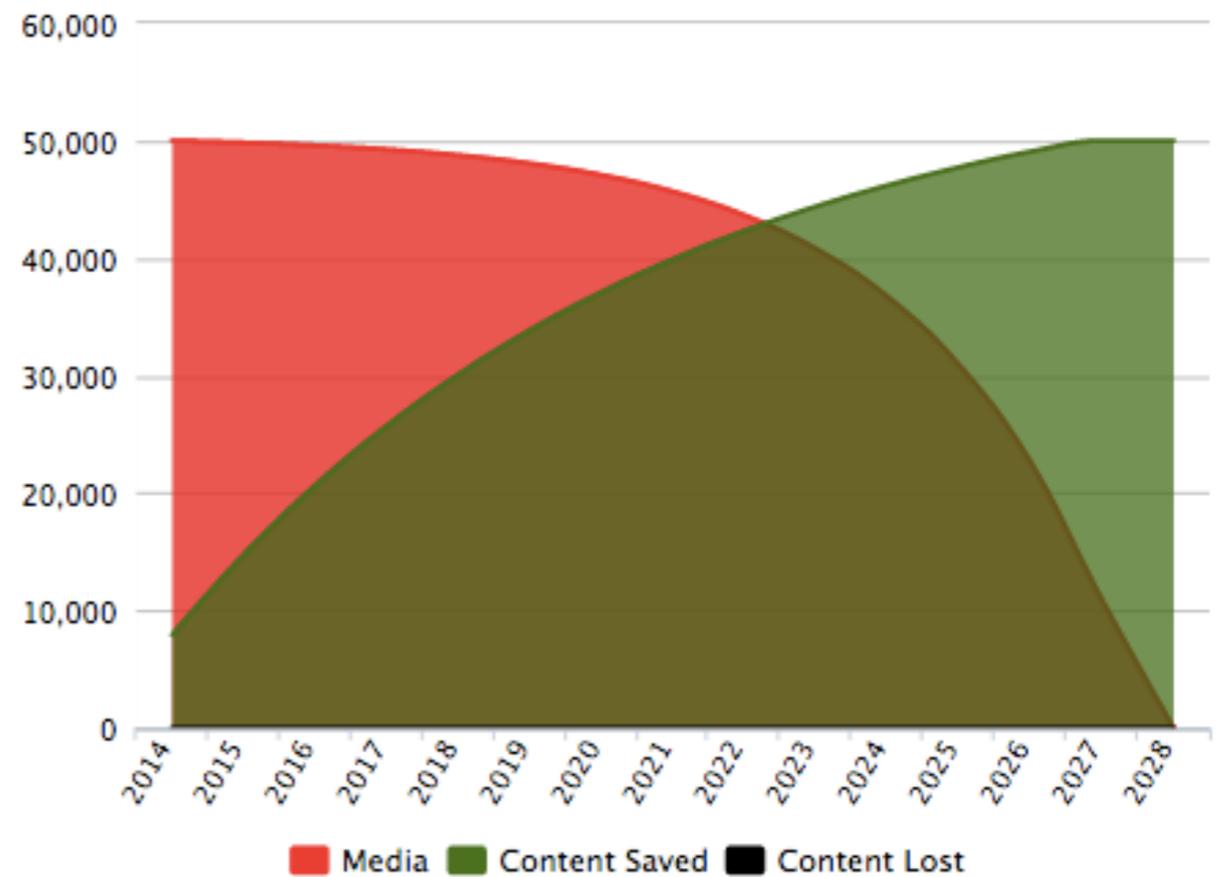Save   Get Link

Enter your collection details

Last year for magnetic media?
2028
2015 — 2050

Number of objects in collection?
50,000
1 — 10,000,000

Collection's audio-video percentage?
50% Video
50% Audio

Investment to date for media?
$4,500,000
$1 — $100,000,000

Annual cost per media item moving forward?
$3
$0.01 — $20

Digitization cost per
$60
$0.01 — $10000

Year you will start digitizing items?
2014
2014 — 2028

Annual digitization
$475,000
$1 — $50,000,000

Storage service?
Amazon

Annual decrease in cost of storage?
15%
0% — 100%

Annual increase in cost of digitization?
16%
0% — 100%

Investment Analysis

10,000,000
7,500,000
5,000,000
2,500,000
0

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

■ Investment Made   ■ Investment Saved   — Digitization+Storage Expense

Item and Accessibility Analysis

60,000
50,000
40,000
30,000
20,000
10,000
0

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

■ Media   ■ Content Saved   ■ Content Lost

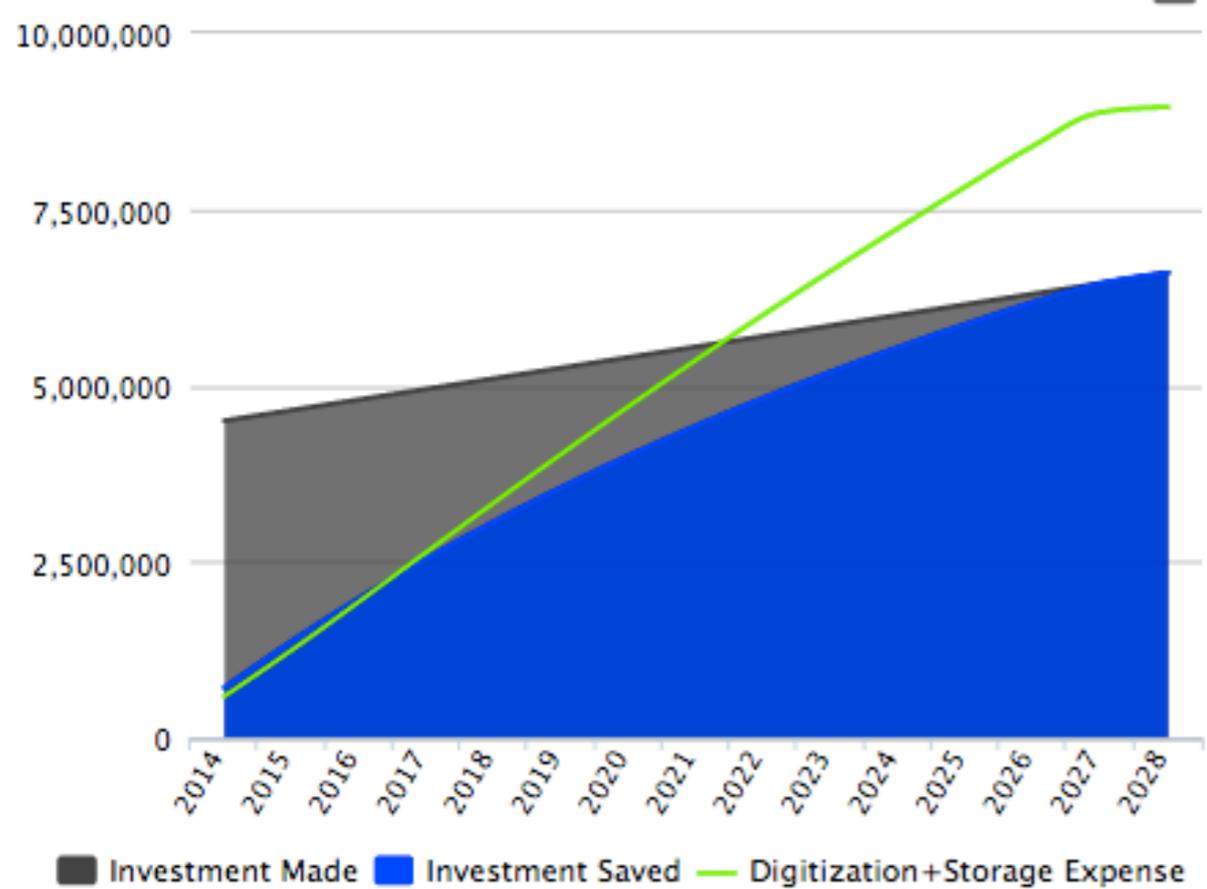**Save** | **Get Link**

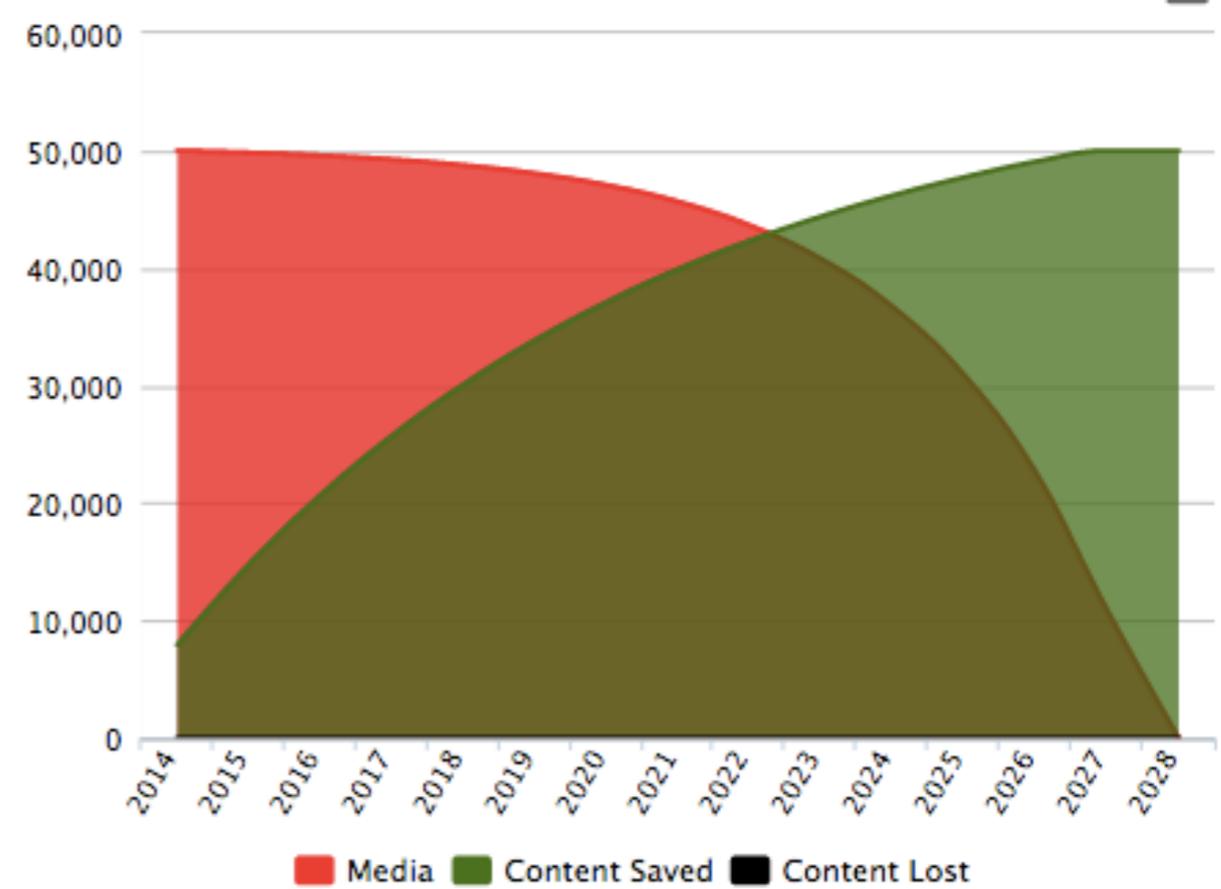# Enter your collection details

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Storage service?
Amazon ▾

Annual decrease in cost of storage?
15%
0% — 100%

Annual increase in cost of digitization?
16%
0% — 100%

Investment Analysis

10,000,000

7,500,000

5,000,000

2,500,000

0

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

■ Investment Made   ■ Investment Saved   — Digitization+Storage Expense

Item and Accessibility Analysis

60,000

50,000

40,000

30,000

20,000

10,000

0

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

■ Media   ■ Content Saved   ■ Content Lost

COST OF INACTION CALCULATOR

coi.avpreserve.com

DIGITAL PRESERVATION 2014

Free and Open Tools

avps

Chris Lacinak
chris@avpreserve.com