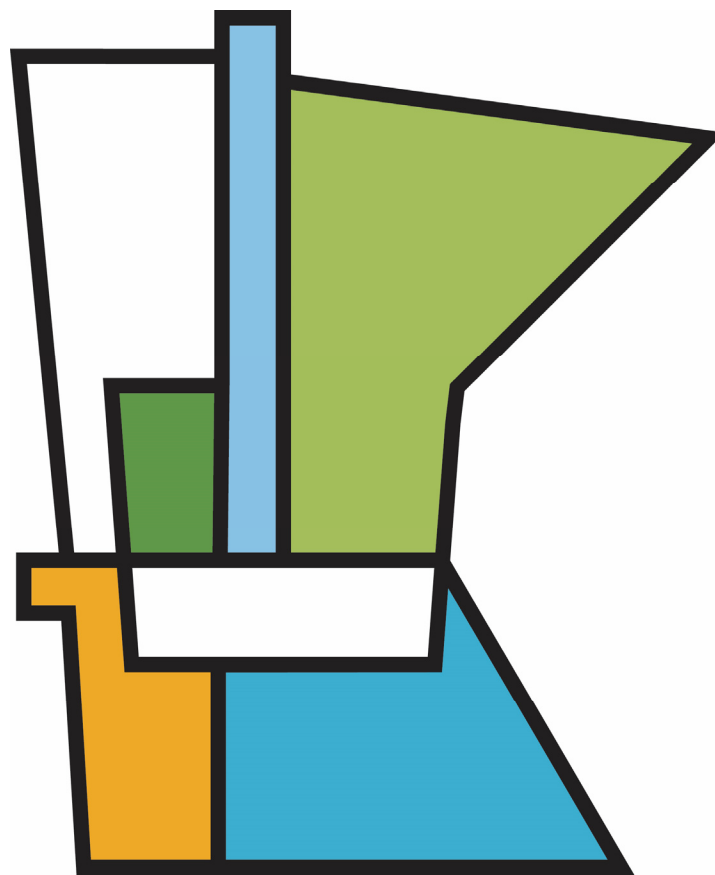


METADATA ENTRY GUIDELINES

MINNESOTA REFLECTIONS

<http://reflections.mndigital.org>

FOR USE IN CREATING DESCRIPTIVE, ADMINISTRATIVE, and TECHNICAL METADATA



Version 3.3 – March 6, 2016

MINNESOTA DIGITAL LIBRARY

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I. GETTING STARTED

TYPE A CONTRIBUTORS - These organizations contribute the descriptive cataloging information, but the Minnesota Digital Library (MDL) provides digitization services for these contributors. These organizations should focus their attention on the instructions for Parts I, II and some of Part III.

TYPE B CONTRIBUTORS - These organizations are involved in both halves of the MDL process: descriptive cataloging and digitization. They provide both scanned images, along with the requisite technical metadata, and descriptive cataloging information for their collection items. These organizations should follow the data entry instructions for Parts I, II, III and IV.

THE USE OF THE TERM “ITEM”

The term item is used throughout the guidebook. An “item” can be a number of different things – including a photograph, a photo album (filled with many photographs), a journal, a diary, an account book, a published book, a scrapbook, a recorded oral history, a postcard, a map, an atlas, etc. We have adopted “item” as a generic descriptive term when referring to the individual items that are to be included in *Minnesota Reflections*.

METADATA SPREADSHEETS

The MDL Outreach Coordinator will work directly with you as you plan and apply for a *Minnesota Reflections* digitization project. After your project has been approved, the MDL Metadata Coordinator will provide you with the necessary data entry training to help you successfully complete the appropriate metadata spreadsheet(s). Depending on the type of items in your project, you will receive one or more of the following spreadsheets:

1. **Image-Map Metadata Spreadsheet** – used for photographs, postcards, maps and other single-page items.
2. **Document Metadata Spreadsheet** – used for documents, text and other multi-page items. Atlases and plat books should be considered documents for purposes of metadata creation.
3. **Audio Metadata Spreadsheet** – used for audio files.
4. **Video Metadata Spreadsheet** – used for video files.

If you are submitting both single and multi-page items, you will need to fill out a separate spreadsheet for each item type. For example, if you are submitting photographs and documents, you will need to complete both an Image-Map Metadata Spreadsheet and a Document Metadata Spreadsheet.

GENERAL RULES FOR ENTERING DATA INTO THE METADATA SPREADSHEETS

- **Leave blank** any fields for which there is no available data. **DO NOT** use a question mark or the terms “Unknown” or “NA.”
- **DO NOT** use ampersands (“&”) to connect sentence elements. An ampersand should only be used when it is part of an official corporate name or logo.

Example of Corporate name: Atchison, Topeka & Santa Fe Railroad

- When adding multiple entries to a single field (such as multiple authors or multiple locally assigned subject headings), separate each element with a semi-colon and one space.
Example of multiple authors: Ward, Barbara; Ward, Gerald
Example of multiple locally assigned subject headings: Century farms; Dairy cattle
- **Avoid** the use of abbreviations throughout *Minnesota Reflections*. Writing words out enables users to find items consistently and also helps to avoid confusion (such as abbreviating both County and Company to “Co.”). An exception to this rule is the use of “St.” in a city or place name (e.g. St. Peter, St. Paul or St. Benedict).
- **Spell-check your metadata.** After entering your information into the spreadsheets, run the spell check to catch any misspelled words. Also, verify the spelling of local place names and individual’s names that may not be caught during the spell-check process.

HOW TO USE THIS MANUAL: Use this guidebook to determine definitions, how and where to enter data and to better understand what types of terms should be used to populate the spreadsheet. Each of the metadata fields is arranged in the following order:

Definition: The definition of the field.

Required: Denotes if a value for the field is required. If "Required" is marked “yes,” then a value (if one is known) must be included in the spreadsheet.

Local Input: Denotes who completes the field. If Local Input is marked “yes” then the contributing organization is responsible for entering that information. If it is marked “no,” then the MDL Metadata Coordinator completes the field.

Enter Data into Spreadsheet Column: Instructs contributing organizations into which column to enter the data in the spreadsheet.

Guidelines: These guidelines are intended to help contributors complete the data entry. Scope and content notes and the “rules” for completing the field are provided here.

Minnesota Reflections Input Options: Some fields, such as Title and Creator, require contributors to type in the values. Other fields, such as *Minnesota Reflections Topic* and *Item Physical Format*, are populated using Pull-Down Menus or selected from a pre-defined list of options. When a Pull-Down Menu or a pre-defined list is used to populate a field, the guidebook will include the list of options from which a value is to be selected or a link to an external website where those options are located.

Examples from Minnesota Reflections: Whenever possible, examples from *Minnesota Reflections* are included for illustrative purposes.

QUESTIONS? Contact the MDL Metadata Coordinator with questions about metadata creation. Please contact the MDL Outreach Coordinator with questions regarding all other aspects of your project.

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II. DESCRIPTIVE METADATA

What is Descriptive Metadata? Put simply, descriptive metadata is the information that uniquely describes and identifies an item – whether the item is a document, image or map. This descriptive information enables users to find an item in *Minnesota Reflections* (<http://reflections.mndigital.org>), the Minnesota Digital Library’s online discovery tool.

Unless otherwise indicated, Descriptive Metadata is provided by the contributing institution. Review the list of metadata fields prior to beginning your data entry project. You should look for two things: fields that are designated as “Required” and fields that require “Local Input.” Required fields must contain a value (if one is known). Contributing organizations should make every effort to complete all of the required fields. Local input fields are those fields which must be completed by the contributing organization.

Title

Definition: A descriptive name or phrase by which the item may be identified.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Title

Guidelines for Data Entry: There are two types of titles: Formal and Descriptive.

- **Formal Titles** are those that have been previously created or assigned. Examples of formal titles include those found on books, journals and other publications. Another example of a formal title is the printed title on a postcard. If the item has been published, transcribe the item title exactly as it appears in its published form.

Capitalization in Formal Titles: Formal Titles should transcribe the title as it appears in the original including all capitalization and punctuation.

Examples of Formal Titles in *Minnesota Reflections*:

Annual Progress Report Dodge County Extension Service 1977-78

Standard Atlas, Blue Earth County

Views on Upper Mississippi River

- **Descriptive Titles** are created when an item does not have a formal title. For items without formal titles, such as most historic photographs, create a brief descriptive title that will assist users in locating the item and determining its content. Limit your description to a phrase that will enable users to locate the item. A more detailed description of the object should be recorded in the *Description* field. Note: Descriptive titles are far more common in *Minnesota Reflections* than formal titles.

Capitalization in Descriptive Titles: When creating a Descriptive Title, always capitalize the first word in the title. Proper names of individuals, companies, and place names should also be capitalized.

Creating Descriptive Titles: Three of the most common subjects for historic materials are **People, Houses/Individual Buildings, and City/Town views**. How do you create descriptive titles for images, documents and audio/visual materials? A benchmark of a good descriptive title is “Specificity.” Specificity means creating titles that uniquely and specifically describe what is in the image.

1. **People** - Identify people by first and last name. Differentiate between professional studio portraits and informal photography. Informal snapshot photography can often be further identified by places and activities. Include the city OR township OR county name to help create specificity in the title. Do NOT include all three. The city, township or county name should then be followed by the state name.

Ordering of Title: FIRST and LAST NAME, CITY or TOWNSHIP or COUNTY, STATE

Photographic Example: Portrait of James J. Hill, St. Paul, Minnesota

Photographic Example: Group of men and women at Minneopa State Park, Blue Earth County, Minnesota

Oral History Example: Interview with Andrew Marlow (1944-), St. Cloud State University Oral History Collection, St. Cloud, Minnesota

Postcard Example: Adeline Nyberg and Marian Johnson, St. Peter, Minnesota

2. **Houses and Buildings** - Include the building’s identifying information such as the name of the building’s owner and/or the street address if known. If the title appears to be getting too long, some of the information can be placed in the description. Include the city OR township OR county name to help create specificity in the title. Do NOT include all three. The city, township or county name should then be followed by the state name.

Ordering of Title: BUILDING NAME and/or ADDRESS, CITY or TOWNSHIP or COUNTY, STATE

Photographic Example: Public Library, Rochester, Minnesota

Postcard Example: Administration Building, Concordia College, St. Paul, Minnesota

- 3. City and Town Views** - Include street names, business names, and the directional view if known followed by the name of the city and the state name.

Ordering of Title: VIEW or STREET NAME, CITY or TOWNSHIP, STATE

Postcard Example: Main Street, Anoka, Minnesota

Examples of Descriptive Titles in *Minnesota Reflections*:

	NOT Descriptive Titles	Good Descriptive Titles	Better Descriptive Titles
	These titles lack specificity and do NOT assist users in their search for materials.	These are examples of basic descriptive titles.	These titles provide users with more specific information and relay exactly what is in the image.
People	Man	Portrait of Forest L. Pinney	Portrait of Forest L. Pinney, Anoka, Minnesota
	Crowd of people	Group portrait, Thief River Falls	Members of the Board of Education, Thief River Falls, Minnesota
	Oral history	Oral history interview with Andrew Marlow, St. Cloud, Minnesota	Interview with Andrew Marlow (1944-), St. Cloud State University Oral History Collection, St. Cloud, Minnesota
Houses and Buildings	House	House in Melrose, Minnesota	First frame house built north of Melrose, Minnesota
	Downtown business	Axel's, Minneapolis	Axel's Lunch Room, Minneapolis, Minnesota
	Hotel	Hotel, Ely, Minnesota	Pioneer Hotel, Ely, Minnesota
	Church	Church in Pemberton, Minnesota	Medo Lutheran Church, Pemberton, Minnesota
	Hospital	Bethany Hospital, Thief River	Bethany Hospital, Thief River Falls, Minnesota
City and Town Views	View of a river	Steamboat "War Eagle" on a river	Steamboat "War Eagle" unloading cargo, Fountain City, Minnesota
	Street view of city	Street view, Greenbush	Bird's eye view of the city, Greenbush, Minnesota
	Main Street	Main Street, Anoka,	Main Street looking east, Anoka, Minnesota

Creator

Definition: The name of the creator of the item (e.g. photographer, author, artist), either an individual or an organization.

Required: Yes (if available)

Local Input: Yes

Enter Data into Spreadsheet Column: Creator

Guidelines for Data Entry: Enter the name of the individual or organization responsible for creating the item.

Record the name of the creator using the following format:

Last name, First name, Middle Name or Initials (if known), Life dates (if known)

If an organization or corporate body created the object, record the name of the organization or corporate body. If more than one creator is identified, record each creator name separated by a semicolon and one space.

The name of individual photographers should be entered in the *Creator* field; photography studios should be entered into the *Contributor* field. If the photography studio information is provided but no photographer is listed, leave the *Creator* field blank and enter the studio information in the *Contributor* field.

For the purposes of oral history interviews, the creator is the person being interviewed. The oral history documents that person's story and experiences. The name of the interviewer should be assigned to the Contributor field.

Examples in *Minnesota Reflections*:

Whitney, Joel Emmons, 1822-1886

Minnesota (Ter.) Constitutional convention (1857)

Ward, Barbara; Ward, Gerald (*note: this is an illustrative example but is not in Minnesota Reflections*)

Contributor

Definition: The name of an individual or an organization that played a **secondary role** in the creation of the item (e.g. editor, photography studio).

Required: Yes (if available)

Local Input: Yes

Enter Data into Spreadsheet Column: Contributor

Guidelines for Data Entry: Use this field to record the names of people and organizations that contributed to the creation of the item, but are not deemed as fully responsible as a creator. For example, a photography studio should be listed as a contributor. Record the name of an individual contributor using the following format:

Last name, First name, Middle Name or Initials (if known), Life dates (if known)

If an organization or corporate body contributed to the creation of the item, record the corporate name using natural word order. If more than one contributor is identified, record all names separated by a semicolon and one space. If the city and state is provided for the contributor, record it separated from the name by one space and enclosed in parentheses. Spell out the state name after the city name within the parentheses. Separate the city and state names by a comma and one space. If no city or state is provided, simply enter the contributor name.

For the purposes of oral history interviews, the contributor is the person conducting the interview. The purpose of the oral history is to document the interviewee’s story and experiences. The interviewer’s role as a Contributor is to facilitate the telling of those experiences.

Examples in *Minnesota Reflections*:

J. H. Whitney's Fine Art Gallery (Rochester, Minnesota)
Holm Studio (Alexandria, Minnesota)

NOTE: DO NOT use this field to enter information on who donated the original object to your organization or information regarding the item’s provenance. Information about the organization that owns or holds the rights to the original item should be entered in the *Contributing Organization* field.

The following table demonstrates the relationship between the Creator, Contributor and Publishing Agency fields. It should be noted that not all of these fields will be used all of the time. There will instances when you will use only one of these fields; and there will be other instances when you use two fields or even all three of the fields. Adding metadata to any of these fields is dependent on the type of materials you have, as well as how much information you have.

Item Physical Format:	Title:	Creator:	Contributor:	Publishing Agency:
Oral histories	Interview with Guillermo Cuellar, A Measure of the Earth: An Oral History of the Potters of the St. Croix River Valley, Minnesota	Cuellar, Guillermo, 1951-; MacGregor, Laurie	Wilhide, Anduin (interviewer); McNabb, Tierney (project assistant)	
Black-and-white photographs	Portrait of John Otherday, St. Paul, Minnesota	Whitney, Joel E., 1822-1886	Whitney's Gallery (St. Paul, Minnesota)	
Books	Reminiscences, Memoirs, Lectures of Monsignor A. Ravoux, V.G.	Ravoux, Augustine, 1815-1906		Brown, Treacy & Co. (St. Paul, Minnesota)

Description

Definition: A narrative, textual description of the item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Description

Guidelines for Data Entry: Use this field to record information about the people, places, events, or themes depicted in the item. The description is typically a more detailed extension of the information recorded in the *Title* field. While there is no rule as to how much information should be included in a description, contributors should try to find a balance between providing too much and not enough information.

The description should be written in complete sentences and the field should read as a single block of text. The block of text should end with a period. Do not use abbreviations, ampersands or paragraph and line breaks. Maintain standard capitalization rules. Do not use all capital letters to set words or phrases apart or to denote importance. Use double quotation marks to denote the name of a train, ship, steamboat, farm, etc. Do not include any electronic coding, such as a web address (URL), that could create structural changes to the text.

Examples in *Minnesota Reflections*:

Too Little Information: Main Street

Too Much Information: Sunny day in the northern Minnesota woods. Vertical photograph showing a dirt path through the woods. The path is lined with dirt and chipped wood and curves to the right, disappearing behind a number of trees and shrubs. The sun is shining through the trees and the shadows are cast into the path. The trees along the left side of the path are examples of Red Pine (also called Norway Pine) as well as a number of White Pine (Minnesota's State tree). There is a proliferation of low shrub-type plants as well. On the right of the path is a low-lying plant with light green leaves. This is perhaps a young birch tree or perhaps a dogwood plant. There are a number of stumps near the birch tree that were originally large trees that may have been cut down during a logging operation at an earlier time. The reverse of the photo is written in black ball point ink, "A Great day for a hike! Father's Day 1954." It is not known who took the photo or who wrote the inscription on the back of the photo. (*Note: this is an illustrative example but is not in Minnesota Reflections*)

Good Description: Park Avenue Methodist Church outing at Red Rock in Newport Township.

Date of Creation

Definition: The date the item was created.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Date of Creation

Guidelines for Data Entry: Record the date on which the item was created. If the exact date is not known, consider creating a date range for the item. Using visual cues such as hair and clothing styles, automobile makes, etc. create a date range that can help users place an item into a certain time frame. Date values must be recorded according to these specific guidelines:

- **Year only:** use when only the year is known. Record in the form of yyyy
- **Year and Month:** use when the year and month are known. Record in the form yyyy-mm
- **Year, Month, Day:** use when the exact date is known. Record in the form yyyy-mm-dd
- **Uncertain Date:** use when date is uncertain. Place a question mark after the date value. Do NOT use the term “circa.”
- **Date Range:** use when date is uncertain but falls within a likely range. Record the earliest and latest dates separated by one space-a hyphen-one space in the form of yyyy - yyyy.

Examples in *Minnesota Reflections*:

- **Year only:** 1872
- **Year and Month:** 1890-03 (use for March 1890)
- **Year, Month, Day:** 1905-05-22 (use for May 22, 1905)
- **Uncertain Date:** 1875? (means possibly 1875; use ? instead of “circa”)
- **Date Range:** 1850 - 1895 (use for the date range between 1850 and 1895) Note: a space is required before and after the hyphen.

Publishing Agency

Definition: Information regarding the publisher of the item should be denoted here.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: Publishing Agency

Guidelines for Data Entry: Enter the publisher’s name. If the city is provided, record it separated from the name by one space and enclosed in parentheses. If the state to which the publishing city belongs is given, record it after the city name. Spell out the state name after the city name within the parentheses.

Separate the city and state names by a comma and one space. If the state is unknown, do not include it. If multiple city names are identified, list only the most prominent; if all are given equivalent prominence, enter only the first.

NOTE: Use this field to record the names of the publishing firms that printed commercial postcards. Do not put postcard publishing information in the Creator or Contributor fields.

Examples in *Minnesota Reflections*:

C. U. Williams (Bloomington, Illinois)

R. Steinman and Company (St. Paul, Minnesota)

Dimensions

Definition: Information regarding the physical dimensions or extent of the item should be recorded here.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: Dimensions

Guidelines for Data Entry: Enter the size of the item (height x width), in **centimeters**. One inch is equal to 2.54 centimeters. The “x” separating the height and width dimensions should be lowercase. For audio and video materials, enter the length or duration of the item. Times are entered in hours, minutes and seconds separated by colons and no spaces.

Examples in *Minnesota Reflections*:

15 x 10 (15 cm in vertical dimension x 10 cm in horizontal dimension)

02:36:12 (denoting an audio file 2 hours, 36 minutes and 12 seconds in length)

NOTE: Use the following 3 fields to describe an item from the most general term, *Minnesota Reflections Topic*, to the most specific term, *Item Physical Format*.

Minnesota Reflections Topic

Definition: One of 20 topical terms that best characterizes or describes the general subject or topic of the item being described.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: *Minnesota Reflections* Topic

Guidelines for Data Entry: Use the pull-down list in the metadata spreadsheet to select the term that best characterizes or describes the subject of the item. Only one value may be assigned. Please refer to *Appendix A* for guidelines and examples.

NOTE: There is a subjective element to assigning the topic values. Sometimes an item can span more than one of these topical terms. Think about how users will look for and find this item; select the term that you think BEST describes the item.

***Minnesota Reflections* Input Options:**

Agriculture	Crime and Punishment	Politics and Government
American Indians	Education	Religion
Animals	Environment	Social Issues
Architecture	Health and Medicine	Sports and Recreation
The Arts	Immigration and Ethnicity	Transportation
Business and Industry	Labor	Weather
Communication	People of Minnesota	

Examples in *Minnesota Reflections*:

People of Minnesota
The Arts
Labor
Transportation

Item Type

Definition: One of nine broad terms which characterize the type of item being described. Please refer to *Appendix B* and *Appendix C* for a detailed list of *Item Type* terms and their corresponding *Item Physical Format* terms.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Item Type

Guidelines for Data Entry: Use the pull-down list in the metadata spreadsheet to select the term that best characterizes or describes the type of item being described. Only one value may be assigned.

Minnesota Reflections Input options:

Term	Definition
Cartographic	Use for all cartographic materials, including maps, charts, atlases and plat books.
Mixed Material	Use to indicate that the item is comprised significantly of two or more types of materials. Use Mixed Material to describe a single item that is comprised of multiple, different item types such as text, photographs, and sound recordings. A good example is a scrapbook, which may contain still images (such as postcards and photographs), textual materials (such as letters and newspaper clippings) and three dimensional objects (such as pins, ribbons, souvenir coins or tokens).
Moving Image	Use for motion pictures, video recordings, television programs, digital video. This does NOT include slides and transparencies (use <i>Still Image</i>).
Notated Music	Use for graphic representations of musical works. This includes musical scores, diagrammatic representations, square note notation, chant notation, etc. For digitized audio recordings, use <i>Sound Recording-Musical</i> or <i>Sound Recording-Nonmusical</i> .
Sound Recording – Musical	Use when a resource is predominately a musical sound recording. For sheet music, scores and songbooks use <i>Notated Music</i> .

Sound Recording – Nonmusical	Use when the sound recording is predominately nonmusical in nature.
Still Image	Use when a resource is a "Two-Dimensional Graphic." This includes drawings, prints, paintings, postcards, and posters; as well as all photographic materials – such as photographic prints, negatives, 35 mm slides and transparencies.
Text	Use for text-based materials such as correspondence, annual reports, books, pamphlets, diaries, etc. Text materials can be handwritten, typed or computer-generated.
Three-Dimensional Object	Use for all three-dimensional objects. This includes a wide range of materials such as tools, equipment, costume, furnishings, etc. Three-dimensional objects are included in <i>Minnesota Reflections</i> via documentary photograph intermediaries; a method whereby a professional photographer in a museum or other cultural organization setting photographs three-dimensional objects, the intent of which is to photographically represent the three-dimensional object in two-dimensional form.

Example in *Minnesota Reflections*:

Text
 Cartographic
 Still Image

Item Physical Format

Definition: Selected from controlled lists, these terms further specify and define the broader term previously selected in *Item Type*.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Item Physical Format

Guidelines for Data Entry: After selecting the appropriate *Item Type* term, a pull-down menu listing all of the conforming *Item Physical Format* terms will be available in the metadata spreadsheet. These options will define the item with greater specificity. Select the term that best describes the physical nature of the item. Only one value may be assigned.

Minnesota Reflections Input options: Please see *Appendix B* for a comprehensive list of *Item Type* terms and their related *Item Physical Format* terms. Please see *Appendix C* for definitions of the *Item Physical Format* terms in the pull-down menu.

Examples in Minnesota Reflections:

Diaries (associated with the Item Type: Text)

Black-and-white photographs (associated with the Item Type: Still image)

Plat Maps (associated with the Item Type: Cartographic)

Examples of Assigned Values

Recap: How should data in these three fields look? Review the following table for some examples of how to describe an item starting with the most general term and ending with the most specific term.

Item being described:	Minnesota Reflections Topic:	Item Type:	Item Physical Format:
Photograph of James J. Hill	People of Minnesota	Still Image	Albumen prints
Map of St. Louis County, Minnesota	Communication	Cartographic	Plat Maps
Letter from Sinclair Lewis to Marcella Powers	People of Minnesota	Text	Letters (correspondence)
Cassette tape of school children singing (<i>note: this is an illustrative example but is not in Minnesota Reflections</i>)	Education	Sound Recording-Musical	Songs
Ojibwe bandolier bag (<i>note: this is an illustrative example but is not in Minnesota Reflections</i>)	American Indians	Three-Dimensional Object	Costumes

Formal Subject Headings

Definition: A formal subject term or terms describing the people, organizations, events or themes depicted in the item.

NOTE: These terms are assigned by the MDL Metadata Coordinator using Library of Congress Subject Headings.

Required: Yes

Local Input: No

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign all *Formal Subject Headings* after the project has been added to *Minnesota Reflections*.

Examples in *Minnesota Reflections*:

Libraries; Children; Children's clothing

Dams; Building sites

River boats

Locally Assigned Subject Headings

Definition: A term or terms describing the people, organizations, events or themes depicted in the item. These terms are assigned by the contributing organization.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Locally Assigned Subject Headings

Guidelines for Data Entry: Record here information about the people, organizations, events, or themes that are depicted in the item. Enter as many terms as are appropriate. Separate each term from the preceding one by inserting a semicolon and one space. Personal names should be recorded using the following format: last name, first name, middle initial, life dates. Do not use ampersands to connect subject elements. At least one local subject must be included. The first word in a local subject heading MUST be capitalized.

Examples in *Minnesota Reflections*:

Veterans; Grand Army of the Republic

Christmas; Family life

Hill, James J.

Minnesota City or Township

Definition: Enter the name of the incorporated city or village or the name of a civil township described in the item.

Required: Yes (if available)

Local Input: Yes

Enter Data into Spreadsheet Column: Minnesota City or Township

Guidelines for Data Entry: Select the name of the city, village, or township that describes the location named or shown in the item. When multiple cities or townships are entered, clearly separate each entry by a semicolon and one space. All entries must conform to *Minnesota Reflections* approved values. Complete this field, even if this information was entered in the *Title* or *Description* fields.

If a city or township name does not appear in Minnesota Place Names, do NOT include it here. Put the information in the *Description* field.

Leave this field blank, if an item has a Minnesota state-wide focus. Items considered to have state-wide focus include Minnesota state statutes, booklets, state tourism advertisements, and cartographic materials such as maps and atlases with state-wide coverage.

Minnesota Reflections Input Options: All values must come from the *Minnesota Place Names* online thesaurus available at: <http://mnplaces.mnhs.org/upham/index.cfm>.

Examples in *Minnesota Reflections*:

Pine River Township
St. Cloud
Zumbrota
Minneapolis; St. Paul

District

Definition: The name of a place described in the item which does not correspond to a formal unit of government.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: District

Guidelines for Data Entry: Enter the name of a district or region named or shown in the item. When multiple districts are entered, clearly separate each entry by a semicolon and one space.

Examples in *Minnesota Reflections*:

Central business district
Third Ward
East side; Arcade

Minnesota County

Definition: The name of the Minnesota County that corresponds to the place named or shown in the item.

Required: Yes (if available)

Local Input: Yes

Enter Data into Spreadsheet Column: Minnesota County

Guidelines for Data Entry: Select the Minnesota County that characterizes the location shown or described in the item. When multiple counties are entered, clearly separate each entry by a semicolon and one space. Complete this field even if this information was previously entered in the *Title* or *Description* fields.

Leave this field blank, if an item has a Minnesota state-wide focus. Items considered to have state-wide focus include Minnesota state statutes, booklets, state tourism advertisements, and cartographic materials such as maps and atlases with state-wide coverage.

***Minnesota Reflections* Input Options:**

Aitkin	Dakota	Lac qui Parle	Olmsted	Stearns
Anoka	Dodge	Lake	Otter Tail	Steele
Becker	Douglas	Lake of the Woods	Pennington	Stevens
Beltrami	Faribault	Le Sueur	Pine	Swift
Benton	Fillmore	Lincoln	Pipestone	Todd
Big Stone	Freeborn	Lyon	Polk	Traverse
Blue Earth	Goodhue	McLeod	Pope	Wabasha
Brown	Grant	Mahnomen	Ramsey	Wadena
Carlton	Hennepin	Marshall	Red Lake	Waseca
Carver	Houston	Martin	Redwood	Washington
Cass	Hubbard	Meeker	Renville	Watowan
Chippewa	Isanti	Mille Lacs	Rice	Wilkin
Chisago	Itasca	Morrison	Rock	Winona
Clay	Jackson	Mower	Roseau	Wright
Clearwater	Kanabec	Murray	St. Louis	Yellow Medicine
Cook	Kandiyohi	Nicollet	Scott	
Cottonwood	Kittson	Nobles	Sherburne	
Crow Wing	Koochiching	Norman	Sibley	

Example in *Minnesota Reflections*:

State or Province

Definition: The name of the U.S. state or Canadian province of the place shown or described in the item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: State or Province

Guidelines for Data Entry: Select the state or Canadian province that characterizes the location shown or described in the item. When multiple states or provinces are entered, clearly separate each entry by a semicolon and one space. Complete this field even if this information was previously entered in the *Title* or *Description* fields.

Minnesota Reflections Input Options: U.S. States

Alabama	Hawaii	Michigan	New Mexico	South Dakota
Alaska	Idaho	Massachusetts	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

Minnesota Reflections Input Options: Canadian Provinces

Alberta	Northwest Territories	Quebec
British Columbia	Nova Scotia	Saskatchewan
Manitoba	Nunavut	Yukon
New Brunswick	Ontario	
Newfoundland and Labrador	Prince Edward Island	

Examples in Minnesota Reflections:

Minnesota

Minnesota; Iowa

Minnesota; South Dakota

Country

Definition: The name of the country shown or described in the item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Country

Guidelines for Data Entry: Select the country that characterizes the location shown or described in the item. When multiple countries are entered, clearly separate each entry by a semicolon and one space. Complete this field even if this information was previously entered in the *Title* or *Description* fields.

Minnesota Reflections Input Options: The country designation in *Minnesota Reflections* should **ALMOST ALWAYS** be the United States. Canada may also be assigned as a country value if an item spans, crosses or relates to the Minnesota/Canadian border. Some examples of items that would use Canada as a country value: historic postcards of the Northwest Angle, photographs of a 1954 canoe trip into Lac La Croix (one of the major border lakes in northern Minnesota), letters and memorandums that relate to the development of the BWCAW/Quetico Provincial Park, etc.

Other country values may be assigned, but please discuss your project's scope with the MDL Outreach Coordinator prior to submitting your project proposal.

Examples in *Minnesota Reflections*:

United States

Canada

Geographic Feature

Definition: The name of a geographic feature described in the item.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: Geographic Feature

Guidelines for Data Entry: Enter a term that names a river, lake, landform, or other geographic feature shown in the image into the spreadsheet column Geographic Feature. When multiple terms are used, separate them by a semicolon and one space. All entries must conform to *Minnesota Reflections* approved values.

If a Geographic Feature does not appear in Minnesota Place Names, do NOT include it here. Put the information in the Description field.

Minnesota Reflections Input Options: All values must come from the *Minnesota Place Names* online thesaurus available at: <http://mnplaces.mnhs.org/upham/index.cfm>.

Examples in *Minnesota Reflections*:

Harriet Island
Burntside Lake
Birch Coulee

Latitude

Definition: Lines of Latitude are the horizontal lines that run east-to-west or west-to-east either north or south of the equator. A specific latitude may be combined with a specific longitude to give a precise position on the earth's surface.

Required: No

Local Input: No

Enter Data into Spreadsheet Column: Latitude

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct latitude after the project has been added to *Minnesota Reflections*. Values are entered using the decimal system.

Examples in *Minnesota Reflections*:

47.8935175

Longitude

Definition: Lines of Longitude are the vertical lines that run north-to-south or south-to-north either east or west of the Prime Meridian. A specific longitude may be combined with a specific latitude to give a precise position on the earth's surface.

Required: No

Local Input: No

Enter Data into Spreadsheet Column: Longitude

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct longitude after the project has been added to *Minnesota Reflections*. Values are entered using the decimal system.

Examples in *Minnesota Reflections*:

Geographic Metadata Source

Definition: A number of different standards currently exist for creating and capturing geographic metadata. Capturing the data source helps preserve the data's value and ensures the overall accuracy and consistency of the geographic metadata in *Minnesota Reflections*.

Required: No

Local Input: No

Enter Data into Spreadsheet Column: Geographic Metadata Source

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct geographic metadata source after the project has been added to *Minnesota Reflections*.

Minnesota Reflections Input Options:

The following input options are listed in order of preference.

GNIS: whenever possible determine all geographic coordinates through the GNIS website at <http://geonames.usgs.gov/pls/gnispublic>. The GNIS organizes geographic features by class. The following list indicates the order of preference for the GNIS class terms used in *Minnesota Reflections*.

1. GNIS – Civil
2. GNIS – Populated Place
3. GNIS – Locale
4. GNIS – Unassigned

Bureau of Land Management: if no GNIS options are available, consult the BLM.
<http://www.blm.gov/wo/st/en/prog/more/gcdb.html>

Language

Definition: The language of the original resource.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: Language

Guidelines for Data Entry: In *Minnesota Reflections* the Language field should be applied to Text, Cartographic, Sound Recordings, and Moving Image materials. Text-based materials include Books, Booklets and Pamphlets. Cartographic materials include Maps and Atlases. The Language field can also be applied to some Still Images such as Postcards – due to the fact that postcards often feature printed captions and titles.

In cases of bi-lingual materials, separate each language with a semi-colon and a space. The use of the Language field does NOT apply to photographic works – and should be left blank.

Values for the Language field are derived from the ISO-639-2 standard which is administered by the Library of Congress. Information about the ISO Language Codes is available at:

http://www.loc.gov/standards/iso639-2/php/code_list.php

The ISO-639-2 standard lists the accepted English name, as well as the accepted French name and a 3-letter alpha code for each language. Input only the accepted English name of the language.

Examples in *Minnesota Reflections*:

English

English; Dakota

English; Swedish

III. ADMINISTRATIVE METADATA

What is Administrative Metadata? Administrative Metadata is the information that helps manage digital items, such as local identifiers, owners of the original, and any associated image rights.

In *Minnesota Reflections*, Administrative Metadata primarily provides users with information about the contributing organization: its individual collections, organization name and address, the organization’s rights management statement and information regarding the project’s funding source.

Unless otherwise indicated, the Administrative Metadata is provided by the contributing organization. Review the list of metadata fields prior to beginning your data entry. You should look for two things: fields that are designated as “Required” and fields that require “Local Input.” Required fields must contain a value (if one is known). Local Input fields are those fields which must be completed by the contributing organization.

Collection Name

Definition: The name of a larger collection or other entity of which the item being described is a part.

Required: No

Local Input: Yes

Enter Data into Spreadsheet Column: Collection Name

Guidelines for Data Entry: Use this field if an item belongs to a specific (often named) collection located within the contributing organization’s larger collection. A collection name may be comprised of a set of papers, three-dimensional objects, manuscripts, photographs, archival materials, etc.

Examples in *Minnesota Reflections*:

The Iron Range Research Center has contributed a number of individual photographs, documents and maps to *Minnesota Reflections* that are part of named collections within the IRRC.

Item	Collection Name	Contributing Organization
Map: Biwabik, Northeast Quadrangle	Ray Segar Map Collection	Iron Range Research Center
Morgan Park Clubhouse	Neighborhoods of Duluth, Minnesota	Northeast Minnesota Historical Center
Mouth of the Chippewa River	Views on the Mississippi River between Minneapolis, Minnesota and St. Louis, Missouri, 1883-1891	U.S. Army Corps of Engineers, St. Paul District

Contributing Organization

Definition: Name of the organization contributing the digital item to the *Minnesota Reflections*.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Contributing Organization

Guidelines for Data Entry: Record ONLY the name of the contributing organization.

Note: **DO NOT** use this field to enter donor information or provenance information from your organization.

Examples in *Minnesota Reflections*:

Iron Range Research Center

Anoka County Historical Society

Contact Information

Definition: Name, address and website address (if applicable) of the organization contributing the digital item to the *Minnesota Reflections*.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Contact Information

Guidelines for Data Entry: Record the name, street address and website (if applicable) of the contributing organization.

Note: **DO NOT** use this field to enter donor information or provenance information from your organization.

Examples in *Minnesota Reflections*:

Iron Range Research Center, 1005 Discovery Drive, Chisholm, Minnesota 55719

<http://mndiscoverycenter.com/research-center>

Anoka County Historical Society, 2135 Third Avenue North, Anoka, Minnesota 55303 <http://ac-hs.org>

Rights Management

Definition: Information about any rights that may be held in and over the item. It may be either a narrative statement or a URL that links to a more formal rights page.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Rights Management

Guidelines for Data Entry: Record any rights management information as supplied by the contributing organization.

Examples in *Minnesota Reflections*:

This image may not be reproduced for any reason without the express written consent of the Nicollet County Historical Society.

Use of this image may be governed by U.S. and international copyright laws. Please contact the Performing Arts Archives for permission to publish this image.

<http://special.lib.umn.edu/manuscripts/perfart.html>

Public domain. No restrictions.

Local Identifier

Definition: A unique string that identifies the item being described. *Local Identifiers* can be numbers, letters, or a combination of both. The purpose of this field is to make it possible to associate a digital image and its associated metadata with the original item from which it was derived. All contributing organizations must supply a unique, locally defined identifier for each item submitted to *Minnesota Reflections*.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Local Identifier

Guidelines for Data Entry: Record a unique identifier such as a library call number, an accession number, a collection identification number, or other local control number that uniquely identifies the item being described.

Examples in *Minnesota Reflections*:

1986.005.0002 (*an accession number supplied by the Pipestone County Historical Society*)

MDL Identifier

Definition: A uniquely assigned file name (excluding the file extension) of the digital item. Type A participants will have this code assigned by the MDL Outreach Coordinator. All Type B participants must have a three-letter prefix assigned by the MDL; contact the MDL Outreach Coordinator to obtain this code.

Required: Yes

Local Input: No for Type A participants; Yes for Type B participants

Enter Data into Spreadsheet Column: MDL Identifier

Guidelines for Data Entry: Record the MDL identifier using a three-character code that corresponds either to: 1) the officially sanctioned MDL scanning center charged with providing digitization services, or 2) the contributing organization which has chosen to scan its own materials (Type B). This three-character code should be followed by a five-digit number (be sure to include leading zeros). This identifier is used as the file name for the digital image and should be assigned to only one file.

NOTE: Third-party scanning vendors must use the three-character code that corresponds to the contributing organization for which they are providing services.

Examples in *Minnesota Reflections*:

mhs00401
irr00125

Project Affiliation

Definition: Denotes the funding year in which the digitization project was approved.

Required: Yes

Local Input: No

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct *Project Affiliation* after the project has been added to *Minnesota Reflections*.

Examples in *Minnesota Reflections*:

Minnesota Reflections 2006-07
Minnesota Reflections 2009-10

Fiscal Sponsor

Definition: Denotes the funding source for the digitization project.

Required: Yes

Local Input: No

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct *Fiscal Sponsor* after the project has been added to *Minnesota Reflections*.

Examples in *Minnesota Reflections*:

Grant provided to the Minnesota Digital Library Coalition through the Library Services and Technology Act (LSTA) and the State Library Services and School Technology unit of the Minnesota Department of Education.

IV. TECHNICAL METADATA

What is Technical Metadata? Technical metadata is also sometimes called “process-related metadata” and it captures information about the process of digitizing an item. Technical metadata does NOT describe the item being digitized (that is Descriptive Metadata). Technical metadata captures information regarding an item’s digital format, technical characteristics, storage and location. Technical metadata helps repositories manage and preserve digital items over time.

NOTE: Section IV is designed primarily for Type B contributors who scan their own images or who contract with vendors to scan their images. Type A participants, those that have chosen to have their items scanned at one of the MDL’s scanning centers, should ignore this section.

Unless otherwise indicated, the Technical Metadata is provided by the contributing organization or by its vendor. Review the list of metadata fields prior to beginning your data entry project. You should look for two things: fields which are designated as “Required” and fields that require “Local Input.” Required fields require a value (if one is known). Local Input are those fields which must be completed by the contributing organization or by its vendor.

Scanning Center

Definition: The organization responsible for creating the digital item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Scanning Center

Guidelines for Data Entry: Record the name and address of the organization or vendor that created the digital item (scanned the material). This may not always be the same organization the holds the original items.

Examples in *Minnesota Reflections*:

Minnesota Historical Society, 345 Kellogg Blvd. West, St. Paul, MN 55102-1906

Iron Range Research Center, Chisholm, Minnesota

Object File Name

Definition: The file name, including extension, of the item being described. Object file names should correspond to the MDL Identifier. Be sure to include the file extension (e.g. .tif, .wav, .jp2).

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Object File Name

Guidelines for Data Entry: Record the Object File Name as the same three-character, five-digit name used in the *MDL Identifier* field. Be sure to include the applicable file extension.

Examples in *Minnesota Reflections*:

mhs00401.tif

umn94142.wav

irr00125.tif

Date Digital

Definition: Date Digital is the date that the scanning center created the master digital version of the item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Date Digital

Guidelines for Data Entry: Record the date using the International Standard for Organization ISO-8601 format: YYYY-MM-DD; YYYY is the year, MM is the month of the year between 01 (January) and 12 (December), and DD is the day of the month between 01 and 31.

Example in *Minnesota Reflections*:

2006-12-05

Item Digital Format

Definition: The Internet Media Type for the digital item. This field is used to describe the **access file only**.

Required: Yes

Local Input: No

Enter Data into Spreadsheet Column: Item Digital Format

Guidelines for Data Entry: Assigned directly by the MDL Metadata Coordinator. This field does not appear on any of the metadata spreadsheets. The MDL Metadata Coordinator will assign the correct *Item Digital Format* after the project has been added to *Minnesota Reflections*.

For more information and a complete list of valid Internet Media Types please refer to <http://www.iana.org/assignments/media-types/>.

Examples in *Minnesota Reflections*:

image/jp2

audio/mpeg

Master File Format

Definition: The file type of the master digital item.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Format

Guidelines for Data Entry: Using the pull-down list provided in the metadata spreadsheet, select the file format of the item.

***Minnesota Reflections* Input Options:** All options conform to valid Internet Media Types. For more information and a complete list of valid Internet Media Types please refer to <http://www.iana.org/assignments/media-types/>.

image/tiff

image/jp2

audio/wav

video/mp4

video/avi

video/x-ms-wmv

video/quicktime

Examples in *Minnesota Reflections*:

image/tiff

audio/wav

Master File Size

Definition: The file size expressed as the number of bytes.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Size

Guidelines for Data Entry: Enter the master file size expressed as the number of bytes.

Example in *Minnesota Reflections*:

18070004

61888412

Master File Bit Depth

Definition: The bit depth at which the item was scanned. Bit depth (sometimes referred to as color depth) describes the number of bits used to represent the color of a single pixel.

NOTE: A higher bit depth provides a broader range of distinct colors. MDL best practices recommend scanning items at 24-bit RGB color. Please contact the MDL Outreach Coordinator if you are considering submitting a project that deviates from MDL standards.

Common bit depths include:

1-bit: 2 colors, black and white

8-bit: 256 colors or shades of gray available

24-bit: 16 million colors available

Required: Yes (if applicable)

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Bit Depth

Guidelines for Data Entry: Enter the bit depth at which the image was scanned. Contributing organizations submitting video or audio files should leave this field blank.

Examples in *Minnesota Reflections*:

Master File Resolution

Definition: The resolution at which the item was scanned (not spatial resolution). This resolution should be expressed in pixels per inch (ppi).

Required: Yes (if applicable)

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Resolution

Guidelines for Data Entry: Enter the resolution (not spatial resolution) at which the item was scanned. This resolution should be expressed in pixels per inch (ppi). Contributing organizations submitting video or audio files should leave this field blank.

Examples in *Minnesota Reflections*:

300

450

600

Master File Compression

Definition: The compression scheme (if any) used for optimized storage and delivery of the digital object. The MDL requires that all master files be uncompressed.

NOTE: Please contact the MDL Outreach Coordinator if you are considering submitting a project that deviates from MDL standards.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Compression

Guidelines for Data Entry: For all *Minnesota Reflections* projects we strongly recommended that all master files be saved with no compression. Enter 'None' into the spreadsheet column *Master File Compression* in order to express the fact that the master image was saved uncompressed.

Example in *Minnesota Reflections*:

None

Master File Width

Definition: The width, expressed in pixels, of the digital item.

Required: Yes (if applicable)

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Width

Guidelines for Data Entry: Enter the width, expressed in pixels, of the digital item. Contributing organizations submitting audio files should leave this field blank.

Example in *Minnesota Reflections*:

4037

5109

Master File Height

Definition: The height, expressed in pixels, of the digital item.

Required: Yes (if applicable)

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Height

Guidelines for Data Entry: Enter the height, expressed in pixels, of the digital item. Contributing organizations submitting audio files should leave this field blank.

Example in *Minnesota Reflections*:

5564

4364

Master File Hardware

Definition: The name and model number of the hardware used to create the digital object. This is intended to capture information about the scanner or digital audio/video equipment used to create the digital content.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Hardware

Guidelines for Data Entry: Enter the hardware device used to create the digital object. (Examples: flatbed scanner, digital camera, etc.) Include the manufacturer's name and model name/number.

Examples in *Minnesota Reflections*:

Epson Expression 10000XL

PhaseOne P65

Master File Software

Definition: The name and version number of the software used to create the digital object.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Software

Guidelines for Data Entry: If more than one piece of software is used in the creation of the digital object, record both names separated by a semi-colon and a space.

Examples in *Minnesota Reflections*:

Adobe Photoshop CS5

SilverFast Ai 6; Adobe Photoshop CS5 (*note: this is an illustrative example but is not in Minnesota Reflections*)

Master File System

Definition: The computer operating system and version used by the computer with which the digital object was created.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File System

Guidelines for Data Entry: Enter the computer operating system and version (to the greatest specificity possible) used by the computer with which the digital object was created.

Examples in *Minnesota Reflections*:

Windows XP

Mac OS10

Master File Checksum

Definition: An alpha-numeric value used to detect errors in file transmission or storage. The integrity of the digital data can be checked at a later time by re-computing the checksum and comparing it with the stored value. Checksums help to monitor the ongoing integrity of the digital objects.

Required: Yes

Local Input: Yes

Enter Data into Spreadsheet Column: Master File Checksum

Guidelines for Data Entry: Complete this field only if you have software that can generate an MD5 checksum. Enter the MD5 checksum value for the digital object.

Example in *Minnesota Reflections*:

38e41d48200aef78c1ee89542567ec00

APPENDIX A:

Assigning a *Minnesota Reflections* Topic Term

<i>Minnesota Reflections</i> Topics	What items go here?
Agriculture	Farms and farmers Homesteading Crops and fields Threshing Harvesting
American Indians	Individuals and group portraits Reservations, villages and houses Clothing and dress Native American boarding schools
Animals	Wild animals Pets Note: animals should dominate the image
Architecture	Houses and buildings Architectural drawings Vernacular architecture Urban planning
The Arts	Fine arts: paintings, sculpture, drawings, prints Art classes and education Theater and Vaudeville productions Opera Houses Music and musicians Dancers and dance performances Actors
Business and Industry	Main street Central business districts Individual stores and businesses
Communication	Newspapers Newsletters Advertisements Diaries Journals Letters
Crime and Punishment	Police officers Sheriffs State police

	Jails Prisons Posses Criminals
Education	Teachers Students Elementary schools High schools Colleges and universities School buildings Campus and school grounds
Environment	Forests Prairies Rivers and lakes State parks and City parks Landscape photography
Health and Medicine	Hospitals and clinics Doctors and Nurses Public health issues Vaccinations and inoculations Epidemics
Immigration and Ethnicity	Ethnic clubs and organizations Festivals and celebrations Ethnic dress and food-ways
Labor	Workers and employees Strikes May Day activities
People of Minnesota	Studio portraits Informal snapshots Groups of people Anonymous individuals Individuals recognized for their achievements
Politics and Government	Soldiers Veterans and veteran issues Veterans homes Political candidates Political rallies Presidential visits Courthouses County and state office buildings

Religion	<p>Churches Synagogues Congregations Baptisms Confirmations Sunday school Weddings Funerals Church socials, picnics and church suppers</p>
Social Issues	<p>U.S. citizenship Civil Rights GLBT issues Women's Movement WPA and CCC Drinking and Temperance Movement Prohibition German P.O.W.s in Minnesota</p>
Sports and Recreation	<p>Team and individual sports Hobbies Recreation activities Parades Carnivals County fairs Minnesota State Fair</p>
Transportation	<p>Airplanes Automobiles Trains Streetcars Boats used for transportation (vs. recreation) Horse and buggy Carts and wagons</p>
Weather	<p>Storm damage from tornados and windstorms Hail Droughts Floods Snowstorms</p>

APPENDIX B:

Relationship between Item Type and Item Physical Format

<i>Item Type Values</i>	<i>Item Physical Format Values</i>
Cartographic	Atlases Contour maps Engineering maps Fire insurance maps Forestry maps Maps Plats (maps) Relief maps Topographic maps Tourist maps Transportation maps Zoning maps
Mixed Material	No <i>Item Physical Format</i> values are defined as "Mixed Materials" means a multi-format item. Please leave the Item Physical Format field blank.
Moving Image	Home movies Newsreels Short subjects Television programs
Notated Music	Hymnals Scores Sheet music Songbooks Songs (document genre)
Sound Recording-Musical	Operas Songs
Sound Recording-Nonmusical	Broadcasts Oral histories Speeches

Still Image	Aerial photographs	
	Albumen prints	
	Architectural drawings (visual works)	
	Black-and-white photographs	
	Cabinet photographs	
	Car cards	
	Cartes-de-visite (card photographs)	
	Color photographs	
	Color transparencies	
	Collodion prints	
	Contact prints	
	Cyanotypes	
	Daguerreotypes (photographs)	
	Design drawings	
	Drawings (visual works)	
	Gelatin silver prints	
	Lantern slides	
	Negatives (photographic)	
	Paintings (visual works)	
	Panoramas	
	Photograph albums	
	Postcards	
	Posters	
	Prints (visual works)	
	Sketchbooks	
	Slides (photographs)	
	Stereographs	
	Studio portraits	
	Tintypes	
	Trade Cards	
	Text	Accounts
		Advertisements
		Affidavits
Announcements		
Articles		
Articles of incorporation		
Artists' statements		
Attendance Records		
Bills (legislative records)		
Books		
Booklets		
Broadsides (notices)		
Building permits		
Bulletins		
Business cards		
Calendars		

Catalogs
Certificates
Contracts
Deeds
Diaries
Diplomas
Documents (other)* see Appendix C note regarding this term
Genealogical tables
Greeting cards
Instructional materials
Insurance policies
Invitations
Invoices
Journals (accounts)
Leaflets (printed works)
Labels
Ledgers (account books)
Letters (correspondence)
Licenses
Magazines (periodicals)
Minutes (administrative records)
Membership cards
Memoirs
Memorandums
Menus
Muster rolls
Newsletters
Newspapers
Notes
Pamphlets
Pattern books
Poems
Postal cards
Proceedings
Programs
Radio scripts
Receipts (financial records)
Registrations (licenses)
Reports
Schedules (time plans)
Speeches
Stationery
Statutes
Telegrams
Tickets
Wedding announcements
Wills

Three-Dimensional Object	Boxes (containers)
	Canisters
	Medicine bottles
	Mortars
	Packaging
	Pennants
	Pestles
	Samples
	Sculpture (visual works)
	Trophies (objects)

APPENDIX C:

Glossary of Item Physical Format terms

- Select the **Item Type** first – then select an appropriate term from the **Item Type Physical Format** list below. See Appendix B for an illustration of the relationship between **Item Type** and **Item Physical Format**.
- Use the following terms to populate the field **Item Physical Format**. All of these terms are taken from the Getty Museum’s Art & Architecture Thesaurus Online (http://www.getty.edu/research/conducting_research/vocabularies/aat/).
- Contact the MDL Metadata Coordinator if you would like to use a term that is not currently listed. It can easily be added!
- To view the example in *Minnesota Reflections*, click on the link provided OR copy the identifier and paste it into the search box at the *Minnesota Reflections* site (<http://reflections.mndigital.org>).

Term	Definition	AAT ID Number	Example in <i>Minnesota Reflections</i>
Accounts	Documents in which monies or goods received and paid or given out are recorded in order to permit periodic totaling.	300145802	http://reflections.mndigital.org/cdm/ref/collection/mhs/id/659 Local identifier: sa.gov020.2
Advertisements	Public notices or paid announcements, especially those in print.	300193993	http://reflections.mndigital.org/cdm/ref/collection/swede/id/4 MDL identifier: mhs03125
Aerial photographs	Photographs of the earth taken from aircraft. Do not use for photographs of celestial bodies or astronomical phenomena.	300128222	http://reflections.mndigital.org/cdm/ref/collection/whs/id/205 MDL identifier: umn34782
Affidavits	Sworn statements in writing; especially made upon oath before an authorized magistrate or officer.	300027594	http://reflections.mndigital.org/u/?spl,444 MDL identifier: umn11162a
Albumen prints	Photographic prints having albumen as the binder; always black-and-white, though they may be toned to a monochrome hue.	300127121	http://reflections.mndigital.org/cdm/ref/collection/ctton/id/751 MDL identifier: umn45057

Almanacs	Publications, usually annuals, containing a variety of useful facts of miscellaneous nature or statistical information. Originally included projections of coming days, months and holidays.	300026705	http://reflections.mndigital.org/cdm/ref/collection/p16022coll35/id/0 MDL identifier: 2007_SPA
Announcements	Printed, spoken or published statements or notices that inform the reader of an event or other news.	300026707	http://reflections.mndigital.org/cdm/compoundobject/collection/p16022coll39/id/73/rec/1 Local identifier: 36778
Architectural drawings (visual works)	Drawings of architecture and architectural projects, whether the project was executed or not. The term may also refer to any image in a two-dimensional medium that serves this same purpose, including prints and computer images. NOTE: Blueprints and blue-line drawings should be entered as <i>Architectural drawings</i> .	300034787	http://reflections.mndigital.org/cdm/ref/collection/naa/id/140 MDL identifier: naa2051
Articles	Literary compositions prepared for publication as an independent portion of a magazine, newspaper, encyclopedia, or other work.	300048715	http://reflections.mndigital.org/cdm/ref/collection/p16022coll16/id/374 Local identifier: thecompanion
Articles of incorporation	Written agreements embodying the purposes or other conditions of the association of a number of persons for the pursuit of a joint enterprise; especially those duly executed and filed with a state's administrative authorities so as to have the force of a charter under general incorporation law.	300027597	http://reflections.mndigital.org/cdm/ref/collection/p16022coll20/id/58 MDL identifier: umn171904
Artists' Statements	Texts by artists, often brief, that state explanations of the artists' work or theoretical concepts on which their work is based.	300192825	http://reflections.mndigital.org/cdm/ref/collection/p16022coll54/id/191 Local identifier: etc_kdg03

Atlases	Volumes of maps, with or without descriptive text, which may be issued to supplement or accompany texts or be published independently.	300028053	http://reflections.mndigital.org/cdm/ref/collection/mow/id/404 MDL identifier: umn35419
Attendance records	Records maintained by an organization regarding the action or fact of individuals being present to take part in social transactions, entertainment, instruction, worship, or in answer to a summons.	30027443	None currently listed in <i>Minnesota Reflections</i>
Bills (legislative records)	Drafts of proposed laws introduced in a legislative body.	300027888	http://reflections.mndigital.org/cdm/ref/collection/irrc/id/1290 Local identifier: 1961_TacAmd_V01_0002a_fcina_2005.0058_GOV
Black-and-white photographs	Refers to a broad class of photographs having images in gray tones, black, and white, and sometimes one hue (which can result from chemical processes used, including toning or from aging).	300128347	http://reflections.mndigital.org/cdm/ref/collection/stc/id/207 MDL identifier: stc00231
Books	Items comprising a collection of leaves of paper, parchment, wood, stiffened textile, metal tablets, or other flat material, that are blank, written on, or printed, and are strung or bound together in a volume.	300028051	http://reflections.mndigital.org/cdm/ref/collection/p15160coll10/id/369 Local identifier: lak1007
Booklets	Small books consisting of a few sheets that are glued, stitched or stapled together between thin card or paper covers.	300311670	http://reflections.mndigital.org/cdm/ref/collection/jhs/id/614 Local identifier: D#6
Boxes (containers)	Rigid, often rectangular containers usually with a lid or cover in which something non-liquid is kept or carried.	300045643	http://reflections.mndigital.org/cdm/ref/collection/p16022coll53/id/23 Local identifier: wan_001
Broadcasts	Transmissions of signals, usually taking the form of programs made public by means of radio.	300263431	None currently listed in <i>Minnesota Reflections</i>

Broadsides (notices)	Sizeable single-sheet notices or advertisements printed on one or both sides, often chiefly textual rather than pictorial, and printed to be read unfolded.	300026739	http://reflections.mndigital.org/cdm/ref/collection/mhs/id/502 MDL identifier: mhs14612
Building permits	Permits required by local governmental bodies for new building, or for major alteration or expansion of existing structures. Applications, building plans, estimated costs, and a fee are usually required before a permit is issued.	300027834	http://reflections.mndigital.org/cdm/ref/collection/sple/id/4032 sple_0005
Bulletins	A serial publication issued by an organization or society, especially a short account, alert, or report of public news or events issued by authority.	300311679	http://reflections.mndigital.org/cdm/ref/collection/p16022coll20/id/555 Local identifier: scc089
Business cards	Small cards bearing the name and address of a business concern and one of its representatives, and intended more for information than advertisement. Note: not to be confused with “trade cards” and “advertising cards.”	300026767	http://reflections.mndigital.org/cdm/ref/collection/wch/id/422 MDL identifier: mhs07242
Cabinet photographs	Mounted on card stock and a larger alternative to the <i>Cartes-de-visite</i> . The larger size (approximately 6½ x 4¼ inches) was considered more appropriate for display, allowed for group portraits, and permitted the image to be retouched. The card stock mount often contains the name and address of the photography studio. Popular until World War I.	300127131	http://reflections.mndigital.org/cdm/ref/collection/bsc/id/2397 MDL identifier: mhs04599
Calendars	Registers of days or other contrivances for reckoning days, months, years, etc., such as a table showing the division of a given year into its months, weeks, days, years, or other divisions of time.	300026741	None currently listed in <i>Minnesota Reflections</i>

Canisters	Cylindrical or rectangular containers usually of lightweight metal, plastic, or laminated pasteboard used for holding dry products.	300195322	http://reflections.mndigital.org/cdm/ref/collection/p16022coll53/id/25 Local identifier: wan_002
Car cards	Posters intended to be placed in subway cars, street cars and buses.	300201079	http://reflections.mndigital.org/cdm/search/searchterm/umn218282/order/title MDL identifier: umn218282
Cartes-de-visite (card photographs)	Refers to small-format photographs affixed to card stock. They were typically portraits and the image was a standard size of 3¼ x 2¼ inches. They went out of fashion in the 1870s.	300127141	http://reflections.mndigital.org/cdm/ref/collection/fhs/id/84 MDL identifier: mhs05351
Catalogs	Enumerations of items, such as a file of bibliographic records or a list of art objects, usually arranged systematically and with descriptive details; may be in book or pamphlet form, or on cards	300026059	http://reflections.mndigital.org/cdm/ref/collection/stc/id/1034 Local identifier: scsucatalog1886_87
Certificates	Documents giving authoritative recognition of a fact, qualification, or promise.	300026841	http://reflections.mndigital.org/cdm/ref/collection/mm/id/17 MDL identifier: umn23691
City directories	Enumerations of names, addresses, and other data about specific groups of persons or organizations; may appear in alphabetic or graphic format.	300026241	http://reflections.mndigital.org/cdm/ref/collection/stearns/id/3130 Local identifier: city-directory-1888-1889
Color photographs	The broad class of photographs having images composed of more than one hue, plus the neutral tones. For photographs having a range of tones within one hue, see <i>Black-and-white photographs</i> .	300128359	http://reflections.mndigital.org/cdm/ref/collection/bsm/id/96 MDL identifier: umn23961
Color transparencies	Photographic images designed for viewing by transmitted light, composed of more than one hue, plus the neutral tones.	300128364	http://cdm16022.contentdm.oclc.org/cdm/ref/collection/swede/id/278 MDL identifier: mhs24204

Collodion prints	Photographic prints having collodion as the binder.	300134696	http://reflections.mndigital.org/cdm/ref/collection/nemhc/id/2469 MDL identifier: umn10843
Contact prints	Photographic prints made by interfacing a negative and a sheet of photographic paper and exposing the paper with raw light.	300127169	http://reflections.mndigital.org/cdm/ref/collection/swede/id/37 MDL identifier: umn16623
Contour maps	Maps showing elevation and the configuration of the ground by the use of contour lines and usually lacking other detail.	300028393	http://reflections.mndigital.org/cdm/ref/collection/shr/id/87 Local identifier: 98.015.010
Contracts	Documents, enforceable by law, embodying agreements between two or more competent parties to do or not to do something, and specifying the terms and conditions of the agreement.	300027649	http://reflections.mndigital.org/cdm/ref/collection/winsona/id/640 mhs07136
Cyanotypes (photographic prints)	Blue-toned photographic prints produced by the blueprint process. These do NOT include reproductive prints of architectural or other technical drawings; for these, use <i>Architectural drawings</i> .	300134811	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/1360 MDL identifier: mhs11186
Daguerreotypes (photographs)	<i>Daguerreotypes</i> produce a direct positive image on a silver-coated copper plate. They are often mounted in special cases lined with colored velvet or leather. NOTE: <i>Daguerreotypes</i> are not to be confused with <i>Tintypes</i> which use a thin sheet of lacquered iron as the image support.	300127181	None currently listed in <i>Minnesota Reflections</i>
Deeds	Documents, usually executed under seal, containing a conveyance, especially of real estate.	300027249	http://reflections.mndigital.org/cdm/ref/collection/sew/id/36 Local identifier: ST-84

Design drawings	Drawings intended to work out the scheme of a project, whether the project is expected to be executed or not; more finished than sketches.	300069413	http://reflections.mndigital.org/cdm/ref/collection/stc/id/6999 MDL Identifier: stc04020
Diaries	Refers to books containing the daily, personal accounts of the writer's own experiences, attitudes, and observations. Use <i>Journals (accounts)</i> when referring to an individual's or an organization's account of occurrences or transactions.	300027112	http://reflections.mndigital.org/cdm/ref/collection/mps/id/909 MDL identifier: umn16861
Diplomas	Formal documents conferring some honor, degree, or privilege, especially those bearing record of graduation from or a degree conferred by an educational institution.	300028011	http://reflections.mndigital.org/cdm/ref/collection/stc/id/216 MDL identifier: stc00274
Documents (other)	NOTE: This is a general Item Physical Format term for Text based items. This term should ONLY be used when an item cannot be assigned a more specific term. Please review the list of Item Physical Format terms under Text before assigning this value (see Appendix B). Contact the Metadata Coordinator for assistance if you have any questions about the use of this term.	n/a	http://reflections.mndigital.org/cdm/ref/collection/nico/id/2877 Local identifier: ms-30a
Drawings (visual works)	Visual works produced by drawing, which is the application of lines on a surface, often paper, by using a pencil, pen, chalk, or some other tracing instrument to focus on the delineation of form rather than the application of color.	300033973	http://reflections.mndigital.org/cdm/ref/collection/sbmb/id/253 MDL identifier: SBM.02a

Engineering maps	Maps, usually maintained in the public works or engineering departments of a city, showing information such as street and rail rights of way, location of bridges, and grade separations; used for planning and executing engineering work in a locality.	300028364	http://reflections.mndigital.org/cdm/ref/collection/grh/id/125 MDL identifier: umn100634
Fire insurance maps	Maps prepared primarily for fire insurance underwriters, showing information, such as type of construction, about structures in a given area.	300028187	None currently listed in <i>Minnesota Reflections</i>
Forestry maps	Refers to maps of a given region, intended to chart the areas covered by forests and other vegetation. They typically record the boundaries of the forest, the relief of the area, assessments of timber volume and expected growth rates, and features or projections related to animal/human inhabitants and ecological matters.	300028249	None currently listed in <i>Minnesota Reflections</i>
Gelatin silver prints	Refers to photographic prints having gelatin as the binder, holding silver as the final image material; always black-and-white, though they may be toned to a monochrome hue.	300128695	http://reflections.mndigital.org/cdm/ref/collection/nemhc/id/1961 MDL identifier: umn01255
Genealogical tables	Documents representing the lineage of a person or persons in tabular or diagrammatic form.	300027016	None currently listed in <i>Minnesota Reflections</i>
Greeting cards	Cards often imprinted with messages and suitable illustrations, sent or given on special occasions or holidays.	300026778	http://reflections.mndigital.org/cdm/ref/collection/wch/id/444 MDL identifier: mhs07268a

Home movies	Motion pictures on film or videotape made by amateurs, or professionals in a nonprofessional capacity, intended for home viewing by family and friends. People, scenes and events filmed generally feature the filmmakers' immediate circle and personal activities.	300263874	None currently listed in <i>Minnesota Reflections</i>
Hymnals	Books containing collections of church hymns.	300026463	http://reflections.mndigital.org/cdm/ref/collection/p15160coll10/id/272 Local identifier: lak1005
Instructional materials	Print or non-print materials used for the purpose of imparting knowledge, attitudes, or skills to others.	300026367	http://reflections.mndigital.org/cdm/ref/collection/p15160coll10/id/687 Local identifier: lak1004
Insurance policies	Documents by which one party (the insurer) in consideration of a premium, engages to indemnify another (the insured) against a contingent loss, by making a payment in compensation.	300027527	http://reflections.mndigital.org/cdm/ref/collection/sew/id/16 Local identifier: ST-83
Invitations	Engraved, printed, or written expressions requesting a person's company at a certain event at a given time and place.	300027083	http://reflections.mndigital.org/cdm/ref/collection/hzf/id/40 MDL identifier: mhs07508
Invoices	Documents showing items supplied, together with the prices charged for each; also, itemized bills or accounts.	300027568	http://reflections.mndigital.org/cdm/ref/collection/sew/id/25 Local identifier: ST-66
Journals (accounts)	Books containing accounts of an individual's or organization's business occurrences or transactions, including records of financial transactions. Use <i>Diaries</i> when referring to personal accounts of the writer's experiences, attitudes, or observations.	300027087	http://reflections.mndigital.org/cdm/ref/collection/guist/id/509 Local identifier: 0000.0006.1

Labels (identifying artifacts)	Pieces of paper inscribed and affixed to something for identification or description.	300028730	http://reflections.mndigital.org/cdm/ref/collection/p16022coll46/id/161 umn276112
Lantern slides	Transparent positive image made or mounted on glass, usually (but not necessarily) photographic. Measurements: 3.25 to 3.5 inches by 4 inches. Lantern slides are projected onto a screen by means of a specialized projector.	300134977	http://cdm16022.contentdm.oclc.org/cdm/ref/collection/lfw/id/0 MDL identifier: mhs07296
Leaflets (printed works)	Small printed works consisting of one small-sized leaf of paper folded and not stitched or bound, containing printed matter, chiefly for gratuitous distribution.	300211825	http://reflections.mndigital.org/cdm/ref/collection/mhs/id/505 MDL identifier: mhs14615
Ledgers (account books)	Volumes of final entry in accounting in which are entered debits, credits, and all other money transactions under each individual account or heading.	300027496	http://reflections.mndigital.org/cdm/ref/collection/carl/id/157 MDL Identifier: mhs07598
Letters (correspondence)	Pieces of correspondence that are somewhat more formal than memoranda or notes, usually on paper and delivered.	300026879	http://reflections.mndigital.org/cdm/ref/collection/p15160coll1/id/1614 Local identifier: B1F8L10
Licenses	Documents evidencing a right or permission, granted to an individual or organization in accordance with law by a competent authority, to engage in some transaction, business, or occupation, or to do some act.	300027759	http://reflections.mndigital.org/cdm/ref/collection/p16022coll46/id/166 MDL identifier: umn283098
Magazines (periodicals)	Periodicals containing articles, essays, poems, or other writings by different authors, usually on a variety of topics and intended for a general reading public or treating a particular area of interest for a popular audience.	300215389	http://cdm16022.contentdm.oclc.org/cdm/compound/object/collection/msu/id/418 Local identifier: MSU-UA-130-Student-1889-10

Maps	Refers to graphic or photogrammetric representations of the Earth's surface or a part of it, including physical features and political boundaries, where each point corresponds to a geographical or celestial position according to a definite scale or projection. The term may also refer to similar depictions of other planets, suns, other heavenly bodies, or areas of the heavens.	300028094	http://reflections.mndigital.org/cdm/ref/collection/mgs/id/1179 MDL identifier: umn22528
Medicine bottles	Bottles of varying size, shape, and style made to contain medicine, particularly those intended to be taken home by customers of an apothecary or sold elsewhere; examples include collectible patent medicine bottles.	300220810	http://reflections.mndigital.org/cdm/ref/collection/p16022coll46/id/193 Local identifier: eph2_011
Membership cards	Cards issued to individual members of an organization attesting to the fact of their membership, typically wallet-sized and carrying the name of the member and the name or logo of the organization.	300255378	http://reflections.mndigital.org/cdm/ref/collection/p16022coll23/id/190 Local identifier: 8A026
Memoirs	Narratives or histories autobiographical in nature or stressing the author's personal experience of the events.	300202559	http://reflections.mndigital.org/cdm/ref/collection/olms/id/1071 Local identifier: 1936.131.001
Memorandums	Documents recording information used for internal communication.	300026906	http://reflections.mndigital.org/cdm/ref/collection/spl/id/462 MDL identifier: umn11238a
Menus	Lists of dishes to be served or available for meals.	300027191	http://reflections.mndigital.org/cdm/ref/collection/sew/id/97 MDL identifier: mhs10496
Minutes (administrative records)	Records of what was said and done at meetings or conferences.	300027440	http://reflections.mndigital.org/cdm/ref/collection/p16022coll13/id/11 MDL identifier: mhs23644

Mortars (grinding tools)	Receptacles of a hard material, such as stone, brass, wood, or glass, that have a cup-shaped cavity in which materials are pounded or ground with a pestle. Often used to grind ingredients used in a pharmacy, painting, or cookery.	300024724	http://reflections.mndigital.org/cdm/ref/collection/p16022coll46/id/179 Local identifier: eph2_001
Muster rolls	Lists of troops actually present, made on the day of muster or review of troops in order to take account of their condition; used as the paymaster's voucher for the pay she/he issued.	300027828	http://reflections.mndigital.org/cdm/ref/collection/p16022coll47/id/197 Local identifier: Box 8, Folder 147, Field and Staff, 1917 July-August
Negatives (photographic)	Photographs, usually on a transparent support, in which the tones or colors are reversed from their appearance in nature. This includes glass plate negatives.	300127173	http://reflections.mndigital.org/cdm/ref/collection/swede/id/107 MDL identifier: mhs24383
Newsletters	Letters, reports, or other brief written communications that communicate news, particularly those written by societies or business organizations. Historically referred to serial publications consisting of one or a few printed sheets containing news and information of interest to the general public or to a special group.	300026652	http://reflections.mndigital.org/cdm/ref/collection/mdt/id/1299 Local identifier: mnh195111
Newspapers	Serials published at stated, frequent intervals, such as daily or weekly, and containing news, editorials, features, advertisements, and other items of current interest.	300026656	http://reflections.mndigital.org/cdm/ref/collection/p16022coll2/id/13592 Local identifier: lak1102

Newsreels	Nonfiction motion pictures originally released to theaters in periodic issues, each issue consisting of a number of news stories reporting or commenting on recent events. Typically American newsreels ran for about ten minutes and were issued twice weekly. Their principal years of production in the U.S. ran from 1910 to the 1960s.	300263837	None currently listed in <i>Minnesota Reflections</i>
Notes	Brief statements of a fact or experience, written down for review, or as an aid to memory, or to inform someone else; also includes short, informal letters.	300027200	http://reflections.mndigital.org/cdm/ref/collection/spl/id/1722 MDL identifier: umn96488
Operas	Dramatic musical performances in which most roles are sung with instrumental accompaniment, usually including arias, recitatives, and choruses. Typically, they are intended to be staged with costumes, sets, and dramatic movement.	300255765	None currently listed in <i>Minnesota Reflections</i>
Oral histories	Works that record interviews conducted to preserve the recollections of persons whose experience or memories are representative or are of special historical or social significance.	300202595	http://reflections.mndigital.org/cdm/ref/collection/nemhc/id/3869 MDL identifier: umn37826
Packaging	Materials for the packing or protective wrapping of products that contain information or otherwise convey a message about the product.	300055100	
Paintings (visual works)	Unique works in which images are formed primarily by the direct application of pigments suspended in oil, water, egg yolk, molten wax, or other liquid, arranged in masses of color, onto a generally two-dimensional surface.	300033618	http://reflections.mndigital.org/cdm/ref/collection/nlc/id/10 MDL identifier: nlc00012

Panoramas	Refers generally to pictorial representations with very broad horizontal ranges of view. The term is also used specifically for photographs that show a wide view produced by a panoramic camera or by joining photographs together.	300015537	http://reflections.mndigital.org/cdm/ref/collection/irrc/id/2519 MDL identifier: umn38997
Pamphlets	Independent publications consisting of a few leaves of printed matter folded or fastened together but not bound, often with no cover or a paper cover. For smaller printed works, of one sheet folded and not stitched or bound, use <i>Leaflets (printed works)</i> .	300220572	http://reflections.mndigital.org/cdm/ref/collection/macal/id/294 Local identifier: 14announce7374
Pattern books	Books of designs or plans circulated or published to enable widespread copying. May also be used for unbound collections of drawings or prints which serve as artists' models. NOTE: use this term for individual patterns.	300026131	http://reflections.mndigital.org/cdm/ref/collection/stbm/id/609 MDL identifier: umn40962
Pennants	Tapering flags, usually pieces of cloth or other flexible material, usually attached along one side to a pole or cord, intended for such purposes as symbolizing a nation or organization, or as a means of signaling.	300195680	http://reflections.mndigital.org/cdm/ref/collection/p16022coll45/id/2 MDL identifier: mhs52791
Periodicals	Publications issued at regular intervals, but not daily, containing articles on various subjects by different authors for the general reader.	300026657	http://reflections.mndigital.org/cdm/ref/collection/p16022coll34/id/7 MDL identifier: qfl00289_001

Pestles	Club-shaped instruments of a hard material with a round end used for crushing, pounding, or grinding herbs, spices, drugs, pigments, or other materials in a mortar, which is a cup-shaped receptacle.	300024725	http://reflections.mndigital.org/cdm/ref/collection/p16022coll46/id/179 Local identifier: eph2_001
Plats (maps)	Maps, charts, or plans that show the location, boundaries, and ownership of individual properties.	300028125	http://reflections.mndigital.org/cdm/ref/collection/p15160coll14/id/182 MDL identifier: umn147971
Photograph albums	Albums made up of mounted photographs, with or without identifying information.	300026695	http://reflections.mndigital.org/cdm/ref/collection/rtc/id/878 MDL identifier: umn16238
Poems	Written or oral compositions characterized by condensed language chosen for sound and suggestive power as well as meaning, and by the use of such literary techniques as structured meter, natural cadences, rhyme, or metaphor.	300026451	http://reflections.mndigital.org/cdm/ref/collection/p16022coll20/id/476 Local identifier: scc073
Postal cards	Stationery cards sold by the post office with postage stamps already printed on them. Note: not to be confused with postcards (see below).	300026821	http://cdm16022.contentdm.oclc.org/cdm/ref/collection/spp/id/534 MDL identifier: mhs07084a
Postcards	Cards on which a message may be written or printed for mailing without an envelope, usually at a lower rate than that for letters in envelopes. One side of the card frequently features a photographic image, advertisement or graphic illustration.	300026816	http://reflections.mndigital.org/cdm/ref/collection/nico/id/2122 MDL identifier: umn39493a
Posters	Notices, usually decorative or pictorial, intended to be posted to advertise, promote, or publicize an activity, cause, product, or service; also, decorative, mass-produced prints intended for hanging.	300027221	http://reflections.mndigital.org/cdm/ref/collection/wch/id/333 MDL identifier: mhs07141

Prints (visual works)	Pictorial works produced by transferring images by means of a matrix such as a plate, block, or screen, using any of various printing processes. Common types of prints include engravings, etchings and lithographs.	300041273	http://reflections.mndigital.org/cdm/ref/collection/nico/id/1614 MDL identifier: umn10280
Proceedings	Records of meetings of a conference, society, or other organization, usually published, and frequently accompanied by abstracts or reports of papers presented.	300027316	None currently listed in <i>Minnesota Reflections</i>
Programs (documents)	Brief outlines or explanations of the order to be pursued, criteria for participation, or the subjects embraced in a given event or endeavor. Includes lists of the features composing a dramatic or other performance, with the names of participants.	300027240	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/2587 MDL identifier: umn78101
Radio scripts	Scripts used for radio programs.	300026489	http://reflections.mndigital.org/cdm/ref/collection/p16022coll60/id/8 Local identifier: MLAradio_script_bookways_01
Receipts (financial records)	Written acknowledgment of the receiving or taking of goods or money delivered or paid.	300027573	http://reflections.mndigital.org/cdm/ref/collection/sew/id/68 MDL identifier: mhs10484
Registrations (licenses)	Documents attesting to acts of registering.	300027760	http://reflections.mndigital.org/cdm/ref/collection/mdt/id/176 MDL identifier: umn10771
Relief maps	Maps showing land or sea bottom relief in terms of height above or below a datum by any method, such as contours, hachures, shading, or tinting.	300028387	None currently listed in <i>Minnesota Reflections</i>
Reports	Official or formal records of a special investigation, in the form of documents containing presentations of facts, proceedings, investigations, or events.	300027267	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/7759 Local identifier: northwestern-hospital-1897-98

Samples	Individual units, segments, or small quantities taken as evidence of the quality or character of the entire group or lot.	300028875	
Schedules (time plans)	Plans of procedure, showing the sequence of items or operations and the time allotted for each.	300027339	http://reflections.mndigital.org/cdm/ref/collection/msn/id/835 MDL identifier: mhs10646
Scores	Original and entire drafts or transcripts of musical compositions or arrangements, with the parts of all the different instruments or voices written on staves one above another, so that they can be read at a glance.	300026427	None currently listed in <i>Minnesota Reflections</i>
Sculpture (visual works)	Three-dimensional works of art in which images and forms are produced in relief, in intaglio, or in the round. The term refers particularly to art works created by carving or engraving a hard material, by molding or casting a malleable material (which usually then hardens), or by assembling parts to create a three-dimensional object.	300047090	http://reflections.mndigital.org/cdm/ref/collection/p16022coll54/id/84 Local identifier: etc_kdg03
Scrapbooks	Books or albums designed so that a variety of items may be affixed to the pages, including photographs, clippings, and other memorabilia.	300027341	http://reflections.mndigital.org/cdm/ref/collection/nsn/id/101 MDL identifier: umn34498
Sheet music	Music printed on unbound sheets of paper. Compare to <i>Songbooks</i> .	300026430	http://reflections.mndigital.org/cdm/ref/collection/wch/id/374 MDL identifier: mhs07190
Short subjects	Motion pictures whose length is relatively short in comparison to feature films, this films typically ranging from a few minutes to one hour.	300263846	None currently listed in <i>Minnesota Reflections</i>

Sketchbooks	Books or pads of blank sheets used or intended for sketching, which are informal or rough drawings.	300027354	http://cdm16022.contentdm.oclc.org/cdm/ref/collection/nemhc/id/4043 MDL identifier: umn84080
Slides (photographs)	Positive transparencies in mounts suitable for projection, usually 35mm film in a mount of 2 by 2 inches. An image on film or glass, usually positive, intended to be viewed by means of light passing through the image and base using a viewer or projector.	300128371	http://reflections.mndigital.org/cdm/ref/collection/nsm/id/101 MDL identifier: umn34498
Songbooks	Books containing brief musical compositions written or adapted for singing. Compare to <i>Sheet music</i> .	300026432	http://reflections.mndigital.org/cdm/ref/collection/iml/id/2287 Local identifier: PM1024.C38 1906
Songs (sound recording-musical)	Sound recording of a song (short musical compositions, generally containing words).		None currently listed in <i>Minnesota Reflections</i>
Speeches	Documents containing the text of any public address or talk. Also includes sound recording in which someone is orating a public address or talk.	300026671	http://reflections.mndigital.org/cdm/ref/collection/mhs/id/559 Local identifier: lb.J87.M613_1849b
Stationery	Paper for writing letters, often having a letterhead or decorative design, and often accompanied by matching envelopes.	300207873	http://reflections.mndigital.org/cdm/ref/collection/renew/id/314 MDL identifier: msh06992
Statutes	Acts of a legislature declaring, commanding, or prohibiting something, expressed according to the forms necessary to constitute law.	300027891	http://reflections.mndigital.org/cdm/ref/collection/spl/id/447 MDL Identifier: umn11197a

Stereographs	Refers to the most popular and common form of stereoscopic photographs, which are double photographs of the same image taken from two slightly different perspectives. <i>Stereographs</i> are distinctive among other stereoscopic photographs because they are photographic prints mounted on cards.	300127197	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/234 MDL identifier: mhs00767
Studio portraits	Portraits taken in a professional photographer's studio, often making use of backdrops or props.	300223022	http://reflections.mndigital.org/cdm/ref/collection/irr/id/1558 MDL identifier: irr00145
Telegrams	Messages sent by telegraph.	300026909	http://reflections.mndigital.org/cdm/ref/collection/spl/id/802 Local identifier: 85 Western Union Telegram
Television programs	Presentations of informational or entertainment shows such as news, sports, drama, comedy, music, documentary, talk or game shows to the public by means of television transmission.	300263432	Collection: Northern Lights – A Look at Minnesota Books and Writers
Tickets	Slips of paper or cardboard serving as evidence that the holder has paid a fare or admission or is entitled to some service.	300027381	http://reflections.mndigital.org/cdm/ref/collection/maca/id/304 Local identifier: 6mc
Tintypes	Photographs produced by the wet collodion process and then placed directly on thin sheets of lacquered metal, usually iron. NOTE: <i>Tintypes</i> are not to be confused with <i>Daguerreotypes</i> which utilize a copper plate for the image support.	300134759	http://reflections.mndigital.org/cdm/ref/collection/irr/id/1556 MDL identifier: irr00143

Topographic maps	Refers to maps representing a region at a level of detail or scale between a plan, which is a small area, and a chorographic map, which is a large regional map. Topographic maps include accurate representations of the location and shape of both natural and manmade features. The term refers to maps of various scales in different nations; it is generally limited to maps at scales of 1:500,000 or larger in the U.S. The term is often mistakenly interpreted to mean maps that only represent natural relief features.	300028361	http://reflections.mndigital.org/cdm/ref/collection/irrc/id/2243 MDL identifier: umn34888
Tourist maps	Maps intended to introduce a region or locality to tourists, who are visitors to an unfamiliar place, particularly those who travel for pleasure or culture, usually to visit a number of places with the goal of experiencing places of interest and scenery.	300028298	http://reflections.mndigital.org/cdm/ref/collection/nemhc/id/2793 Local identifier: mdlc map 29 S3020 Duluth Street Railway Records b164f1
Trade cards	Small printed sheets, and later cards, bearing tradesmen's advertisements, often including an engraved, full-color illustration; produced through the 19th century. For cards made later, bearing just the name and address of a business concern and the name of its representative, and intended more for information than for advertising, use " Business cards. "	300207616	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/23429 Local Identifier: btc121

Transportation maps	Maps intended to assist people in the navigation and use of a particular city or region's transit system. Transit systems can include bus, street car, trolley, rail, or road systems. These maps often include route information, timetables, fare information and local points of interest.	300028300	http://reflections.mndigital.org/cdm/ref/collection/mdt/id/215 MDL identifier: umn13507
Trophies (objects)	Objects awarded as prizes for victory in contests; typically include such things as elaborate silver pieces awarded as contest prizes.	300233975	http://reflections.mndigital.org/cdm/ref/collection/p16022coll45/id/154 MDL identifier: mhs52816
Wedding announcements	Generally, announcements of nuptial ceremonies. May be extended to multiple types, including formal printed announcements intended to be mailed, announcements in newspapers, or any historical variant.	300310119	http://reflections.mndigital.org/cdm/ref/collection/sew/id/81 MDL identifier: mhs10454
Wills	Legal instruments in which a person declares the disposition of his/her property, to take effect after his/her death, and which is revocable during the lifetime of that person.	300027764	http://reflections.mndigital.org/cdm/ref/collection/wHITE/id/54 Local identifier: A2010.001.008
Zoning maps	Maps delineating the boundaries of districts which, along with the zoning text, comprise the zoning ordinances.	300028242	http://reflections.mndigital.org/cdm/ref/collection/mpls/id/1466 MDL identifier: umn35759

APPENDIX D:

Compound Objects and Page Titles

What is a compound object? Records comprised of multiple pages and therefore include multiple digital items are referred to as “Compound Objects.” Examples of compound objects in Minnesota Reflections include: books, booklets, atlases, pamphlets, letters, journals, diaries, and annual reports.

In addition to creating a single, item-level description for a compound object, it is also necessary to add individual page titles. The addition of page titles will help users more easily navigate through multi-page Compound Objects. Minnesota Digital Library staff will complete a compound object’s page titles for all Type A participants. If you would like to complete your compound object’s page titles, please confer with the Minnesota Digital Library’s Outreach Coordinator to establish this responsibility during the development of your project. Type B participants will be required to provide page titles for all items provided to *Minnesota Reflections*.

Some organizations may also wish to include page-level metadata beyond the page titles. If you are interested in providing this additional level of information, please contact the Minnesota Digital Library’s Outreach Coordinator prior to beginning your data entry work. The most common instance of including other page-level metadata is the addition of specific geographic metadata pertinent to the individual maps found in an atlas (such as City or Township, County, Latitude/Longitude and Geographic Metadata Source).

Examples of Compound Objects with Page Titles in Minnesota Reflections:

Message from the Governor of the Territory of Minnesota, September 4, 1849

<http://reflections.mndigital.org/cdm/ref/collection/mhs/id/559>

The Legislative Manual, 5th State Legislature, 1863

<http://reflections.mndigital.org/cdm/ref/collection/mhs/id/1661>

Apollo Club program, April 23, 1898

<http://reflections.mndigital.org/cdm/ref/collection/mpls/id/4578>

Example of Compound Object with Additional Page-Level Metadata in Minnesota Reflections:

Photographs of Minnesota Volunteers, 1861 to 1866, From the Whitney Negatives Now Owned by Edward A. Bromley, Minneapolis, Minnesota

<http://reflections.mndigital.org/cdm/ref/collection/hchm/id/1179>

Page Title

Definition: A brief, descriptive title for the individual pages found within a compound document such as a book, booklet, pamphlet, atlas, etc. Page titles help users more effectively navigate through multi-page materials.

Required: Yes

Local Input: Negotiable

Guidelines for Data Entry: Guidelines for Data Entry: This field is located in the first column on the Technical Metadata tab of the Document Excel spreadsheet. If the original document's pages are numbered, use those page numbers as the page title. If the original document's pages are not numbered, generate brief, descriptive page titles.

Examples in *Minnesota Reflections*:

Inside front cover

Table of contents

Page 1

Page 2

Page 48, Index

[Blank page]

Photograph, Science Hall

Index A

Back cover

APPENDIX E:

Minnesota Reflections Data Entry Quick Guide

	<i>Minnesota Reflections</i> Field Name	Required Field:	Type A Project Local Input:	Type B Project Local Input:
Descriptive Metadata	Title	Yes	Yes	Yes
	Creator	Yes (if known)	Yes	Yes
	Contributor	Yes (if known)	Yes	Yes
	Description	Yes	Yes	Yes
	Date of Creation	Yes	Yes	Yes
	Publishing Agency	No	Yes	Yes
	Dimensions	No	Yes	Yes
	Minnesota Reflection Topic	Yes	Yes	Yes
	Item Type	Yes	Yes	Yes
	Item Physical Format	Yes	Yes	Yes
	Formal Subject Headings	No	No	No
	Locally Assigned Subject Headings	Yes	Yes	Yes
	Minnesota City or Township	Yes (if known)	Yes	Yes
	District	No	Yes	Yes
	Minnesota County	Yes (if known)	Yes	Yes
	State or Province	Yes	Yes	Yes
	Country	Yes	Yes	Yes
	Geographic Feature	No	Yes	Yes
	Latitude	No	No	No
	Longitude	No	No	No
Geographic Metadata Source	No	No	No	
Language	No	Yes	Yes	
Administrative Metadata	Collection Name	No	Yes	Yes
	Contributing Institution	Yes	Yes	Yes
	Contact Information	Yes	Yes	Yes
	Rights Management	Yes	Yes	Yes
	Local Identifier	Yes	Yes	Yes
	MDL Identifier	Yes	No	Yes
	Project Affiliation	Yes	No	No
	Fiscal Sponsor	Yes	No	No
Technical Metadata	Scanning Center	Yes	No	Yes
	Object File Name	Yes	No	Yes
	Date Digital	Yes	No	Yes
	Item Digital Format	Yes	No	No
	Master File Format	Yes	No	Yes
	Master File Size	Yes	No	Yes
	Master File Bit Depth	Yes (if applicable)	No	Yes
	Master File Resolution	Yes (if applicable)	No	Yes
	Master File Compression	Yes	No	Yes
	Master File Width	Yes (if applicable)	No	Yes
	Master File Height	Yes (if applicable)	No	Yes
	Master File Hardware	Yes	No	Yes
	Master File Software	Yes	No	Yes
	Master File System	Yes	No	Yes
Master File Checksum	Yes	No	Yes	

APPENDIX F:

Minnesota Reflections Field Mapping to Dublin Core Metadata Element Set

	<i>Minnesota Reflections</i> Field Name	Mapping to Dublin Core Metadata Element Set, Version 1.1
Descriptive Metadata	Title	Title
	Creator	Creator
	Contributor	Contributor
	Description	Description
	Date of Creation	Date-Created
	Publishing Agency	Source
	Dimensions	Format – Extent
	Minnesota Reflection Topic	Relation – Is Part Of
	Item Type	Type
	Item Physical Format	Format – Medium
	Formal Subject Headings	Subject
	Locally Assigned Subject Headings	Subject
	Minnesota City or Township	Coverage – Spatial
	District	Coverage – Spatial
	Minnesota County	Coverage – Spatial
	State or Province	Coverage – Spatial
	Country	Coverage – Spatial
	Geographic Feature	Coverage – Spatial
	Latitude	None
	Longitude	None
	Geographic Metadata Source	None
Language	Language	
Administrative Metadata	Collection Name	Relations – Is Part Of
	Contributing Institution	Publisher
	Contact Information	None
	Rights Management	Rights
	Local Identifier	Identifier
	MDL Identifier	Identifier
	Project Affiliation	None
	Fiscal Sponsor	None
Technical Metadata	Scanning Center	None
	Date Digital	Date – Available
	Item Digital Format	Identifier
	Master File Format	None
	Master File Size	None
	Master File Bit Depth	None
	Master File Resolution	None
	Master File Compression	None
	Master File Width	None
	Master File Height	None
	Master File Hardware	None
	Master File Software	None
	Master File System	None
	Master File Checksum	None
	Transcript	None
Translation	None	

