



What's in a Name:

NACO and Name Authority Work at the Montana DOT Library

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Agenda

1. Why name disambiguation matters
2. What is NACO?
3. Anatomy of a name authority record
4. NACO projects at MDT and beyond

1. Why name disambiguation matters

1. Why name disambiguation matters

What is a library catalog actually for? What is it supposed to let a user do?

1. Why name disambiguation matters

IFLA's FRBR Model: Four User Tasks



UBCIM Publications – New Series Vol 19

**Functional Requirements
for
Bibliographic Records**

Final Report

IFLA Study Group on the
Functional Requirements for Bibliographic Records
Approved by the
Standing Committee of the

IFLA Section on Cataloguing
K . G. Saur München 1998

IFLA Cataloguing Section: <http://www.ifla.org/VII/s13/sc.htm>

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- **Find:** To find entities that correspond to the user's state search criteria



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- **Identify**: To identify an entity (i.e. to confirm that the entity described corresponds to the entity sought, or to distinguish between two or more entities with similar characteristics)



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- **Select:** To select an entity that is appropriate to the user's needs (with respect to content, physical format, etc.)



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- **Select:** To select an entity that is appropriate to the user's needs (with respect to content, physical format, etc.)
- **Obtain:** To acquire or obtain access to the entity described (checkout, download, etc.)



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1. Why name disambiguation matters

- Question: How many distinct individuals named John Williams do you think have authored or contributed to works held by libraries?

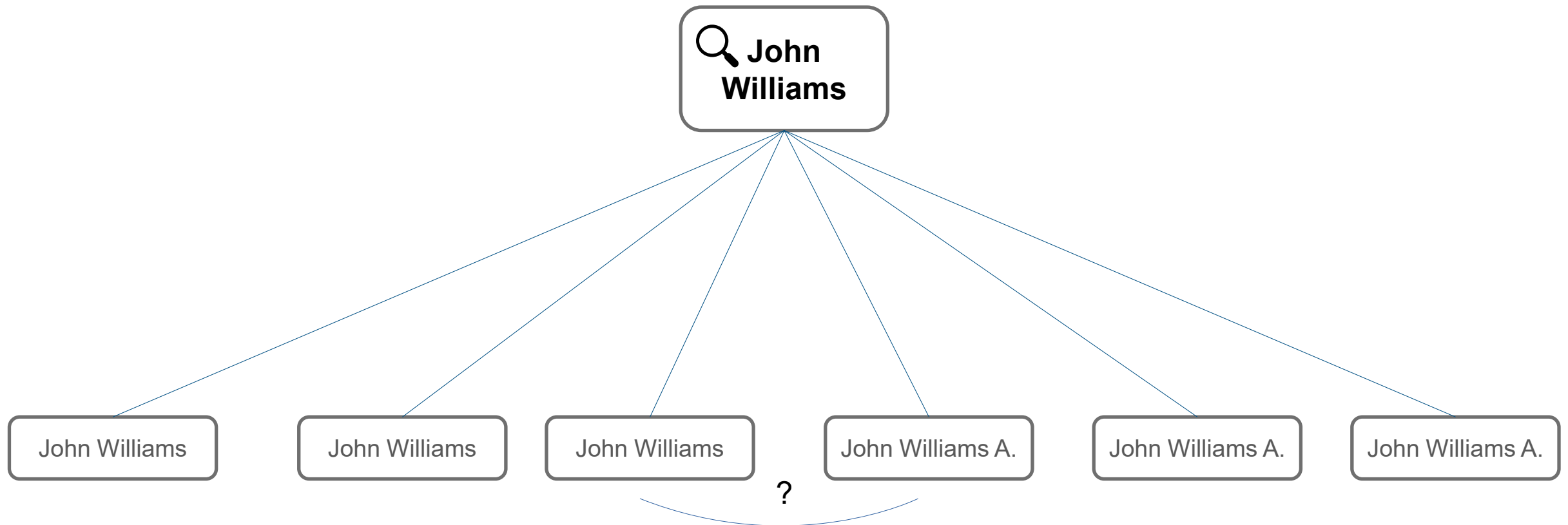
1. Why name disambiguation matters

- Question: How many distinct individuals named John Williams do you think have authored or contributed to works held by libraries?
- A search in authorities.loc.gov says there are 820 authorized name headings for Williams, John, including:
 - Williams, John
 - Williams, John, 1500-1559
 - Williams, John, 1582-1650
 - Williams, John, 1932-
 - Williams John A., 1935-
 - Williams John A., A.M.
 - Williams John A. (Illustrator)
 - Williams John A. (Physical anthropologist)
 - Etc.

1. Why name disambiguation matters

- Now, imagine if all 820 of these were just labeled "John Williams," with nothing to tell these individuals apart:
 - Williams, John
 - Williams, John
 - Williams, John
 - Williams, John
 - Williams John
 - Williams John
 - Williams John
 - Williams John
 - Etc.

1. Why name disambiguation matters – Uncontrolled headings



Without disambiguation, there are 2 distinct problems:

1. Collision: Names of distinct people overlap
2. Variants: Different names of the same person are not linked together

1. Why name disambiguation matters

Overall:

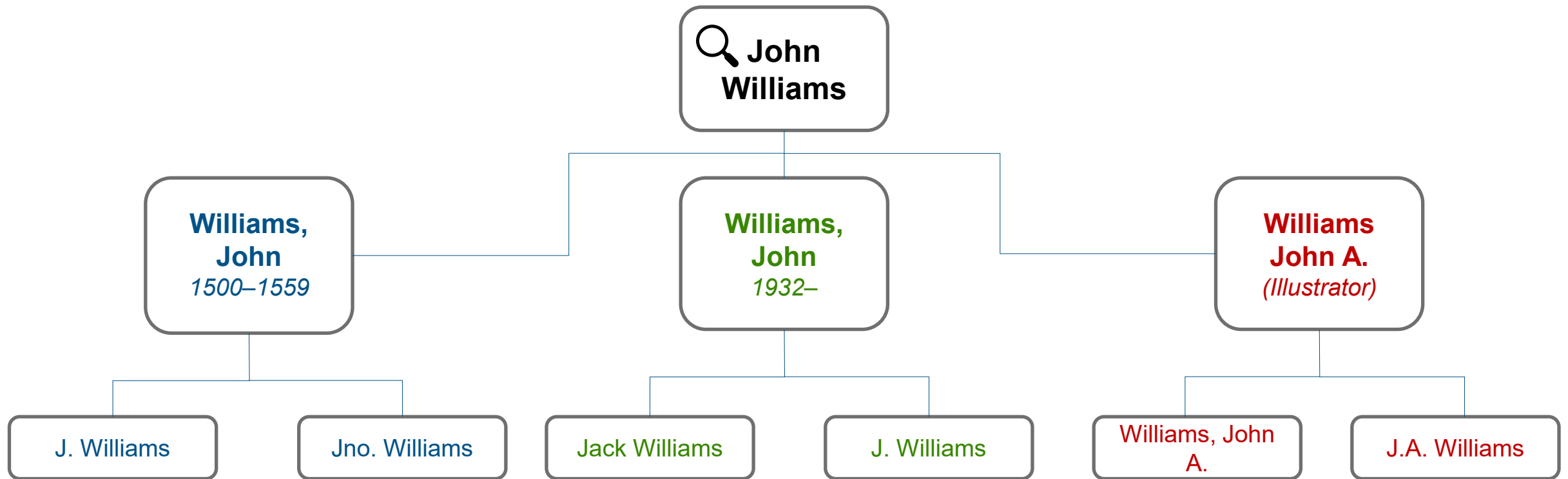
- In a library catalog you want to be able to **identify** and differentiate between people with similar or even the same names so users can find works by a specific person and not mistakenly retrieve works by other people with similar names
- At the same time, you also want name variants that all correspond to the same person to be connected or linked together so that users can **find** everything by that person without having to search every variant separately

1. Why name disambiguation matters

Authority Control: “The procedures by which consistency of form is maintained in the headings (names, uniform titles, series titles, and subjects) used in a library catalog or file of bibliographic records through the application of an authoritative list (called an authority file) to new items as they are added to the collection.”

-Joan M. Reitz, *Online Dictionary for Library and Information Science*

1. Why name disambiguation matters



With authority control:

1. Three distinct people, each clearly separated
2. Preferred name: one authorized form per person, with all variants connected beneath it

1. Why name disambiguation matters

Series	
Sort By: A to Z Number of Results Include Exclude	
☐ Series	Results
☐ Technical report (Texas Transportation Instit...	(254)
☒ Report (Transit Cooperative Research Progra...	(228)
☐ MDT Research final report ;	(225)
☐ Special report (National Research Council (U....	(204)
☐ ACRP synthesis ;	(140)
☐ Highway research circular ;	(130)
☐ Transportation research circular (Online) ;	(121)
☐ Report (United States. Federal Highway Admi...	(116)
☐ NCHRP web document ;	(110)
☐ Special report (National Research Council (U....	(95)
☐ Legal research digest (National Cooperative ...	(88)
☐ NCHRP web-only document ;	(77)
☐ Final report (Minnesota. Department of Tran...	(74)
☐ Research report (New York (State). Engineeri...	(66)
☒ TCRP research report ;	(66)
☐ Research report (Texas Transportation Instit...	(64)
☐ SHRP 2 report ;	(63)
☐ TCRP web document ;	(61)



Series	
Sort By: A to Z Number of Results Include Exclude	
☐ Series	Results
☐ Research results digest (National Cooperativ...	(311)
☐ VTRC (Series) ;	(297)
☒ TCRP research report ;	(294)
☐ ACRP research report ;	(292)
☐ Research report (University of Texas at Austi...	(287)
☐ Bulletin (National Research Council (U.S.). Hi...	(281)
☐ Technical report (Texas Transportation Instit...	(254)
☐ MDT Research final report ;	(226)
☐ Special report (National Research Council (U....	(204)
☐ ACRP synthesis ;	(140)
☐ Highway research circular ;	(130)
☐ Transportation research circular (Online) ;	(121)
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2. What is NACO?

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Charles A. Cutter, *Rules for a Dictionary Catalogue* (1876)

- **Rule 139:** "Distinguish authors who family name is the same by giving the forename in full or by initials"
 - "In a card catalogue the names should always be given in full...Taylor, B. conveys no idea whatever to most readers. Taylor, Baynard, they know" (p. 64)
- **Rule 141:** "Distinguish authors whose family and forenames are the same by the dates of their birth and death, or, if these are not known, by some other label"

2. What is NACO?

- In the card catalog era, libraries often maintained their own local authority files
- There was no easy way to check whether another library had already settled on a different name form
- That made consistency across institutions hit-or-miss



Library of Congress, Card Catalog Division, 1919

2. What is NACO? - Acronyms

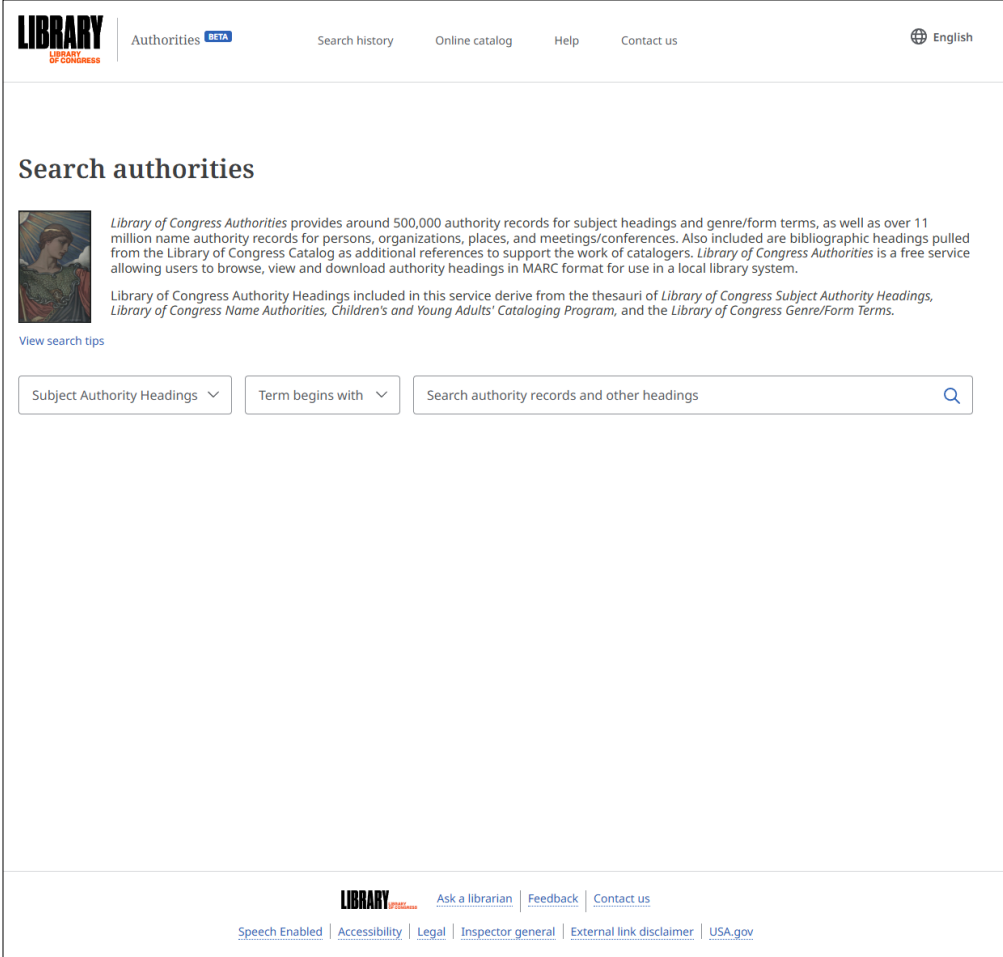
NACO: Name Authority Cooperative Program

NAF: Name Authority File

NAR: Name Authority Record

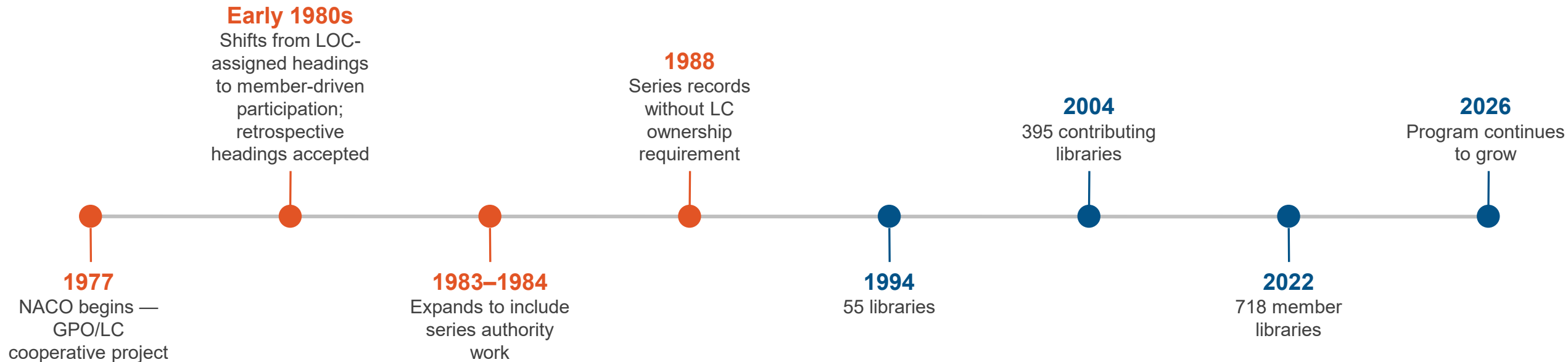
2. What is NACO? - NACO

- **NACO: Name Authority Cooperative Program**, established 1977
- Overseen by Library of Congress and the Program for Cooperative Cataloging (PCC)
- Allows trained catalogers from across the country and even internationally to create and contribute *name authority records (NARs)* to the LOC's *name authority file (NAF)* according to one shared set of standards
- The records they create are then shared with libraries throughout the world



The screenshot shows the 'Library of Congress Authorities' page. At the top, there is a navigation bar with the Library of Congress logo, 'Authorities BETA', and links for 'Search history', 'Online catalog', 'Help', and 'Contact us'. A language selector shows 'English'. The main heading is 'Search authorities'. Below this, there is a small image of a classical statue and a paragraph explaining the service: 'Library of Congress Authorities provides around 500,000 authority records for subject headings and genre/form terms, as well as over 11 million name authority records for persons, organizations, places, and meetings/conferences. Also included are bibliographic headings pulled from the Library of Congress Catalog as additional references to support the work of catalogers. Library of Congress Authorities is a free service allowing users to browse, view and download authority headings in MARC format for use in a local library system.' Below the text is a link to 'View search tips'. A search interface includes two dropdown menus: 'Subject Authority Headings' and 'Term begins with', followed by a search input field with the placeholder text 'Search authority records and other headings' and a magnifying glass icon. The footer contains the Library of Congress logo, links for 'Ask a librarian', 'Feedback', and 'Contact us', and a row of links: 'Speech Enabled', 'Accessibility', 'Legal', 'Inspector general', 'External link disclaimer', and 'USA.gov'.

2. What is NACO? - NACO



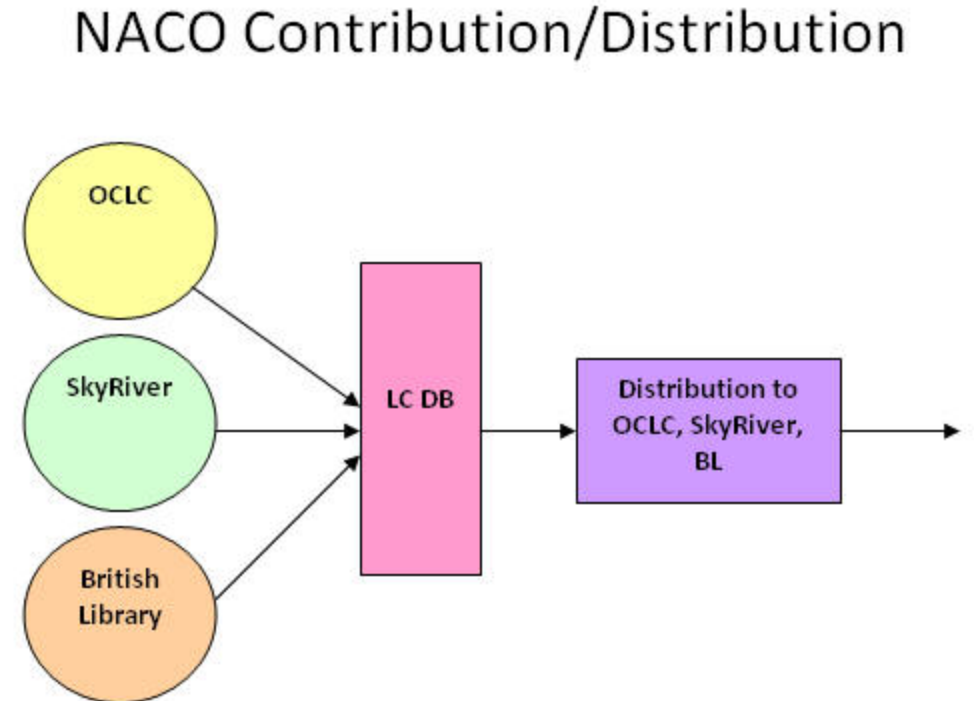
-John J. Riemer & Karen Morgenroth (1994) Hang Together or Hang

Separately:, *Cataloging & Classification Quarterly*, 17:3-4, 127-161, https://doi.org/10.1300/J104v17n03_07

-Byrum, J. D., Jr. (2004). *NACO: A Cooperative Model for Building and Maintaining a Shared Name Authority Database*. *Cataloging & Classification Quarterly*, 38(3-4), 237-249. https://doi.org/10.1300/J104v38n03_18

2. What is NACO? - NAF

- **NAF: Name Authority File**
- The Library of Congress Name Authority File (NAF) provides authoritative data for names of persons, organizations, events, places, and titles.
- Contains 8 million records
- Includes names of persons, corporate bodies, families, events, places, and titles



2. What is NACO? – NAF: authorities.loc.gov



Authorities **BETA**

[Search history](#)

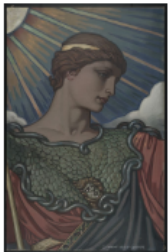
[Online catalog](#)

[Help](#)

[Contact us](#)

 [English](#)

Search authorities



Library of Congress Authorities provides around 500,000 authority records for subject headings and genre/form terms, as well as over 11 million name authority records for persons, organizations, places, and meetings/conferences. Also included are bibliographic headings pulled from the Library of Congress Catalog as additional references to support the work of catalogers. *Library of Congress Authorities* is a free service allowing users to browse, view and download authority headings in MARC format for use in a local library system.

Library of Congress Authority Headings included in this service derive from the thesauri of *Library of Congress Subject Authority Headings*, *Library of Congress Name Authorities*, *Children's and Young Adults' Cataloging Program*, and the *Library of Congress Genre/Form Terms*.

[View search tips](#)

Name Authority Headings ▼

Term begins with ▼

Search authority records and other headings



2. What is NACO? - NAR

- **NAR: Name Authority Record**
- A Name Authority Record (NAR) documents the authorized form of a name, the evidence used to establish it, and the variant forms linked to it.

Authorized heading

Williams, John, 1932-

Use for: Williams, J. T. (John Towner), 1932-; Williams, John (John Towner), 1932-; Williams, John T. (John Towner), 1932-; Williams, John Towner, 1932-; Williams, Johnny (John Towner), 1932-; Williams, Johnny, 1932-

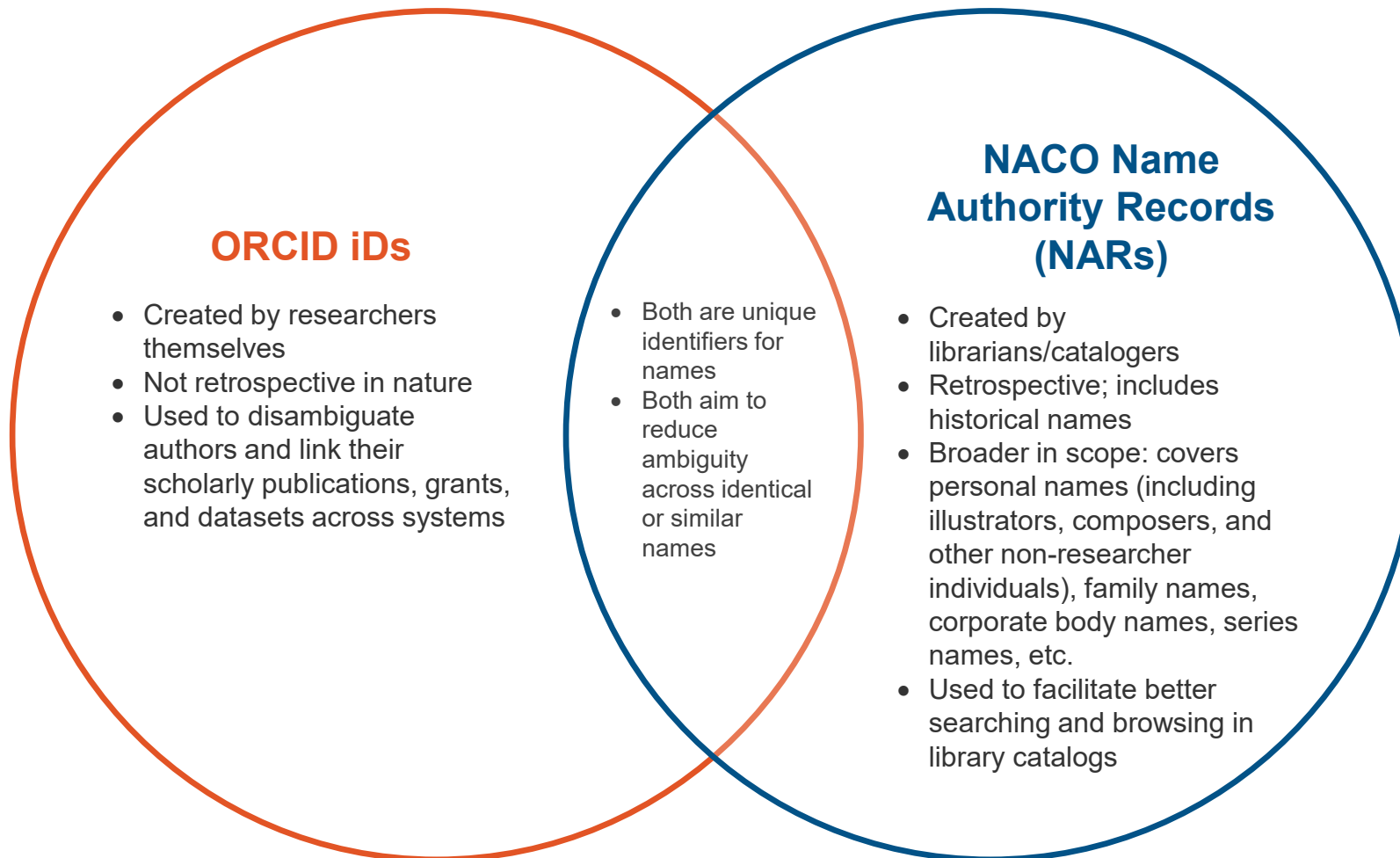
Field of Activity: Music, Motion picture music, Composition (Music), Piano music, Conducting

Occupation: Film composers, Composers, Conductors (Music), Pianists, Arrangers (Musicians)

Associated Groups: North Hollywood High School (Los Angeles, Calif.), 194X-1950; University of California, Los Angeles; Los Angeles City College; United States. Air Force, 1951-1955; University of Arizona; Juilliard School of Music; Eastman School of Music

2. What is NACO? - NAR

ORCID iDs vs. Name Authority Records (NARs)



3. Anatomy of a NAR

3. Anatomy of a NAR: Core elements

RDA 0.6.7: Recording Attributes of an Agent

Include elements that are applicable and readily ascertainable:

Person

- **Preferred name** for person
- Title of person (royalty, nobility, ecclesiastical rank/office; term of address for religious vocation)
- Date of birth
- Date of death
- Other designation (Christian saint, spirit, sacred/apocryphal figure, fictitious/legendary person, real non-human entity)
- Profession or occupation (when the name itself doesn't convey the idea of a person)
- Identifier for person



3. Anatomy of a NAR: Core elements

RDA 0.6.7: Recording Attributes of an Agent

If the preferred name is the same as, or similar to, a name by which another agent is known, differentiate them using as many of these elements as necessary:

Person

- Title of person (another term indicative of rank, honour, or office)
- Fuller form of name
- Profession or occupation
- Period of activity of person
- Other designation associated with person



3. Anatomy of a NAR: Preferred Name

Definitions:

- **Name of person (RDA 9.2):** *a word, character, or group of words by which a person is known.*
- **Preferred name (RDA 8.1.3):** *Form used when constructing authorized access points in bibliographic records.*

Source of information (RDA 2.2.2):

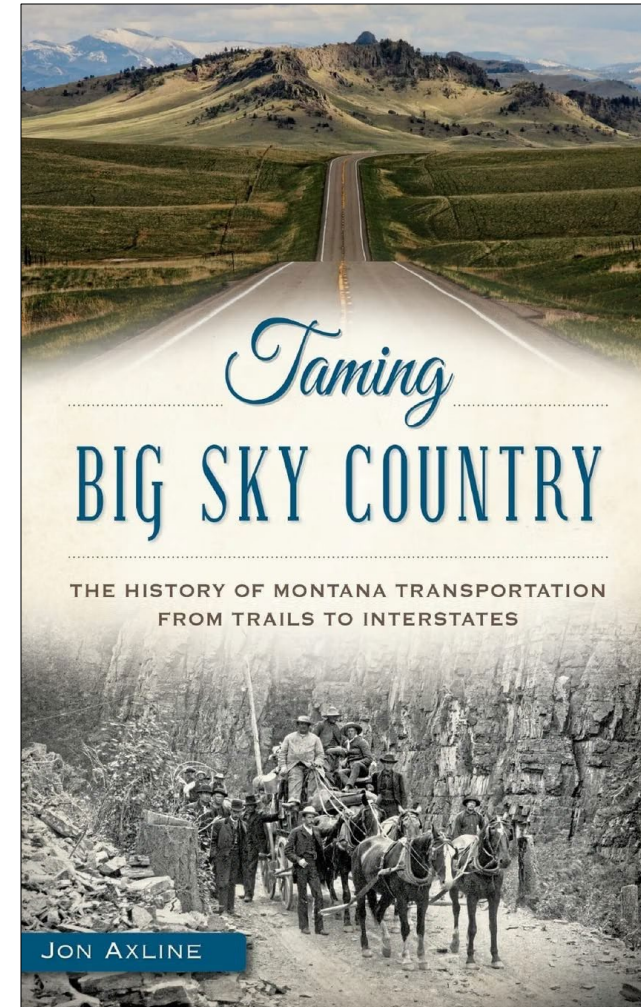
- Use the title page, title sheet, or title card as the preferred source.

Choosing the preferred name (RDA 9.2.2.3): Choose the name by which the person is commonly known, based on:

- **Fullness (9.2.2.5.1):** if a name varies in fullness, choose the form **most commonly found**.
- **Language (9.2.2.5.2):** choose the form matching the language of **most manifestations**.
- **Spelling (9.2.2.5.4):** if spellings vary (not from transliteration), choose the form in the first manifestation received
- **Different names, same person (9.2.2.6):** if known by more than one name, choose whichever is **most commonly known**.

3. Anatomy of a NAR: Preferred Name

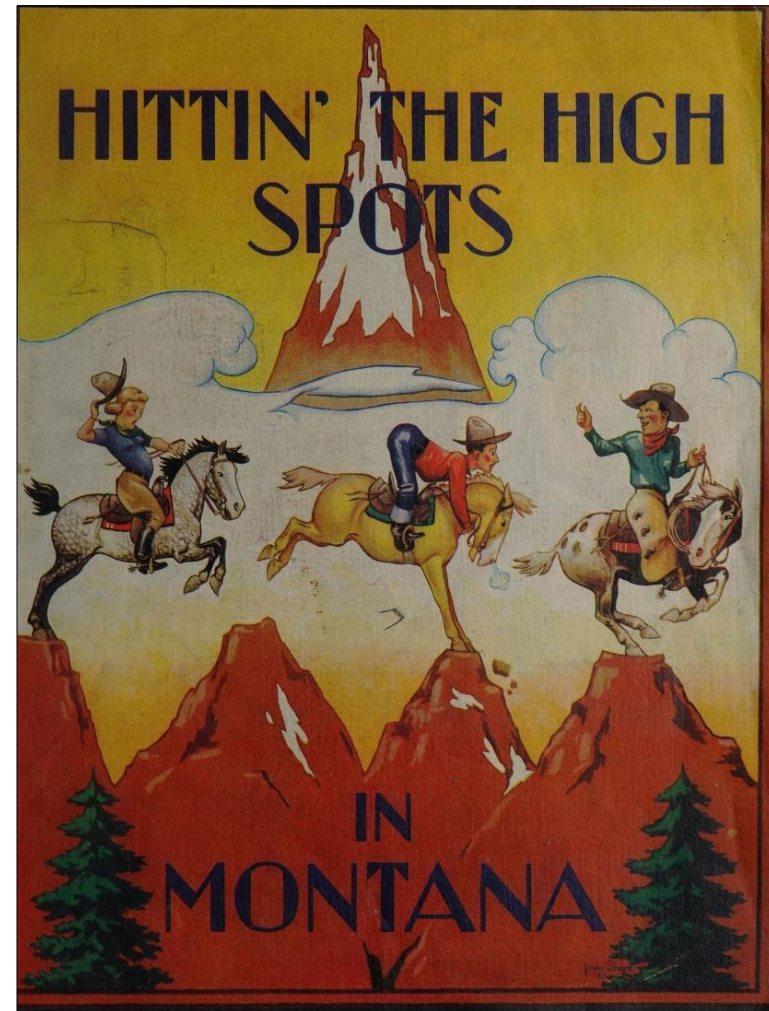
100 1_ \$a Axline, Jon



3. Anatomy of a NAR: Preferred Name

100 1_ \$a Axline, Jon

100 1_ \$a Shope, Irvin



3. Anatomy of a NAR: Preferred Name

100 1_ \$a Axline, Jon

100 1_ \$a Shope, Irvin

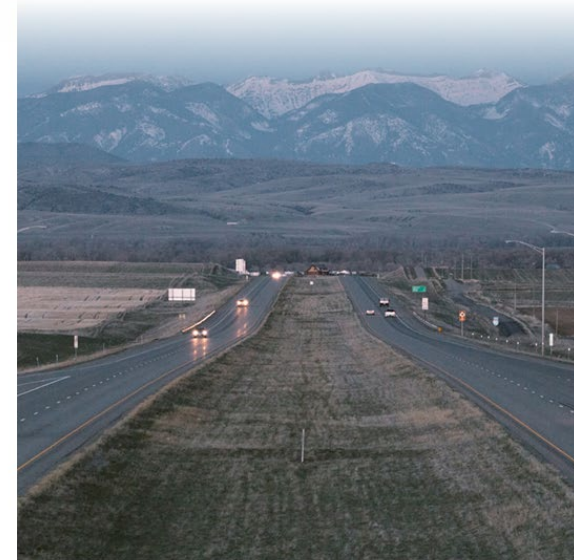
100 1_ \$a Finley, Kari



UNDERSTANDING AGGRESSIVE DRIVING AND WAYS TO REDUCE IT - PHASE 1

FHWA/MT-24-001/8882-444-23

Final Report



January 2024

3. Anatomy of a NAR: Preferred Name Examples

```
100 0_ $a Aristotle
```

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```
100 0_ $a Aristotle
```

```
100 1_ $a Benjamin, Walter, $d 1892-1940
```

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```
100 0_ $a Aristotle
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```
100 1_ $a Benjamin, Walter, $d 1892-1940
```

```
100 1_ $a Cioran, E. M. $q (Emile M.), $d  
1911-1995
```

3. Anatomy of a NAR: Preferred Name Examples

```
100 0_ $a Aristotle
```

```
100 1_ $a Benjamin, Walter, $d 1892-1940
```

```
100 1_ $a Cioran, E. M. $q (Emile M.), $d  
1911-1995
```

```
100 1_ $a Williams, John A. $c (Physical  
anthropologist)
```

3. Anatomy of a NAR: Variants access points

Definitions:

- **Variant name (RDA 9.2.3):** *a variant name is a form not chosen as the preferred name.*

Source of Information:

- Found in manifestations associated with the person, and/or in reference sources.

Choosing variants:

- Not a core requirement, but can help retrieval and with disambiguation.

Should be grounded in an actual source (a manifestation or reference source)

```
100 1_ $a Axline, Jon  
400 1 $a Axline, Jonathan Alan
```

```
100 0 $a Aristotle  
400 0 $a Aristote
```

```
100 1_ $a Shope, Irvin  
400 1_ $a Shope, Shorty
```

```
100 1_ $a Benjamin, Walter, $d 1892-1940  
400 1_ $a Holz, Detlef, $d 1892-1940
```

3. Anatomy of a NAR: Other useful fields

370: Associated Place: *A place associated with works and expressions, including place of origin (OCLC)*

372: Field of Activity: *For a person: a field of endeavor, area of expertise, etc., in which the person is engaged or was engaged (LOC)*

373: Associated Group: *Information about a group, institution, association, etc., that is associated with the entity in the 1XX. This can also be a group with which a person is or has been affiliated, including dates of affiliation (LOC)*

374: Occupation: *Information about profession or occupation in which a person or family works or has worked, including dates applicable (LOC)*

377: Language: *Associated language*

100 1_ \$a Finley, Kari

370 \$c United States \$f Bozeman (Mont.) \$2 naf

372 \$a Traffic Safety \$a Transportation--
Research \$2 lcsh

373 \$a Montana State University--Bozeman.
Center for Health and Safety Culture \$2 naf \$s
2015

374 \$a Scientists \$2 lcdgt

377 \$a eng

3. Anatomy of a NAR: Source Data Found

```
100 1_ $a Finley, Kari
```

Perhaps most importantly (other than the 100): every NAR needs to cite its sources:

670: Source Data Found: *Citation for a consulted source in which information is found related in some manner to the entity represented by the authority record or related entities. May also include the information found in the source (LOC).*

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100 1_ \$a Finley, Kari

670 \$a Understanding aggressive driving and ways to reduce it - phase 1, 2024: \$b t.p. (Kari Finley, Center for Health and Safety Culture, Montana State University, Bozeman, MT) p. iv (Sponsoring Agency Name and Address, Research Programs, Montana Department of Transportation; A resource guidance document was created to help traffic safety practitioners) \$u <https://doi.org/10.21949/1529561>

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670 \$a ORCID.org, viewed Dec. 10, 2024 \$b Employment (2015-01-09 to present, Senior Research Scientist) Education and qualifications (Walden University: Minneapolis, MN, US, 2008 to 2011) \$u <https://orcid.org/0000-0002-0887-4939>

3. Anatomy of a NAR: Putting it all together

010	☐	☐	no2024143152
040	☐	☐	MtHDT \$b eng \$e rda \$c MtHDT
100	1	☐	Finley, Kari
370	☐	☐	\$c United States \$f Bozeman (Mont.) \$2 naf
372	☐	☐	Traffic Safety \$a Transportation--Research \$2 lsh
373	☐	☐	Montana State University--Bozeman. Center for Health and Safety Culture \$2 naf \$s 2015
373	☐	☐	Walden University (Minneapolis, Minn.) \$2 naf \$s 2008 \$t 2011
374	☐	☐	Scientists \$2 lcdgt
377	☐	☐	eng
510	2	☐	\$w r \$i Employer: \$a Montana State University--Bozeman. Center for Health and Safety Culture
510	2	☐	\$w r \$i Graduate of: \$a Walden University (Minneapolis, Minn.)
670	☐	☐	Understanding aggressive driving and ways to reduce it - phase 1, 2024: \$b t.p. (Kari Finley, Center for Health and Safety Culture, Montana State University, Bozeman, MT) p. iv (Sponsoring Agency Name and Address, Research Programs, Montana Department of Transportation; A resource guidance document was created to help traffic safety practitioners) \$u https://doi.org/10.21949/1529561
670	☐	☐	ORCID.org, viewed Dec. 10, 2024 \$b Employment (2015-01-09 to present, Senior Research Scientist) Education and qualifications (Walden University: Minneapolis, MN, US, 2008 to 2011) \$u https://orcid.org/0000-0002-0887-4939

3. Anatomy of a NAR: Other types of NARs

3. Anatomy of a NAR: Corporate body example

110 2_ \$a National Cooperative Highway Research Program

370 \$c United States \$e Washington (D.C.) \$2 naf

372 \$a Highway research--United States \$2 lcsb

410 2 \$a N.C.H.R.P. (National Cooperative Highway Research Program)

510 2 \$w r \$i Hierarchical superior: \$a National Research Council (U.S.). \$b Transportation Research Board

670 \$a Methodology for evaluating highway ... 1981: \$b 2nd prelim. p. (National Cooperative Highway Research Program conducted by the Transportation Research Board with the approval of the Governing Board of the National Research Council)

3. Anatomy of a NAR: Series name example

130 0_ \$a NCHRP research report

373 \$a National Cooperative Highway Research Program \$2 naf

380 \$a Series (Publications) \$a Monographic series \$2 lcs

430 0 \$a National Cooperative Highway Research Program research report

530 0 \$w r \$i Continuation of (work): \$a Report (National Cooperative Highway Research Program)

670 \$a OCLC database, #973954131, viewed 2 March, 2022: \$b (963, published in 2021, is a joint report with TCRP research report 225; Began with 833 in 2016)

3. Anatomy of a NAR: Place name example

151 __ \$a Beartooth Highway (Mont. and Wyo.)

550 __ \$w g \$a Roads \$z Montana

550 __ \$w g \$a Roads \$z Wyoming

551 __ \$w g \$a United States Highway 212

670 __ \$a Work cat.: 97011223: James, H.L. Scenic driving the Beartooth Highway, 1997.

4. NACO projects at MDT

4. NACO Projects at MDT - Background



NACO Funnels

A NACO funnel project is a group of libraries that have joined together to contribute name authority records to the national authority file. Frequently, funnel members create records in modest numbers, and consolidate their efforts to make a more significant contribution in terms of quantity.

NACO funnels may be based on similarities among libraries for example:

- Based on subject area, e.g., NACO Music Project, ArtNACO
- Based on location, e.g., North Dakota Project
- Based on membership in a consortium e.g., CALICO South Africa, GAELIC South Africa

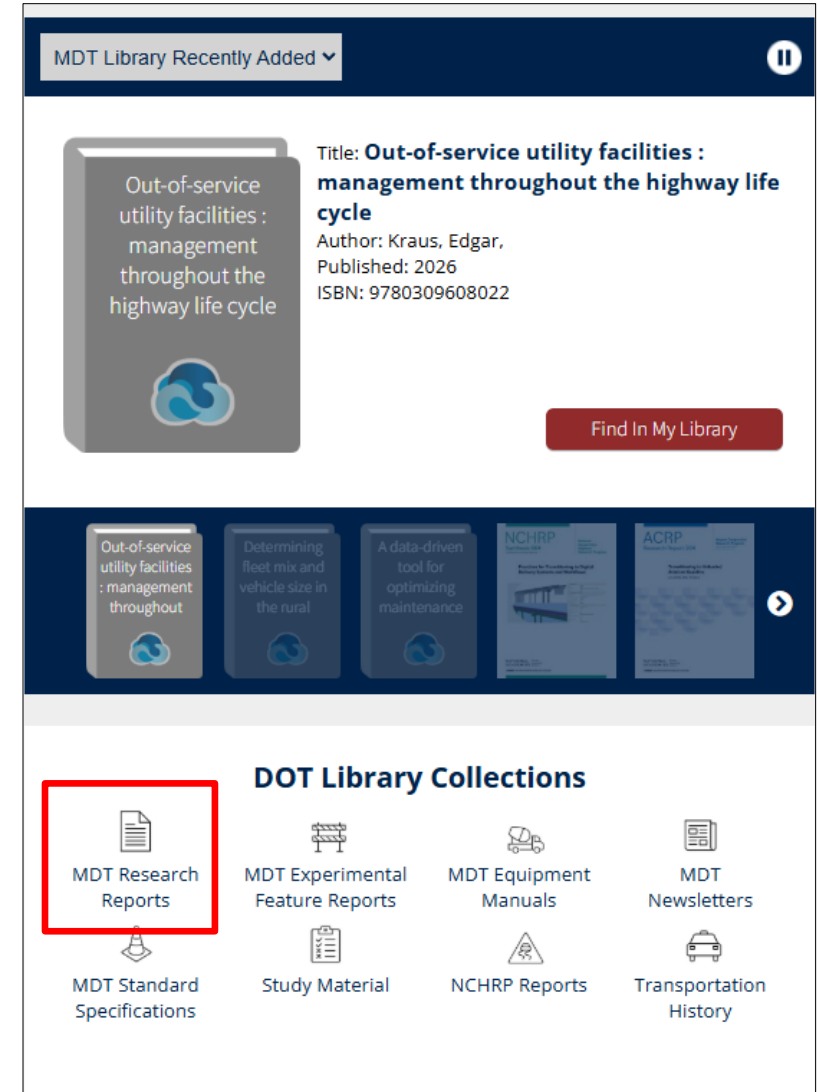
4. NACO Projects at MDT: Project 1 - Researcher Names

What:

- Reviewed MDT research report authors against the national name authority file (NAF)
- Created new NARs for uncontrolled researcher names

Why:

- Not many institutions in MT are creating NARs for Montana-based authors and researchers, especially for grey literature like DOT research reports
- Controlling these names makes retrieval in our own catalog more consistent
- Sharing these consistent headings with other institutional repositories that have MARC based catalogs improves retrieval in those catalogs as well



4. NACO Projects at MDT: Project 1 - Researcher Names

Workflow: 2025

- Summer intern and I went through the collection and logged names into an Excel database
- Intern checked each name against the NAF: existed, didn't exist, or was ambiguous / difficult to determine
- Created new NARs, using the database as a reference

2026

- Intern and I updated the database
- Trained the intern on RDA core elements and relevant OCLC Bibliographic Formats fields, using an existing NAR I'd created as a template to derive from
- Intern saved draft records to the online OCLC file
- I reviewed, edited as needed, and submitted to the NAF

Ongoing

- Once a month, our ILS pushes thorough authority updates automatically applying the new NARs to control previously-uncontrolled names in the catalog
- Some names still remain / NARs need to be created

Researcher name (last name, first name)	Report name	Created authority record (y/n)?
Ahmad, Numan	Safety evaluation of sinusoidal centerline rumble strips	M
Arpin, Jamie	Guidance on Messaging to Avoid Psychological Reactance and Address Moral Disengagement	M
Austin, Eric	Guidance for Evaluating Traffic Safety Culture Strategies	M
Johnson, Michael	Impact of Canadian Economic Development on Northern Montana Highways Phase II, Ports of Wild Horse and Morgan Highway Corridors	M
Ahmed, Emtiaz	Use of fiber-reinforced polymer composites for bridge repairs in Montana	N
Dadgostari, Faraz	A feasibility study of road culvert/bridge deck deicing using geothermal energy	Y
Puccinelli, J.	Ground Penetrating Radar (GPR) Analysis: Phase II Field Evaluation	Y (LOC Record under "Puccinelli, Jason")
Krauss, Paul D.	Evaluation of Thin Polymer Overlays for Bridge Decks	Y (might have two?)
Jeong, Hyung Seok	Artificial Intelligence (AI) Based Tool to Estimate Contract Time	Y (named as "Jeong, H. David" on another report)

4. NACO Projects at MDT: Project 1 - Researcher Names

NAR in NAF: LC control no. no2025088946

100 1_ \$a Bauer, Bart A.

370 __ \$c United States \$f Missoula (Mont.) \$2 naf

372 __ \$a Drone aircraft \$2 lcsh

373 __ \$a University of Montana--Missoula \$2 naf \$s 2021

377 __ \$a eng

510 2_ \$w r \$i Employer: \$a University of Montana–Missoula

670 __ \$a Icy Road Forecast and Alert (IcyRoad): validation and refinement using MDT RWIS data:
\$b t.p. (Bart A. Bauer, University of Montana, Missoula, MT); p. iv (University of Montana,
Autonomous Aerial Systems Office) \$u <https://doi.org/10.21949/1518320>

670 __ \$a ORCID.org, viewed June 05, 2025 \$b Employment (University of Montana, 2021-10-01 to
present, Director, Autonomous Aerial Systems Office) \$u <https://orcid.org/0000-0001-8721-9547>

4. NACO Projects at MDT: Project 1 - Researcher Names

NAR in NAF: LC control no2025049119

100 1 \$a Cota, Cash

370 \$c United States \$f Bozeman (Mont.) \$2 naf

372 \$a Structural engineering \$a Transportation--Research \$2 lcs

373 \$a Western Transportation Institute \$2 naf

373 \$a Montana State University--Bozeman--College of Engineering \$2 naf \$s 2018 \$t 2023

374 \$a Structural engineers \$2 lcdgt

377 \$a eng

510 2 \$w r \$i Graduate of: \$a Montana State University--Bozeman.

670 \$a Concrete-filled steel tube to concrete pile cap connections - further evaluation/improvement of analysis/design methodologies: \$b t.p. (Cash Cota, Civil Engineering Department, Western Transportation Institute, Montana State University - Bozeman) p. ii (Sponsoring Agency Name and Address, Research Programs, Montana Department of Transportation;) \$u <https://doi.org/10.21949/1529560>

670 \$a LinkedIn.com, viewed April 22, 2025 \$b Experience (Structural Engineer; Graduate Research Assistant, Montana State University-Bozeman) Education and Qualifications (Montana State University-Bozeman, Structural Engineering, 2022-2023; Civil Engineering, 2018-2022) \$u <https://www.linkedin.com/in/cashcota>

4. NACO Projects at MDT: Project 1 - Researcher Names

Authorized heading

Murray, Flynn

Field of Activity: Materials, engineering, Transportation--Research

Occupation: University and college faculty members

Associated Groups: Montana State University--Bozeman. College of Engineering, Western Transportation Institute

100 1_ \$a Murray, Flynn

670 __ \$a Feasibility of reclaimed asphalt pavement as aggregate in Portland cement concrete pavement, phase II: field demonstration : \$b t.p. (Flynn Murray, Graduate Research Assistant, of the Civil Engineering Department, Western Transportation Institute, Montana State University - Bozeman) p. iv (Sponsoring Agency Name and Address, Research Programs, Montana Department of Transportation) \$u <https://doi.org/10.21949/1508381>

670 __ \$a ORCID.org, viewed Nov. 5, 2025 \$b Works (2021, Dissertation or Thesis, Predicting and modeling the material properties of fused deposition modeling elements leading to more efficient structural designs) \$u <https://orcid.org/0000-0002-7290-8793>

670 __ \$a montana.edu/ce/directory, viewed Nov. 5, 2025 \$b (Dr. Flynn Murray, Assistant Teaching Professor, Structures and Engineering Mechanics) \$u <https://www.montana.edu/ce/directory/2427179/flynn-murray>

4. NACO Projects at MDT: Project 1 - Researcher Names

 Dept of Transportation

All Fields

finley, kari

SEARCH

Advanced Search

Limit Search Results

Only Show Available

Author

Include

Exclude

☒ Finley, Kari (12)

☐ United States. Federal ... (8)

☐ Connecticut. Departme... (6)

☐ Idaho. Transportation D... (6)

☐ Illinois. Department of ... (6)

More

View All

Subject

Include

Exclude

☐ Safety. (9)

☐ Traffic safety. (9)

☐ Attitudes. (5)

☐ High risk drivers. (4)

☐ Montana. (4)

More

View All

Series

Include

Exclude

☐ Final Report (Montana ... (10)

Publisher

Include

Exclude

☐ Montana Department o... (6)

☐ Montana Department o... (3)

☐ Research Programs, Mo... (2)

☐ Montana Dept. of Trans... (1)

Title Format

Include

Exclude

12 Results Found

Actions:

Sort By:

☐ Select All

1

1.

☐



Resources and tools to improve pedestrian safety
Author Finley, Kari
Published 2024
Format  Electronic Resources
Series Final Report (Montana Department of Transportation. Research Programs); FHWA/MT-24-006/8882-444-22
Electronic Access Online access provided by Montana State Library

Library	Call Number	Circulation Type	Status
Montana Department of Transportation Library	E-RESOURCE	Digital content	Online resource

2.

☐



Resources and tools to reduce multiple risky driving behaviors
Author Finley, Kari
Published 2024
Format  Electronic Resources
Series Final Report (Montana Department of Transportation. Research Programs); FHWA/MT-24-004/888-444-20
Electronic Access Online access provided by Montana State Library

Library	Call Number	Circulation Type	Status
Montana Department of Transportation Library	E-RESOURCE	Digital content	Online resource

3.

☐



Understanding aggressive driving and ways to reduce it : phase 1

4. NACO Projects at MDT: Project 1 - Researcher Names

225 MDT research reports reviewed

84 of those reports had **198** uncontrolled or potentially uncontrolled researcher names

54

Already had a NAR

83

New NARs created

61

TBD

4. NACO Projects at MDT: Project 2 – Research Report Series

What: Established a controlled series heading for MDT's own research report series

Why: Reports like these often lack a formally printed series title, so it's easy for the way it's recorded to drift between catalogers and institutions over time. A controlled heading keeps every report in the series consistently retrievable together in our catalog, and in any other repository that holds the same reports.

Scope: One record, applies to all 220+ research reports

Type	z	Upd status	a	Enc lvl	n	Source	c
Roman	■	Ref status	a	Mod rec		Name use	a
Govt agn	s	Auth status	a	Subj	a	Subj use	a
Series	a	Auth/ref	a	Geo subd	n	Ser use	a
Ser num	a	Name	n	Subdiv tp	n	Rules	z

010		no2026099654
040		MtHDT #b eng #e rda #c MtHDT
130	0	Final Report (Montana Department of Transportation. Research Programs)
373		Montana. Department of Transportation. Research Programs #2 naf
380		Monographic series #2 lcsh
380		Technical reports #2 lcgt
430	0	Montana Department of Transportation final research report
530	0	#w r #i Issuing body: #a Montana. Department of Transportation. Research Programs.
643		Helena, MT #b Montana. Department of Transportation
670		Concrete-filled steel tube to concrete pile cap connections : further evaluation/improvement of analysis/design methodologies, 2024: t.p. (Final Report; prepared for Montana Department of Transportation, Research Programs) ; Technical Report Documentation Page (Sponsoring Agency Name and Address: Research Programs, Montana Department of Transportation (SPR)) #u https://doi.org/10.21949/1529560

4. NACO Projects at MDT: Project 2 – Research Report Series

Workflow: 2024-2026

- Compiled a comprehensive list of MDT research reports, previously scattered across several discovery points with no single comprehensive source
- Cross-checked multiple sources:
 - Our own catalog and physical collection
 - MDT's website (past 5 years of projects)
 - Internet Archive Wayback Machine to look at earlier website versions and find older reports
 - RosaP and Montana State Library's web archive to find outliers, especially the latter for reports predating the Wayback Machine coverage (2004)
- Created the series NAR in OCLC and submitted to LOC NAF
- Updated 490/830 MARC fields (series statement) of all reports so they use the new authorized series name, cataloged any outliers not already in our catalog

The screenshot shows a library catalog search results page. At the top, there is a search bar with the text "Final Report (Montana Department of Transportation, Research Programs)" and a "SEARCH" button. Below the search bar, there are filters for "Dept of Transportation" and "Series". The results are displayed in a list format, with each entry showing a title, author, publication date, format, and series information. The first three results are highlighted with a blue background.

Limit Search Results

Only Show Available

Author Include Exclude

- ☐ Montana. Department ... (94)
- ☐ United States. Federal ... (66)
- ☐ Western Transportation... (62)
- ☐ Montana. Department ... (31)
- ☐ Montana. Department ... (25)

More View All

Subject Include Exclude

- ☐ Montana. (38)
- ☐ Environmental engine... (31)
- ☐ Safety. (26)
- ☐ Materials. (18)
- ☐ Wildlife crossings -- Mo... (15)

More View All

Series Include Exclude

- ☐ Final Report (Montana ... (226)
- ☐ Scientific investigations... (4)
- ☐ Fact sheet (Geological S... (1)
- ☐ Final report (Minnesota... (1)
- ☐ MDT Research experim... (1)

More View All

Publisher Include Exclude

- ☐ Montana Department o... (51)
- ☐ Montana Dept. of Trans... (29)
- ☐ Montana Dept. of Trans... (17)
- ☐ Montana Department o... (9)
- ☐ Montana Dept. of Trans... (7)

More View All

Title Format Include Exclude

- ☐ Books (124)

227 Results Found Actions: Publication Date (Newest to)

Select All 1 2 3 4 5 .. 19

13. ☐ **Understanding aggressive driving and ways to reduce it : phase 1**
Author Finley, Kari.
Published 2024
Format Electronic Resources
Series Final Report (Montana Department of Transportation, Research Programs) ; FHWA/MT-24-001/8882-444-23
Electronic Access View report

Library	Call Number	Circulation Type	Status
Montana Department of Transportation Library	E-RESOURCE	Digital content	Online resource

14. ☐ **Montana Department of Transportation research peer exchange summary report : September 12-13, 2023**
Author Walker-Keleher, Peter.
Published 2023
Format Electronic Resources
Series Final Report (Montana Department of Transportation, Research Programs) ; FHWA-MT-23-007
Electronic Access Online access provided by Montana State Library

Library	Call Number	Circulation Type	Status
Montana Department of Transportation Library	E-RESOURCE	Digital content	Online resource

15. ☐ **Artificial intelligence (AI) based tool to estimate contract time**
Author Jeong, Hyung Seok.
Published 2023
Format Electronic Resources
Series Final Report (Montana Department of Transportation, Research Programs) ; FHWA/MT-23-001/9929-819
Electronic Access Online access provided by Montana State Library

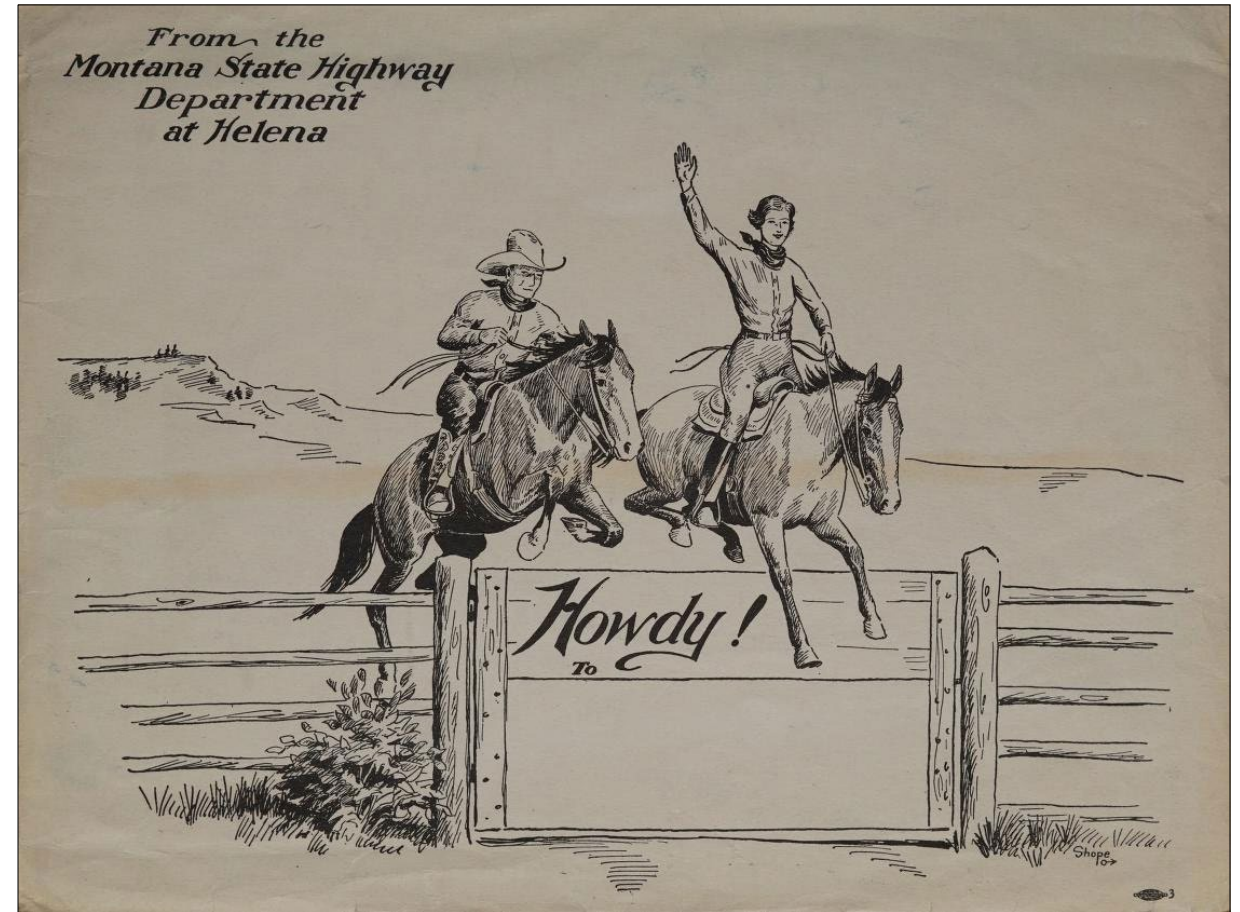
4. NACO Projects at MDT: Project 3 - Historical Names

What:

- Built a new archival collection (the Promotional and Tourism Materials Archive) from materials donated by MDT's retiring Historian.
- Created NARs for reoccurring historical/retrospective names discovered in collection

Why:

- Archival material because it is more unique is the kind of source authority control often misses, it's not standard published literature
- Aids retrieval and links related materials together
- Helps preserves institutional memory, especially as people w/ decades of knowledge are about to retire



4. NACO Projects at MDT: Project 3 – Historical Names

Workflow: 2026-Present

- Received donated materials from MDT's retiring in-house historian
- Established a new archival collection with the help of a 2026 intern: *Promotional and Tourism Materials Archive*
- Created a finding aid detailing all materials, along with the notable names and contributors appearing in them
- Arranged archival storage to provide ongoing access to the physical items
- Sent select items for digitization through the Transportation Research and Connectivity Pooled Fund (TPF-5(442)), to be added to the Internet Archive
- While processing the materials and writing the finding aid, identified recurring historical names for NAR creation
- Created NARs for these notable figures, so they're discoverable in the catalog, with all materials by them, or that they contributed to, easily grouped together

[William Dunbar Obituary \(1932 - 2026\) - Helena, MT - Helena Independent Record](#)



William Dunbar Obituary (1932 - 2026) - Helena...
View William S. "Bill" Dunbar's obituary, send flowers and sign the guestbook.
www.legacy.com

This guy would be good too, for a historical NACO name record: [Lewis M. Chittim papers - Archives West](#)



Lewis M. Chittim papers - Archives West ✕
Archives West provides access to descriptions of primary sources in the western United States, including...
archiveswest.orbiscascade.org

4. NACO Projects at MDT: Project 3 - Historical Names

Type	z	Upd status	a	Enc lvl	n	Source	c
Roman	■	Ref status	a	Mod rec		Name use	a
Govt agn	■	Auth status	a	Subj	a	Subj use	a
Series	n	Auth/ref	a	Geo subd	n	Ser use	b
Ser num	n	Name	a	Subdiv tp	n	Rules	z

010		no2026099658
040		MtHDT #b eng #e rda #c MtHDT
046		#f 1914 #g 1998 #2 edtf
100	1	Chittim, Lewis M., #d 1914-1998
370		#c United States #f Helena (Mont.) #2 naf
370		#f Saigon (Vietnam) #2 naf
372		Highway engineering #2 lcsh
373		Montana. Department of Highways #a United States. Army. Corps of Engineers #a Montana Tech #2 naf
374		Civil engineers #2 lcdgt
377		eng
400	1	Chittim, Lewis, #d 1914-1998
510	2	#w r #i Employer: #a Montana. Department of Highways
510	2	#w r #i Graduate of: #a Montana Tech
670		mtengineers.org, accessed Aug 18, 2026 #b Montana Professional Engineers Hall of Fame, Lewis M. Chittim, P.E. L.S., Montana Tech - M.S. Degree, Engineering Science, Employment Montana Department of Highways #u https://mtengineers.org/pe-hall-of-fame/
670		archiveswest.orbiscascade.org, accessed August 18, 2026 #b Lewis M. Chittim papers, 1934-1988 (born in Bozeman, Montana on February 17, 1914; He passed away in Helena, January 22, 1998; Shortly after his retirement from the Highway Department, Mr. Chittim was called up to assist in the establishment of a working highway department in Viet Nam, He and his family spent close to four years there) #u https://archiveswest.orbiscascade.org/ark:80444/xv95114

Conclusion

- Name Authority work is important for catalogs and databases in terms of enhancing the discoverability of resources
- The issues that arise from uncontrolled names have been broadly recognized in library science for some time, with NACO emerging as a cooperative program in response to these issues
- Any project that involves names, in a broad sense, potentially touches or engages with name authority work, from cataloging research reports or archiving historical materials, to cataloging places, events, etc.

Conclusion

Various levels of involvement:

1. Ensure that all your researchers have ORCID IDs since that can serve as a good reference / source of truth when librarians create these records
2. Use NARs to control names in your catalog and other databases that you maintain
3. Take training w/ LOC to create your own NARs and submit to the NAF

Conclusion



“The condition of the librarian whose library is uncatalogued is indeed pitiable.”

—Charles A. Cutter, *The New Catalogue of Harvard College Library* (1869)

Resources

- LOC authorities database: <https://authorities.loc.gov/>
- Training information: <https://www.loc.gov/aba/pcc/naco/training/>
- NACO funnels: <https://wwws.loc.gov/aba/pcc/naco/funnels.html>
- Guidance on creating NARs
 - DCMZ1: <https://www.loc.gov/catdir/cpsd/z1andlclguidelines.html>
 - MARC 21 Format for Authority Data: <https://www.loc.gov/marc/authority/ecadhome.html>

Questions?

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