

# **PBCore: Metadata Ready for Primetime**

---



**Alison M. White, CPB**  
**Gerry Field, WGBH**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Terms of endearment**
  - ***Metadata* is information associated with digital content.**
  - **PBCore is *descriptive* metadata, and is manually generated.**
  - **The content itself is the *essence*.**
  - **Essence + Metadata = *Media Asset* (+ Ownership = *Valuable Asset!*)**
  - ***PBCore* pays homage to Dublin Core.**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **What *is* PBCore?**
  - **It's a standardized way for people, software and institutions to describe media assets. It works sort of like:**
    - *A lingua franca*
    - The Rosetta Stone
    - Esperanto
    - The Dewey Decimal System.
  - **Assists in resource discovery, and ideally, in resource exchange and delivery.**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

## ■ **Project history**

- **CPB Asset Management Caucus (November 2001)**
- **PBMD Working Group (January 2002)**
- **Metadata *Smackdowns* (2002/2003)**
- **Request for Comments (Winter 2004)**
- **Test Implementations (Summer 2004)**
- **Publication of PBCore v1.0 (Fall 2004)**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Who uses it?**
  - **Responsibility depends on production chain within a single entity.**
    - PA/Editor
    - Producer/Reporter
    - Archivist/Tape Librarian
    - Distributor/Vendor
- **What does it look like?**
  - **48 fields of data (per asset) comprise a complete PBCore metadata record.**



- **Descriptions About CONTENT**
  - **01.01 title**
  - **01.02 titleType**
  - **02.01 subject**
  - **02.02 subjectAuthorityUsed**
  - **03.01 description**
  - **03.02 descriptionType**
  - **04.01 genre**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Descriptions About CONTENT**
  - **05.01 relationType**
  - **05.02 relationIdentifier**
  - **06.01 coverageSpatial**
  - **06.02 coverageTemporal**
  - **07.01 audienceLevel**
  - **07.02 audienceRating**



**PBCore**  
Public Broadcasting  
Metadata Dictionary Project

- **Where does PBCore fit in?**

**Asset management user interface**



**Metadata schema (adds workflow)**



**Metadata dictionary (PBCore)**



**Taxonomy (controlled vocabularies)**





**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Descriptions About INTELLECTUAL PROPERTY**
  - **10.01 creator**
  - **10.02 creatorRole**
  - **11.01 contributor**
  - **11.02 contributorRole**
  - **12.01 publisher**
  - **12.02 publisherRole**
  - **13.01 rightsSummary**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Descriptions About INSTANTIATION**
  - **20.01 dateCreated**
  - **20.02 dateIssued**
  - **20.03 dateAvailableStart**
  - **20.04 dateAvailableEnd**
  - **21.01 formatPhysical**
  - **21.02 formatDigital**
  - **21.03 formatLocation**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Descriptions About INSTANTIATION**
  - **21.04 [formatMediaType](#)**
  - **21.05 [formatGenerations](#)**
  - **21.06 [formatStandard](#)**
  - **21.07 [formatEncoding](#)**
  - **21.08 [formatFileSize](#)**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Descriptions About INSTANTIATION**
  - **21.09 [formatTimeStart](#)**
  - **21.10 [formatDuration](#)**
  - **21.11 [formatDataRate](#)**
  - **21.12 [formatBitDepth](#)**
  - **21.13 [formatSamplingRate](#)**



**PBCore**  
Public Broadcasting  
Metadata Dictionary Project

- **How is it used?**
  - Can **map** existing fields of content data to PBCore and export PBCore metadata record.
  - Can use as **original markup** for new content and export PBCore metadata record.
  - PBCore records can be exported in eXtensible Markup Language (XML).



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Where do I find PBCore and info about it?**

**[www.utah.edu/  
cpbmetadata](http://www.utah.edu/cpbmetadata)**



# PBCore

## Public Broadcasting Metadata Dictionary Project

Understand the PBCore: A Primer - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Google Search Web Search Site Options

**PBCore**  
Public Broadcasting  
Metadata Dictionary Project

**PBCore v 1.0**  
[home](#)

[User Guide](#)

---

**THE ELEMENTS**  
[Info](#)

*Descriptions about the  
INTELLECTUAL  
CONTENT...*

- 01.01 **title**
- 01.02 **titleType**
- 02.01 **subject**
- 02.02 **subjectAuthorityUsed**
- 03.01 **description**
- 03.02 **descriptionType**
- 04.01 **genre**
- 05.01 **relationType**
- 05.02 **relationTypeUsed**

**A Primer for  
Understanding the PBCore Metadata**

- What is Metadata, Anyway?
- What is a Metadata Dictionary?
- What is a Metadata Element?
- What is a Sub-Element (Qualified or Refined)?
- What is an Authority, Controlled Vocabulary & Structured Syntax?
- What are Element Attributes?
- What is an Application Profile?
- What is the Dublin Core (DCMI)?
- What is the Public Broadcasting Core (PBMD Project)?
- How do I Review the Metadata Elements of the PBCore?

Start

Inbox - Microsoft Outlook primer - Message (Plain T... Understand the PBCo...

2:55 PM  
Monday



# PBCore

Public Broadcasting  
Metadata Dictionary Project

## ■ What does PBCore look like?

The screenshot shows a web browser window titled "PBCore Metadata: title - Microsoft Internet Explorer". The page header includes the CPB logo, "PBCore Public Broadcasting Metadata Dictionary Project", "PBCore v 1.0", and a "User Guide" button. The main content is divided into two columns. The left column, titled "THE ELEMENTS", lists various metadata elements: 01.01 title, 01.02 titleType, 02.01 subject, 02.02 subjectAuthorityUsed, 03.01 description, 03.02 descriptionType, 04.01 genre, 05.01 relationType, 05.02 relationIdentifier, 06.01 coverageSpatial, and 06.02 coverageTemporal. The right column, titled "01.01 title", contains a "Describe this Element" section with links for "Describe this Element", "Show Me Examples", and "Other Attributes of this Element". Below this is a "NAME" section with the value "title" and a "DEFINITION" section with the text: "The descriptor **title** is a name given to the media item you are cataloging. It is the unique name everyone should use to refer to or search for a particular media item. There are obviously many types of titles a media item may have, such as a series title, episode title, ...". The browser's taskbar at the bottom shows the Start button, several application icons, and the system tray with the time "3:02 PM Monday".





# PBCore

## Public Broadcasting Metadata Dictionary Project

PBCore Metadata: title - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Google Search Web Search Site Options

05.02 **relationIdentifier**  
06.01 **coverageSpatial**  
06.02 **coverageTemporal**  
07.01 **audienceLevel**  
07.02 **audienceRating**

*Descriptions related to INTELLECTUAL PROPERTY...*

10.01 **creator**  
10.02 **creatorRole**  
11.01 **contributor**  
11.02 **contributorRole**  
12.01 **publisher**  
12.02 **publisherRole**  
13.01 **rightsSummary**

*Descriptions identifying a media asset's INSTANTIATION...*

20.01 **dateCreated**  
20.02 **dateIssued**  
20.03 **dateAvailableStart**  
20.04 **dateAvailableEnd**

should use to refer to or search for a particular media item. There are obviously many types of titles a media item may have, such as a series title, episode title, segment title, or project title. Use the descriptor **titleType** to indicate the type of title you are assigning to the media item.

**REFINEMENTS & ENCODING SCHEMES**  
[info](#)

Use natural language to enter data, following this descriptor's Guidelines for Usage.

**GUIDELINES FOR USAGE**  
[info](#)

PBCore encourages producers, stations, and catalogers to assign titles to items by using more of a natural language grammar (English language) that is understandable in what is often called a "human readable form" (as opposed to "machine readable"). PBCore recommends that you:

- Assign a title that is distinctive, authoritative, descriptive, accurate, and consistent.
- Don't use leading articles, e.g., A, An, The. Place leading articles at the end of a title using the convention of a comma followed by a space and then the leading article.
- Use upper and lower case.
- Use punctuation as needed.

Start  
Inbox - Microsoft Outlook  
primer - Message (Plain...  
Screen Pics for Iowa D...  
PBCore Metadata: ti...  
3:04 PM Monday



# PBCore

## Public Broadcasting Metadata Dictionary Project

PBCore Metadata: title - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Google Search Web Search Site Options

24.01 annotation

use another descriptor called **relation** to establish relationships between media items.

**DESCRIPTION**  
[Info](#)

**OBLIGATION TO USE**  
[Info](#) Mandatory

**REPEATABLE ELEMENT**  
[Info](#) Apply multiple times, as needed

**TYPE OF DATA ENTRY**  
[Info](#) Text String

[UP](#)

*Show Me Examples*  
[Info](#)

Geography of Utah, The

National Parks in the State of Utah

Delicate Arch Olympic Flame Ceremony

American Experience

*Descriptions beyond the PBCore Metadata*

99.00 Special Extensions

[User Guide](#)

[PBCore Hierarchies?](#)

[PBCore DTD](#)

[PBCore XML Schema](#)

[PBCore Namespace](#)

Start

Inbox - Microsoft Outlook primer - Message (Plain... Screen Pics for Iowa D... PBCore Metadata: ti...

3:04 PM Monday



# PBCore

## Public Broadcasting Metadata Dictionary Project

PBCore Metadata: title - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Google Search Web Search Site Options

### Other Attributes of this Element

<b>ELEMENT LABEL</b> <a href="#">info</a>	title
<b>ELEMENT VERSION</b> <a href="#">info</a>	PBMD Project Version 1.0
<b>NAMESPACE IDENTIFIER</b> <a href="#">info</a>	Dublin Core Metadata Element Set, Version 1.1 <b><a href="http://purl.org/dc/elements/1.1/title">http://purl.org/dc/elements/1.1/title</a></b>
<b>REGISTRATION AUTHORITY</b> <a href="#">info</a>	DCMI <b><a href="http://www.dublincore.org">http://www.dublincore.org</a></b>
<b>LANGUAGE OF THE ELEMENT</b> <a href="#">info</a>	eng

Start

Inbox - Microsoft Outlook primer - Message (Plain... Screen Pics for Iowa D... PBCore Metadata: ti... 3:05 PM Monday



**PBCore**

Public Broadcasting

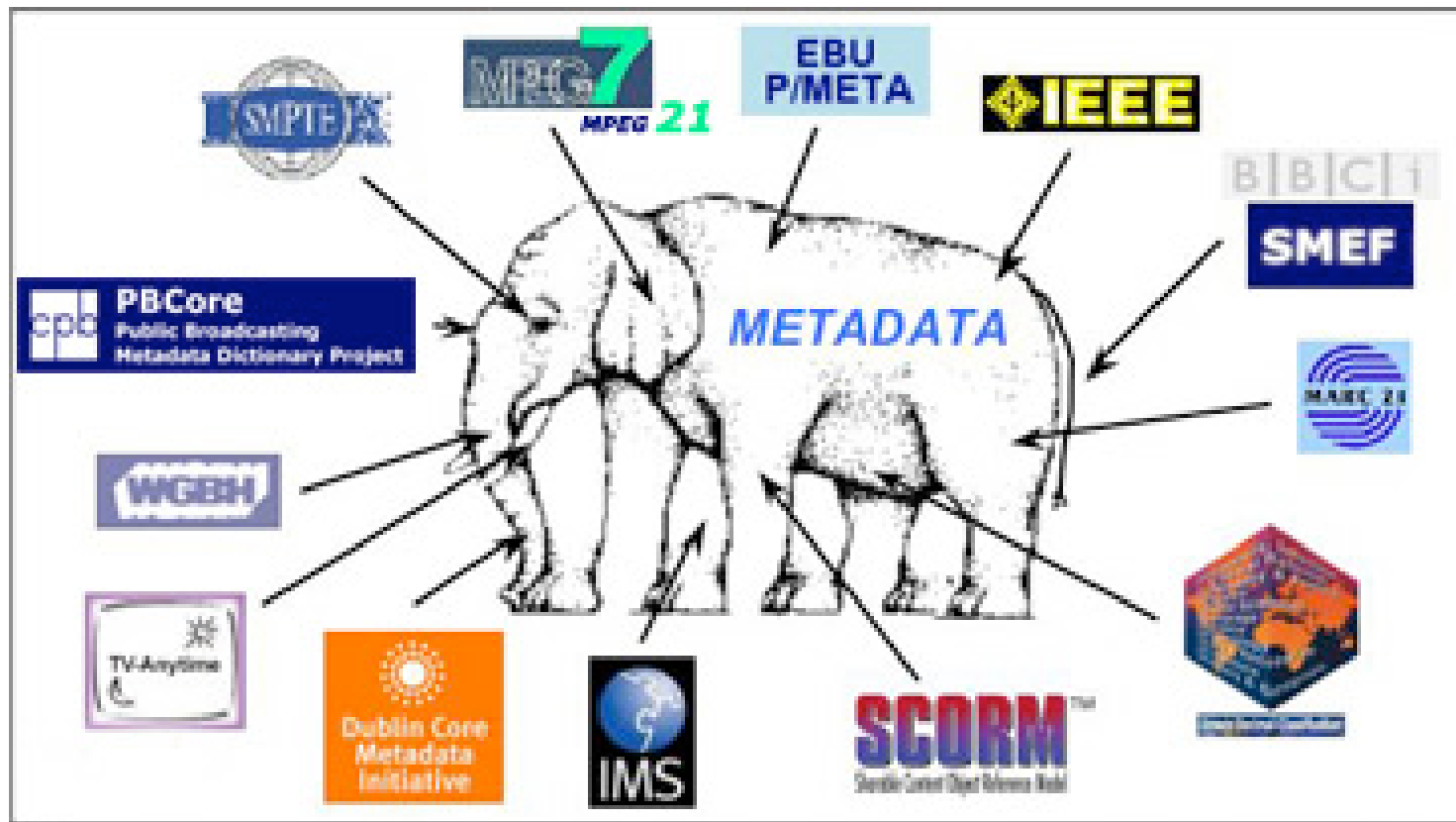
Metadata Dictionary Project

- **Why are PBCore elements described this way?**
  - Follows *another* standard for metadata standards – ISO/IEC 11179.
- **What about other metadata standards?**
  - PBCore based on Dublin Core.
  - Many other standards examined; PBCore reflects PB's service/business model.



# PBCore

Public Broadcasting  
Metadata Dictionary Project





**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **During TIs, PBCore was mapped to:**
  - **Dublin Core**
  - **SCORM**
  - **MPEG-7**
  - **SMPTE**
  - **MODS**
  - **METS**
- **Re-mapping required in future.**
- **PBCore will have *extensions*, too.**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Next steps for project/working group**
  - **Advocacy (within PB, vendors)**
  - **Training (adapted to user needs)**
  - **Technical Assistance (mark-up tools, cataloging utility, maps to/from other standards)**
  - **PBCore Maintenance (website, updates, user community, extensions, etc.)**



**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Roll-out and adoption schedule**
  - **Linked to NGIS, Content Depot, ACE**
  - **First adopters within 12 months**
  - **Additional stations and vendors in two-three years**
  - **All stations, systems within five years!**





**PBCore**

Public Broadcasting

Metadata Dictionary Project

- **Who needs to know/do something?**
  - **GMs need to support effort at local and national level.**
  - **Production/programming/education staff should understand PBCore and expect to add metadata collection to workflow.**
  - **IT folk need to do backend work.**
  - **Archivists/tape librarians need to study, apply and *love* PBCore.**




# PBCore

## Public Broadcasting Metadata Dictionary Project

PBCore Metadata: User Guide - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Google Search Web Search Site Options


**PBCore**  
Public Broadcasting  
Metadata Dictionary Project

Development Funding for PBCore provided by the  
*Corporation for Public Broadcasting*


PBCore is a Metadata & Cataloging Resource  
for Public Broadcasters & Associated Communities

- Home
- Project Background
- PBCore Elements
- User Guide**
- Who May Use PBCore
- Compliance
- Resources & Links
- Contacts
- Site Map

### User Guide to PBCore Public Broadcasting Metadata Dictionary

 [Get the PDF Version of the PBCore User Guide](#) (Posting soon)

View the PDF of the PBCore User Guide with Acrobat Reader  
(rather than through your web browser)  
in order to utilize the document's Bookmark functionality.

 [Review the PBCore Metadata Elements](#)

A complete set of web pages which define and describe each of the PBCore Metadata Elements. Included are definitions, Usage Guidelines, using Picklists of Controlled Vocabularies or other ways to refine data entry, numerous examples for radio and television, as well as other attributes for each element.

Start

Inbox - Microsoft Outlook primer - Message (Plain... Screen Pics for Iowa D... PBCore Metadata: U...

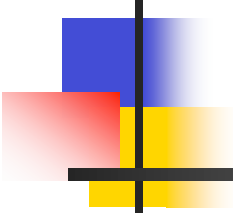
3:06 PM Monday



**PBCore**  
Public Broadcasting  
Metadata Dictionary Project

- **What's that web address again?**

**[www.utah.edu/  
cpbmetadata](http://www.utah.edu/cpbmetadata)**



# **PBCore: Metadata Ready for Primetime**

---



**Alison M. White, CPB**  
**Gerry Field, WGBH**