This project is supported in part by a grant from the Massachusetts Historical Records Advisory Board and the Secretary of the Commonwealth, William Francis Galvin. The Documentary Heritage grant program is funded by a grant from the National Historical Publications and Records Commission and William Francis Galvin, Secretary of the Commonwealth.

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The findings and recommendations in this report do not necessarily represent the views of the Massachusetts Historical Records Advisory Board or the National Historical Publications and Records Commission.
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Overview

The Mass. Memories Road Show is a community initiative of the Massachusetts Studies Project at the University of Massachusetts Boston, in the Institute for Learning and Teaching in the Graduate College of Education.

Since October 2004, The Mass. Studies Project has collaborated with local organizations to host several "Mass. Memories Road Shows" in communities near UMass’ Dorchester campus. At a Road Show, residents bring in photographs that illustrate themselves and their families past and present in that community. The photos are scanned onsite, and the originals immediately returned to their owners. Professional archivists from the New England Archivists are on hand to advise contributors on how to care for and protect their precious family artifacts. All photos become part of the Massachusetts Studies Project’s state-wide educational database online at Healey Library, UMass Boston, and will be used to create a variety of curricular materials and exhibits, as well as being accessible by the general public.

To date, more than 100 Bay Staters have contributed photographs and stories related to the theme “Origins and Arrival”, illustrating their own, their families' and their businesses' early days in their community, whether recently or long ago. The results are the beginnings of a rich collective portrait of the Commonwealth of Massachusetts, online at www.MassMemories.org. Given the lively spirit of these events, and the wonderful photographs and stories that were gathered, we believe that the Road Show concept has great potential to document and strengthen communities, while connecting local schools, businesses, historical societies, universities, libraries with each other.

In the course of organizing the first handful of Road Shows in Norwood, Dorchester and Roxbury, many issues surfaced that required careful consideration. In particular, we needed to determine best practices for the technical aspects of digitization and database management, for describing and indexing the scanned images, for advising contributors on preserving and protecting their original photos, and for balancing the legal rights of contributors with the Project’s desire to share and use this growing repository of photographs and video clips.*
To guide us in addressing these issues, the Mass. Studies Project at UMass engaged the services of a team of experienced professionals in the archival, technical and legal fields, funded through the welcome support of the Massachusetts Historical Records Advisory Board. Each expert reviewed the current practices and output of the MMRS, met several times with the project’s committee of advisors, and then delivered the recommendations that make up the content of this Handbook. Since receiving the reports of the project Consultants, the Mass. Memories Road Show has adjusted its protocols, procedures, database and metadata to conform to their recommendations. After road-testing the process, we will publish additional documents outlining the final shape of the Mass. Memories Road Show.

We hope that other organizations interested in organizing public scanning projects will find this Handbook helpful. The Massachusetts Studies Project welcomes inquiries about scheduling a “Mass. Memories Road Show” in your community. Our goal is to visit every one of the 351 communities in Massachusetts over the course of the next few years!

Please feel free to contact the UMass Boston’s Massachusetts Studies Project at 617-287-7654 or k12.msp@umb.edu with any questions or comments about this Handbook or the Mass. Memories Road Show.

Submitted by the Mass. Memories Road Show Handbook Committee:

Susan Bennett, Executive Director, Lexington Historical Society
Heather Cole, Board of Governors, Norwood Historical Society
April Hagins, New England Archivists "Archives on the Road"
George Hart, Associate Director, Healey Library, UMass Boston
Elisabeth McGregor, Executive Director, Norwood Historical Society
Joanne Riley, Director, The Massachusetts Studies Project at UMass Boston
Valerie Stephens-Washington, Artist/Educator
Earl Taylor, President, Dorchester Historical Society

August 22, 2006

*We recently added a video component to the Road Shows, inviting contributors to share “the story behind the photo”. This Handbook does not deal with video issues, which we will be examining over the coming months and will address in a future edition of the Handbook.
IA. Metadata standards and applications

Submitted by Frances Pollitt, Consulting Archivist

Contents:

1) Introduction
2) Overview of Three Metadata Models
3) Model A (Basic)
4) Model B (Intermediate)
5) Model C (Complex)
6) Additional Resources
7) Conclusion
1. Introduction

Metadata is the textual information used to describe something. For the purposes of the Mass. Memories Road Show, the metadata are the words of description gathered from interviews and pieces of information gleaned from the contributors about their family photographs, documents and keepsakes which are then written down on the worksheet for later inclusion on the website. The choices of what information to gather and the organization of this metadata is the primary focus of this report. The following sections include a description of the industry standard (the Dublin Core Element Set), and three model recommendations.

Four simultaneous processes are addressed with this report;

1. information gathered from the contributors
2. field names for the metadata
3. subject access and technical applications
4. public presentation of material on a website.

Models A, B and C present increasing levels of complexity and need for technical attention. Model A is the simplest, with little or no staff training required, and with the expectation that work can be completed during the actual Road Show event. Simple keyword searching is all that is needed.

Model B is slightly more complex and requires a bit of staff training but the expectation is that work for data entry can be completed during the Road Show. Simple keyword searching is all that is needed.

Model C is much more complex, requires training and time after the Road Show event for data entry and subject research. Though simple keyword searching is also part of this model, field specific searching would be enabled as well. Field specific searching allows for more applications of the data. For instance, a name list could be generated, or a country of origin list. Model C addresses the Mass. Education Frameworks for Emigration & Immigration subjects.

Helpful Vocabulary

digital object - the scanned, digitally photographed or sound converted to digital format used for the Road Show website
object - the photograph, letter, sound (interview), or keepsake contributors bring to the Road Show.

metadata - textual information describing objects and digital objects

**Dublin Core Element Set**

The Dublin Core Metadata Element Set has been used over the past ten years for thousands of digital projects. The elements were designed to comprehend in one very limited vocabulary ways to describe digital resources quickly and efficiently but with extensibility built in. The official description states:

"The Dublin Core metadata element set is a standard for cross-domain information resource description."(http://www.dublincore.org)

'Cross-domain' refers to the differing professions that use the web for mounting information about resources; i.e. libraries, universities, businesses, archives, museums. The 'Dublin' of the name refers to Dublin, Ohio where most of the meetings to hammer out these elements took place. There are 15 basic elements. The guidelines for the use of these elements indicate that it is entirely voluntary which elements are used; the elements may be repeatable; and the elements may be extended.

Using the Dublin Core Element Set assures industry compatibility, especially if the need arises to migrate the information from the Road Show to a regional or national database or website.

These elements include title, description, contributor, identifier, subject, coverage, date, format, type, rights, publisher, creator, source, relation, and language. Administrators of digital projects are free to pick and choose from this set. The recommendations herein use the following 12 Dublin Core elements for the metadata of the Object Descriptions:

Title
Description
Identifier
Subject
Coverage
Format
Type
Rights
Publisher
Contributor
Identifier
Coverage
A very helpful presentation of the Dublin Core Elements may be found at the Making of Modern Michigan website <http://mmm.lib.msu.edu/> under the Inventory & Metadata Systems section. (The specific URL is http://mmm.lib.msu.edu/html/info/dublin/pdf/dublin_pdf_9-8-03/all_elements.pdf)

Massachusetts Department of Education Frameworks

A note about the History and Social Science Curriculum Frameworks published by the Massachusetts Department of Education: the content of the Road Show provides primary source documents for the 2nd, 3rd and 5th grade History and Social Science Curriculum Framework. High school level concepts and skills in this area are also addressed by the Road Show. Model C addresses more of the concepts in the Frameworks than the other two models in that the subject of Emigration and Immigration which is included in Model C is also broadly addressed at the High School level.
2. **Overview of Metadata Models A, B & C**

Three models are presented here, each one more complex than the one before. Model A is the simplest, model C the most complex. Model A requires little or no training; while Model C would require some training.

For all three models, the Description field becomes the most important of all data entry points. From the description field, all other subject fields can be completed.

**Model A - Keyword search capability only**

This model is the simplest and requires little or no training for staff members. The guiding principle for this model is to consider the Description Field as the carrier of all relevant information about the historical object.

Advantages: Easy to understand, simple to complete, little training, little prior knowledge, students and the general public could do this. Work easily completed during the Road Show event. Keyword searching.

Disadvantages: Keyword searching, though comprehensive, doesn't allow for targeted searches. Generally, keyword is fine, but if more sophisticated tools are envisioned for the Road Show, then Model A will not afford the support.

**Model B - Some search capability beyond keyword**

Slightly more complex than Model A, the number of fields increases and training is required. The Description field carries all relevant information about the object. Drop down menus may be offered for Decades, Countries and formats. Input of personal names is more time consuming. The record might be able to be completed during the Road Show event.

Advantages: Easy to understand, simple to complete. May require some training.

Disadvantages: Keyword searching only limits search accuracy, time consuming.

**Model C - Complex search capability, Emigration & immigration information**

The complexity of this model requires time after the event to complete all field entries. The Description Field carries all relevant information about the object and the information therein is used to complete the other fields. Drop down menus may be created for Decades, Ethnicity, Format and Countries. Emigration & immigration information is recorded and presented.

Advantages: Keyword searching, field specific searching and emigration and immigration information gathered. A clickable map showing immigration patterns could be generated through this information. Specific lists of people, vessel names, etc. could be generated.

Disadvantages: Needs training. Cannot be completed during a Road Show.
Subject Access

Keyword searching is the simplest way to provide subject access for the user. Care must be taken to include as many keywords as possible in the fields provided. In Model A, all subject words must be included in the Title, Description and Location fields.

Models B and C provide a Subject field for keywords. A controlled vocabulary is not recommended for this project. If a controlled vocabulary is desired, then the Thesaurus for Graphic Materials I: Subject Terms is recommended. It is easily accessible online, and the formats and terms are readily understandable. (http://www.loc.gov/rr/print/tgm1/toc.html) This thesaurus was developed to provide subject access for graphic materials such as paintings, posters, photographs. When an object other than a photograph is digitized, this thesaurus is not as useful. Subject terms to appear with every record, or embedded should be: Massachusetts History, United States History.

Each of the models has three parts: the Public View, the Cataloging Instructions and the Metadata and Technical information.
3. **Model A (Simple Metadata)**

Sample Record: Public View

<table>
<thead>
<tr>
<th><strong>Identifier:</strong></th>
<th>315</th>
</tr>
</thead>
</table>

| **Title:**      | Edward O'Malley visits Ireland, 1929 |
| **Description:** Nine year old Edward O'Malley, a resident of Dorchester, visiting both sets of his grandparents in Ireland in 1929. His father, Austin O’Malley, came to Boston at age 20 in 1912 from Queenstown, on the ship SS. Laconia. In 1929, Austin O'Malley brought his son to Ireland to meet his parents and in-laws. Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley. |
| **Creator:**    | Austin O'Malley |
| **Location:**   | Ireland, County Mayo, Doughmakeon, Louisburgh |
| **Rights:**     | Copyright Massachusetts Studies Project, UMass Boston. |
Model A - Cataloging instructions

1. **Title field:** Briefly answers Who? What? Where? or When?

   Examples:  Edward O'Malley visits Ireland, 1929,
              Kathleen Miller at her 20th birthday party,
              Malden, Mass., ca. 1940.

   This field allows users a 'quick' reference.

2. **Description field:**

   THIS IS THE MOST IMPORTANT FIELD.
   This field provides as much information as possible for effective keyword searching.

   Repeat the information in the title field and give any supplementary information. This can be quite long. Include all names, places, dates, situations and history available. When in doubt, include the information. This field also provides all the information for any other field in the record, for later input if necessary. So include everything.

   All of the information in this field should be presented in a way that will be understandable by the general public.

   For group portraits, list the people in a standardized way.

   Example:
   Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley.

2a. **Description_Contributor:**

   This field provides the subjective information from the contributor. Phrases such as, "This is my grandmother," or, "My mother took this photograph when she was visiting her parents," might be included here.

3. **Creator:**

   Creator is the person or organization who created the photograph or letter or physical object. It is not you or the contributor, unless the contributor took the photograph, wrote the letter, or spoke in the interview (for example).

4. **Coverage_Spatial:**

   This field might also be titled LOCATION.
   Include all locations that relate to the object or photograph. The field names will determine the kind of geographic location, ie. country, state, county, town, neighborhood.

   Examples:
5. **Coverage_Temporal_Decade:**

Here is entered the decade the object was created. Drop down menu by decades, or fill in the decade:

Examples:
- 1900-1910
- 1940-1950

You may have already included date information in the Title field and in the Description field. Even though redundant, this repetition is useful for the user of the website. This 'Decades' field allows for more complex sorting of records.

16. **Rights:**
Copyright statement. This should be automatically generated by the database.

Example:
- Copyright 2007 UMass Boston
- Educational use only

17. **Publisher:**
This information is automatically generated by the database.

Example:
- UMass Boston; Massachusetts Studies Project

18. **Identifier_RoadShow:**

This field identifies the location and date of the road show where this object was digitized.

Example:
- Norton, Mass., 2006 Mar. 15

19. **Identifier_Contributor:**

This is a unique number assigned to the contributor of the object to the Road Show.

20. **Identifier_Object:**

This is the unique contributor number with a number or letter added for each object digitized.
Examples:
201-a - Jones family photograph
201-b - Jones family heirloom
201-c - Jones family letter
201-d - Jones audio interview
201-e - Jones video of grandmother

21. Rights_Age:

Is there anyone pictured under age (18) who does not have parental permission to appear on website?

22. Creator_Staff:

Road show personnel digitizing this object. Or, if desired, list all the road show staff on duty.

23. Contributor:

Name and other information about the contributor of the historical object.

24. Questions:

Included here are questions the contributor may have about this image. Questions such as "Who is the person at the right?" or "Where was the photograph taken?" might be included in this field.
4. MODEL B: Intermediate Metadata

Sample Record, Public View

**Title:** Edward O'Malley visits Ireland, 1929

**Description:** Nine year old Edward O'Malley, a resident of Dorchester, visiting both sets of his grandparents in Ireland in 1929. His father, Austin O’Malley, came to Boston at age 20 in 1912 from Queenstown, on the ship SS. Laconia. In 1929, Austin O'Malley brought his son to Ireland to meet his parents and in-laws. Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley

**Creator:** Austin O'Malley

**Location:** Ireland, County Mayo, Doughmakeon, Louisburgh

**Dates:** 1929

**People:** Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley, Austin O'Malley

**Subjects:** Children, Emigration & immigration, Irish Americans, Families

**Type:** image

**Format:** jpg

**Rights:** Copyright Massachusetts Studies Project, UMass Boston.

**Publisher:** UMass Boston

**Identifier:** 315
Model B - Cataloging instructions

1. Title:
Briefly answer Who? What? Where? or When?

Examples:
Edward O'Malley visits Ireland, 1929,
Kathleen Miller at her 20th birthday party,
Malden, Mass., ca. 1940.

This field allows users a 'quick' reference.

2. Description:
THIS IS THE MOST IMPORTANT FIELD.
This field provides as much information as possible for effective keyword searching.

Repeat the information in the title field and give any supplementary information. This can be quite long. Include all names, places, dates, situations and history available.

When in doubt, include the information. This field also provides all the information for any other field in the record, for later input if necessary. So include everything.

All of the information in this field should be presented in a way that will be understandable by the general public.

For group portraits, list the people in a standardized way.

   Example:
   Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley.

3. Creator:
Creator is the person or organization who created the photograph or letter or physical object. It is not you or the contributor, unless the contributor took the photograph, wrote the letter, or spoke in the interview (for example).

4. Coverage_Spatial:

This field might also be titled LOCATION.
Include all locations that relate to the object or photograph. The field names will determine the kind of geographic location, i.e. state, country, county, town, neighborhood.

Examples:
United States--Massachusetts--Norton
Ireland
Italy--Genoa
5. **Coverage_Temporal_Decade:**

Here is entered the decade the object was created. 
Select from a drop down menu by decades, or fill in the decade, or perhaps the database software can automatically calculate the decade from the date.

Examples:
1900-1910
1940-1950

You may have already included date information in the Title field and in the Description field. Even though redundant, this repetition is useful for the user of this website. This 'Decades' field allows for more complex sorting of records.

6. **Subject_People:**

This field includes all personal names associated with this object. Include the people in a photograph, the people who own an object, and the family names of others that are in some way related to the object. Though you may have already included these names in the Description field and the Title field, adding the names in this field allows the database to generate a listing of people.

Examples:
O'Malley family
O'Malley, Edward
O'Malley, Austin

14. **Type:**

Drop down menu of the following choices:

Physical object, Text, Image, Sound, Movie/Video

Examples:
A photograph would be IMAGE
A necklace (not a photograph of a necklace) would be PHYSICAL OBJECT
A letter would be TEXT
Music or a recorded interview would be SOUND
A video would be MOVIE/VIDEO

This field is often difficult for catalogers to understand. Some resource types require special software, such as video player software, and it may help the user (the person visiting the website) to know the type of different resources.

15. **Format:**

Drop down menu showing the digital information:
16. Rights:
Copyright statement. This should be automatically generated by the database.

Example:
Copyright 2007 UMass Boston
Educational use only

17. Publisher:
This information is automatically generated by the database.

Example:
UMass Boston; Massachusetts Studies Project

18. Identifier_RoadShow:

This field identifies the location and date of the road show where this object was digitized.

Example:
Norton, Mass., 2006 Mar. 15
Or, a code: NOR20060315

19. Identifier_Contributor:

This is a unique number assigned to the contributor of the object to the Road Show.

20. Identifier_Object:

This is the unique contributor number with a number or letter added for each object digitized.

Examples:
201-a - Jones family photograph
201-b - Jones family heirloom
201-c - Jones family letter
201-d - Jones audio interview
201-e - Jones video of grandmother

21. Rights_Age:

Is there anyone pictured under age (18) who does not have parental permission to appear on website?

22. Creator_Staff:
Road show personnel digitizing this object. Or, if desired, list all the road show staff on duty.

23. **Contributor:**

Name and other information about the contributor of the historical object.

24. **Questions:**

Included here are questions the contributor may have about this image. Questions such as "Who is the person at the right?" or "Where was the photograph taken?" might be included in this field.
## Model B - Metadata description and technical information

<table>
<thead>
<tr>
<th>Field Names</th>
<th>Technical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dublin Core Elements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>text</td>
<td>Who what where when</td>
</tr>
<tr>
<td>Description</td>
<td>text (memo), three-four paragraphs of text at least</td>
<td>Narrative about object</td>
</tr>
<tr>
<td>Description_Contributor</td>
<td>text</td>
<td>Subjective information from the contributor</td>
</tr>
<tr>
<td>Creator</td>
<td>text</td>
<td>Creator (s) of object (photographer, letter writer, interviewee, etc.)</td>
</tr>
<tr>
<td>Coverage_Spatial</td>
<td>text</td>
<td>Locations related to the object and/or family.</td>
</tr>
<tr>
<td></td>
<td>repeatable</td>
<td></td>
</tr>
<tr>
<td>Coverage_Temporal_Decade</td>
<td>drop down? or text</td>
<td>Decade historical object was created</td>
</tr>
<tr>
<td>Subject_People</td>
<td>text</td>
<td>Names of people associated with object</td>
</tr>
<tr>
<td></td>
<td>repeatable</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Checkbox</td>
<td>Type of resource</td>
</tr>
<tr>
<td></td>
<td>Physical object</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Image</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sound</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Movie/video</td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td>Checkbox</td>
<td>Digital formats used on this website with this object</td>
</tr>
<tr>
<td></td>
<td>examples:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>jpg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mp3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.mov</td>
<td></td>
</tr>
<tr>
<td>Rights</td>
<td>text</td>
<td>Copyright statement for website and project</td>
</tr>
<tr>
<td></td>
<td>automatically added</td>
<td></td>
</tr>
<tr>
<td>Identifier_RoadShow</td>
<td>text</td>
<td>Place and date of Road Show</td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Identifier_Contributor</td>
<td>Text? number?</td>
<td>Unique Number assigned to each contributor</td>
</tr>
<tr>
<td>Identifier_Object</td>
<td>Text? number?</td>
<td>Unique number assigned to each object, prefixed by the contributor's number</td>
</tr>
<tr>
<td>Rights_Age</td>
<td>Yes/No? or text</td>
<td>Is there anyone pictured under age (18) who does not have parental permission to appear on website?</td>
</tr>
<tr>
<td>Creator_Staff</td>
<td>text</td>
<td>Names of Road Show staff members</td>
</tr>
<tr>
<td>Contributor</td>
<td>text</td>
<td>Contributor name and information</td>
</tr>
<tr>
<td>Questions</td>
<td>text</td>
<td>Questions the contributor has about the object</td>
</tr>
</tbody>
</table>
### Title:
Edward O'Malley visits Ireland, 1929

### Description:
Nine year old Edward O'Malley, a resident of Dorchester, visiting both sets of his grandparents in Ireland in 1929. His father, Austin O'Malley, came to Boston at age 20 in 1912 from Queenstown, on the ship SS. Laconia. In 1929, Austin O'Malley brought his son to Ireland to meet his parents and in-laws. Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley

### Creator:
Austin O'Malley

### Location:
Ireland, County Mayo, Doughmakeon, Louisburgh

### Dates:
1929

### People:
Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley, Austin O'Malley

### Subjects:
Children, Emigration & immigration, Irish Americans, Families

### Ethnicity:
Irish American

### Emigrated from:
Ireland--Queenstown

### Immigrated to:
New York--Ellis Island; Massachusetts--Dorchester

### Arrival date:
1912

### Ship name:
Laconia

### Reason for emigrating:
Economic

### Type:
image

### Format:
jpg

### Rights:
Copyright Massachusetts Studies Project, UMass Boston.

### Identifier:
315

### Publisher:
UMass Boston
Model C - Cataloging instructions

1. Title: Briefly answer Who? What? Where? or When?

Examples:
Edward O'Malley visits Ireland, 1929.
Kathleen Miller at her 20th birthday party, Malden, Mass., ca. 1940.

This field allows users a 'quick' reference.

2. Description: THIS IS THE MOST IMPORTANT FIELD.
This field provides as much information as possible for effective keyword searching.

Repeat the information in the title field and give any supplementary information. This can be quite long. Include all names, places, dates, situations and history available. When in doubt, include the information. This field also provides all the information for any other field in the record, for later input if necessary. So include everything.

All of the information in this field should be presented in a way that will be understandable by the general public.

For group portraits: List the people in a standardized way.

Example:
Pictured left to right and back to front: Honore O'Malley, Ellen Byrne, Michael O'Malley, Edward Byrne, Edward O'Malley.

2a. Description_Contributor:

This field provides the subjective information from the contributor. Phrases such as, "This is my grandmother," or, "My mother took this photograph when she was visiting her parents," might be included here.

3. Creator:
Creator is the person or organization who created the photograph or letter or physical object. It is not you or the contributor, unless the contributor took the photograph, wrote the letter, or spoke in the interview (for example).

4. Coverage_Spatial:
This field might also be titled LOCATION.
Include all locations that relate to the object or photograph. The field names will determine the kind of geographic location, i.e. state, country, county, town, neighborhood.
Examples:
United States--Massachusetts--Norton
Ireland
Italy--Genoa
United States--Massachusetts--Cambridge--Middlesex--Central Square

5. Coverage_Temporal_Decade:

Here is entered the decade the object was created.
Drop down menu by decades, or fill in the decade:

Examples:
1900-1910
1940-1950

You may have already included date information in the Title field and in the Description field. Even though redundant, this repetition is useful for the user of this website. This 'Decades' field allows for more complex sorting of records.

6. Subject_People:

This field includes all personal names associated with this object. Include the people in a photograph, the people who own an object, and the family names of others that are in some way related to the object. Though you may have already included these names in the Description field and the Title field, adding the names in this field allows the database to generate a listing of people.

Examples:
O'Malley family
O'Malley, Edward
O'Malley, Austin

7. Subject_Keyword:

Here are included any words that might help someone searching for this object, that may not appear in the record elsewhere. Do not include “Massachusetts history” or “United States history” as keywords.

Examples:
pets, parties, fathers, sons

Administrator: The database should automatically generate the following:

Massachusetts history
United States history

7a. Subject_TGM1:

8. Subject_Ethnicity:

   Examples:
   Irish Americans
   Haitian Americans

9. Coverage_Spatial_Emigration:

   This is the country, city and town the people left in order to come to the United States. The home country, in other words.

   Examples:
   Italy--Rome
   Ireland

   You may have already entered this information elsewhere in the record. Entering it here, also, allows the database to create special features about emigration & immigration.

10. Coverage_Spatial_Immigration:

    This field refers to the place where the immigrants stepped foot into the United States.

    Examples:
    United States--New York--Ellis Island
    United States--New Jersey--Trenton

    You may have already entered this information elsewhere in the record. Entering it here, also, allows the database to create special features about emigration & immigration.

11. Coverage_Temporal_Immigration:

    Sometimes the contributor discusses the arrival date of his or her family, even though the photograph itself may have nothing to do with immigration. Here is where you put, in the decades format, the period a family immigrated to the U.S.

    Examples: 1890-1900
               1980-1990

12. Subject_Vessel:
Here is entered the name of the ship or vessel of any kind that brought the immigrants to the United States. Sometimes this is an important way that researchers discover more about a family. This field will allow the database to generate a separate listing by vessel.

13. **Subject_Immigration_Reason:**

Five choices are offered here: Educational, political, religious, economic, other. This information might also appear in the Description field.

14. **Type:**
Drop down menu of the following choices:
Physical object, Text, Image, Sound, Movie/Video

Examples:
- A photograph would be IMAGE
- A necklace (not a photograph of a necklace) would be PHYSICAL OBJECT
- A letter would be TEXT
- Music or a recorded interview would be SOUND
- A video would be MOVIE/VIDEO

This field is often difficult for catalogers to understand. It may help to remember that the user (the person viewing the website) may need special software to access the resource. Knowing what you are showing sometimes helps.

15. **Format:**
Drop down menu showing the digital information:

Examples might include:
- .jpg, text, mp3, video, .mov.

This information is helpful to the user.

16. **Rights:**
Copyright statement. This should be automatically generated by the database.

Example:
- Copyright 2007 UMass Boston
- Educational use only

17. **Publisher:**
This information is automatically generated by the database.

Example:
- UMass Boston; Massachusetts Studies Project

18. **Identifier_RoadShow:**
This field identifies the location and date of the road show where this object was digitized.

Example:
   Norton, Mass., 2006 Mar. 15
   Or, coded, e.g. NORTON20060315

19. Identifier_Contributor:

This is a unique number assigned to the contributor of the object to the Road Show.

20. Identifier_Object:

This is the unique contributor number with a number or letter added for each object digitized.

Examples:
   201-a - Jones family photograph
   201-b - Jones family heirloom
   201-c - Jones family letter
   201-d - Jones audio interview
   201-e - Jones video of grandmother

21. Rights_Age:

Is there anyone pictured under age (18)
who does not have parental permission to appear on website?

22. Creator_Staff:

Road show personnel digitizing this object. Or, if desired, list all the road show staff on duty.

23. Contributor:

Name and other information about the contributor of the historical object.

24. Questions:

Included here are questions the contributor may have about this image. Questions such as "Who is the person at the right?" or "Where was the photograph taken?" might be included in this field.

Model C - Metadata description and technical information
<table>
<thead>
<tr>
<th>Field Names</th>
<th>Technical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dublin Core Elements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>text</td>
<td>Who what where when</td>
</tr>
<tr>
<td>Description</td>
<td>text (memo), three-four paragraphs of text at least</td>
<td>Narrative about object</td>
</tr>
<tr>
<td>Description_Contributor</td>
<td>text</td>
<td>Subjective information from the contributor</td>
</tr>
<tr>
<td>Creator</td>
<td>text repeatable</td>
<td>Creator (s) of object (photographer, letter writer, interviewee, etc.)</td>
</tr>
<tr>
<td>Coverage_Spatial</td>
<td>text repeatable:</td>
<td>Locations related to the object and/or family.</td>
</tr>
<tr>
<td></td>
<td>1. country,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. state,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. county,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. town/city</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. neighborhood</td>
<td></td>
</tr>
<tr>
<td>Coverage_Temporal_Decade</td>
<td>drop down? or text</td>
<td>Decade historical object was created</td>
</tr>
<tr>
<td>Subject_People</td>
<td>text, repeatable:</td>
<td>Names of people associated with object</td>
</tr>
<tr>
<td></td>
<td>1. lastname</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. firstname</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. middlename</td>
<td></td>
</tr>
<tr>
<td>Subject_Keyword</td>
<td>text repeatable</td>
<td>Words to assist in keyword searching</td>
</tr>
<tr>
<td>Subject_TGM1</td>
<td>text repeatable</td>
<td>Subjects chosen from the Thesaurus for Graphic Materials I: Subject Terms</td>
</tr>
<tr>
<td>Subject_Ethnicity</td>
<td>text, or drop down; if text, then repeatable</td>
<td>Examples: African Americans, Haitian Americans</td>
</tr>
<tr>
<td>Coverage_Spatial_Emigration</td>
<td>text</td>
<td>Home country</td>
</tr>
<tr>
<td></td>
<td>1. country,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. state,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. county,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. town/city</td>
<td></td>
</tr>
<tr>
<td>Coverage_Spatial_Immigration</td>
<td>text</td>
<td>Location where immigrants entered the United States, or other country</td>
</tr>
<tr>
<td></td>
<td>1. country,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. state,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. county,</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Coverage.Temporal.Immigration</td>
<td>text or drop down decades format</td>
<td>Decade immigrants moved from their home country to the United States, or other country</td>
</tr>
<tr>
<td>Subject.Vessel</td>
<td>text</td>
<td>Vessel that transported immigrants</td>
</tr>
<tr>
<td>Subject.Immigration.Reason</td>
<td>Drop down menu:</td>
<td>Reason immigrants left their homes to enter the United States, or other country</td>
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<tr>
<td></td>
<td>Educational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political</td>
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<tr>
<td></td>
<td>Religious</td>
<td></td>
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<tr>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Checkbox</td>
<td>Type of resource</td>
</tr>
<tr>
<td></td>
<td>Physical object</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Image</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sound</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Movie/video</td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td>Check examples:</td>
<td>Digital formats used on this website with this object</td>
</tr>
<tr>
<td></td>
<td>jpg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mp3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.mov</td>
<td></td>
</tr>
<tr>
<td>Rights</td>
<td>text, automatically added</td>
<td>Copyright statement for website and project</td>
</tr>
<tr>
<td>Publisher</td>
<td>text, automatically added</td>
<td>Publisher of website</td>
</tr>
<tr>
<td>Identifier.RoadShow</td>
<td>text</td>
<td>Place and date of Road Show</td>
</tr>
<tr>
<td>Identifier.Contributor</td>
<td>Text? number?</td>
<td>Unique Number assigned to each contributor</td>
</tr>
<tr>
<td>Identifier.Object</td>
<td>Text? number?</td>
<td>Unique number assigned to each object, prefixed by the contributor's number</td>
</tr>
<tr>
<td>Rights.Age</td>
<td>Yes/No? or text</td>
<td>Is there anyone pictured under age (18) who does not have parental permission to appear on website?</td>
</tr>
<tr>
<td>Creator.Staff</td>
<td>text</td>
<td>Names of Road Show staff</td>
</tr>
<tr>
<td>Members</td>
<td>Contributor Text</td>
<td>Contributor Information</td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Contributor</td>
<td>text</td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td>text</td>
<td>Questions the contributor has about the object</td>
</tr>
</tbody>
</table>
6. Conclusion

Metadata can sometimes be as complex as the technical aspects of a data project, even though it involves the familiar realm of the English language. Care has been taken with this report to make it as easy as possible to transition to a gathering of information which will stand the project in good stead for some time to come.

None of these models should be taken at face value; they were created as a starting point for dialogue and as a framework from which to plan and adjust.

It must be stated often and frequently that concepts such as the Road Show can be, in their execution, quite complicated. The staff working on the project may not think that this is so, because they have skill sets that suit them for this work as educators; recording interviews, eliciting information, enjoying history and social connections and weaving through the threads of community lives. But translating the work done on the 'ground' to a web presence and to a database that is useful for researchers is a complicated process. The staff should not underestimate their skills and try to realize that a database structure demands that the complexities of their work be translated to a digital world. Sometimes it seems overly didactic and tedious to break information down into these parts, but I can assure you, this will be a great service in the long run for future users of these wonderful resources.

With greatest respect and best wishes,

Frances L. Pollitt, MLS

7. Recommended Resources

Dead Fred free family history photo website <http://www.deadfred.com>
Allows anyone to contribute family photographs to a searchable database

Dublin Core Metadata Element Set <http://www.dublincore.org>
Describes the organization of data

Maine Memory Network <http://www.mainememory.net>
Collaborative project including historical objects from many organizations with many ways to search

Making of Modern Michigan website <http://mmm.lib.msu.edu/>
Very helpful display of the Dublin Core elements and explanations

Massachusetts Curriculum Frameworks
Thesaurus for Graphic Materials I: Subject terms: <http://www.loc.gov/rr/print/tgm1/>
Subject terms that might be useful to use for the Project
IB. Preserving Family Photographs and Documents

By the New England Archivists’ Outreach Committee

The Mass. Memories Road Show creates digital surrogates of original photographs and documents that are held in the Contributors’ family collections. An important part of the Road Shows is the partnership with the New England Archivists’ Outreach Committee, whose members attend each Road Show and provide onsite consultation with Contributors about how to protect and preserve their priceless family artifacts. This service is part of the NEA’s “Archives on the Road” program.

In addition to their presence and onsite advice, the NEA Outreach Committee has prepared a brochure, “Guide to Preserving Your Family Photos and Documents” to inform the public of basic best practices for preserving family documents and photos. This highly informative brochure is distributed free-of-charge to Road Show attendees.

For more information, visit the New England Archivists website at:

http://www.newenglandarchivists.org/
**Environment**
Where in your home do you keep your family photos and documents? Is this location exposed to any of the following?

- temperature changes
- sunlight
- moisture
- humidity changes

- food
- pets
- people
- pests

Too much exposure to any of these elements can shorten the lifespan of your collection. Do not store your archival collections in an attic, basement, damp closet, shelf near a window or any other risky place.

**The ideal storage environment is:**

**Dark**- has no direct sunlight, as UV rays damage paper-based items.

**Stable**- a place where changes in room temperature and humidity are minimal (such as a dark closet on the main level of your home)

**Protected**- away from water sources (think about where water pipes are located), pests, pets, and food.

**Photographs** are best kept in either acid-free folders, adhesive-free albums (tape and sticky-back albums will leave residue on your photos), or in uncoated polyester, polyethylene, or polypropylene sleeves.

Never use plastic storage materials that have PVC (polyvinyl chloride) as a component. PVC is not a safe material because as it ages, it chemically breaks down, causing damage to your photographs. Also, some plastics will "stick" to your photographs, making them difficult or impossible to remove from photo albums.

**Storage**
The best type of storage containers for your collection can be purchased from supply companies that sell archival quality boxes, folders, and photo sleeves.

Please keep in mind that the sizes of the enclosures that you purchase should closely match the size of your object (so the object does not rub against the enclosure and cause damage).

**Manuscripts/Papers** should be stored flat in acid-free, buffered folders, rather than folded or rolled, which can lead to tearing.

**Newspaper** articles and other acidic paper such as telegrams should ideally be photocopied onto acid-free buffered paper. If you must keep the originals, make sure to store them away from your other treasures to prevent the acid from transferring.
Books are best kept on sturdy shelves and arranged so they are difficult to pull off. Prop books with bookends so they remain upright, and reduce pressure on the book’s spine. Books should not be stored in direct sunlight. Sunlight fades book jackets and pages, and UV radiation will weaken spines and accelerate chemical deterioration.

Handling
- Normal oils from your skin can damage your photographs and documents. Always wash and dry hands thoroughly before handling documents; avoid creams and lotions as these heighten natural skin oils that can corrode them. Using white cotton gloves is suggested.
- Avoid excessive handling. If possible, scan or photocopy a photograph or document that must be handled frequently.
- When displaying photographs, if possible, display a scanned copy, and keep the originals safely stored away from the light.
- Never laminate your document or treasures. This adds acidity and is irreversible.
- Remove all metal fasteners from documents and, if needed, replace them with inert plastic clips.
- Never repair any document with tape (even those claiming to be archival), because it can stain, eventually falls off, and leaves behind a sticky residue that is almost impossible to remove.
- Use a pencil, not a ballpoint pen or permanent marker, on items to prevent damage. Pens and markers (even those labeled archival) can bleed through or smear, thus permanently damaging the item.

Never try to be your own conservator. The repair of archival materials and rare books is difficult, highly specialized work and should only be performed by a trained professional.

This guide was designed to inform the public of basic best practices when it comes to preserving your family documents, photos and treasures.

The information within outlines the three principal preservation concerns that you should consider when caring for your family treasures:

Environment: the environment in which archival materials are kept,

Storage: how the materials are stored (such as in boxes or albums), and

Handling: how the materials are being handled or used.

For more preservation information, please visit www.newenglandarchivists.org/about/committees/outreach

To purchase archival quality preservation supplies, visit these or other reputable dealers:

www.conservationresources.com
www.gaylord.com
www.hollingercorp.com
www.lightimpressionsdirect.com
www.metaledgeinc.com
www.universityproducts.com
This brochure was created by the New England Archivists' Outreach Committee. The NEA Outreach Committee is committed to increasing public appreciation and understanding of archives and the archival profession.

Our objective is to organize events that increase public awareness of primary source materials, how and where they are maintained, and the work of the professionals who sustain them. We do so through the sponsorship and promotion of programs, lectures, and workshops designed specifically for the public: students, educators, genealogists, and members of allied professions.

ONLINE
www.newenglandarchivists.org
/about/committees/outreach
II. Legal Considerations

Submitted by Christopher Cloud, Consulting Attorney

Contents:

1) Overview

2) Copyrights

3) Publicity and Privacy

4) Consents & Authorized Uses

5) Other Considerations

6) Conclusion
Overview

The Massachusetts Studies Project, Institute for Learning and Teaching, University of Massachusetts, Boston, has undertaken a project, the “Mass. Memories Road Show”, to digitally document the lives of the people who have lived in and contributed to the rich history of the Commonwealth of Massachusetts.

The Consent Form the Mass. Memories Road Show asks each Contributor to sign allows the organization to use these images for a variety of purposes. The Consent Form also allows the Contributor to have a say in how their photographs are used.

Each Contributor has the option of placing a check mark in a variety of boxes on the consent form providing the University of Massachusetts Boston with consent to (1) use the photograph in our digital database on a non-exclusive basis, (2) use the photograph for Commercial Gain, (3) use images submitted by minors only if Parental Consent has been provided, and (4) use photograph(s) in all marketing, advertising, and promotional programs associated with this project.

These various consents help the organization make sure that the photographs are only used in ways that the contributor is comfortable, and that also respect the legal rights attached to each photograph that has been submitted.

Copyrights

A copyright is the right that is attached to a photograph once it is taken. The photographer, the subject or the commissioning organization retains ownership over the photograph. The University of Massachusetts Boston Consent Form that the submitters of the photograph(s) are asked to sign, provides the University of Massachusetts Boston with the non-exclusive right to use the photograph(s) as part of this project. This non-exclusive right allows the copyright holder to retain ownership over their work, but provides the University of Massachusetts Boston the right to use the image and any derivatives to develop its digital database of photographs.

Definition of Copyright:

A copyright is “a set of exclusive rights granted by government for a limited time to protect the particular form, way or manner in which an idea or information is expressed. Copyright may subsist in a wide range of creative or artistic forms or "works,"
including literary works, movies, musical works, sound recordings, paintings, photographs, software, and industrial designs.”

Each photograph contributed to this project has been copywritten, and it is for this reason that the project requests (1) the non-exclusive right to use the photograph, and (2) recognition that our use of this photographs falls under the “Fair Use” exception that is recognized under copyright law.

The Doctrine of Fair Use:

Like the English language, the laws pertaining to copyright provide for a number of exceptions to the rule. One such exception is that a non-profit institution may use a work for educational purposes that benefit the public. The University of Massachusetts Boston has a right to allow commentary on the personal history illustrated in the photographs, but does not use photograph(s) for commercial gain unless the Contributor expressly provides consent.

As an example: In 1966 the Standells recorded a song written by Ed Cobb known as “Dirty Water”. If the lyrics “Well I love that dirty water, Oh, Boston, you're my home (oh, yeah)” were used in a poem published in a book of poetry distributed to the public for free, then their use would be considered “fair use”. On the other hand, if an individual wanted to place these same lyrics on a coffee mug and sell that mug for commercial gain, then the doctrine of fair use would not apply.

The University of Massachusetts Boston’s use of the photographs on a non-exclusive basis (which allows the organization to use the photograph(s) without restricting copyright holders’ ability to use the same photograph) minimizes the need to track down, locate, or determine the original copyright holder, unless the University of Massachusetts Boston seeks to use those photographs for commercial purposes.

As a not-for-profit organization, the Massachusetts Studies Project relies on contributions and grants to fund its initiatives, and so may want to feature some of the contributed photographs on promotional products to be sold for commercial gain. The consent form that each Contributor signs before submitting their photographs includes an option that authorizes the University of Massachusetts Boston to use the submission for commercial purposes.

Publicity & Privacy
Right of Publicity

The right of publicity is defined as an individual's right to control and profit from the commercial use of his/her name, likeness and persona.

Right to Privacy

A violation of one’s right to privacy is defined as the intrusion into the personal life of another, without just cause, which can give the person whose privacy has been invaded a right to bring a lawsuit for damages against the person or entity that intruded. However, public personages are not protected in most situations, since they have placed themselves already within the public eye, and their activities (even personal and sometimes intimate) are considered newsworthy, i.e. of legitimate public interest. However, an otherwise non-public individual has a right to privacy from: 1) intrusion on one's solitude or into one's private affairs; 2) public disclosure of embarrassing private information; 3) publicity which puts him/her in a false light to the public; 4) appropriation of one's name or picture for personal or commercial advantage.

The University of Massachusetts Boston has also done its best to make sure that it has taken the proper steps to protect people’s rights to Publicity and Privacy. The consent form helps us to avoid violating these rights. If a party objects to our use of a photograph we ask that they contact the webmaster at the University of Massachusetts Boston so we may take appropriate steps to remove the objectionable photograph from this database. We ask that the disputing party demonstrate patience, as it is not the intention of the University of Massachusetts Boston to feature anyone that does not want to be a part of this wonderful project.

Consents & Authorized Uses

The University of Massachusetts Boston Consent Form also gives contributors control over how their photographs will be used. Each contributor has the option to consent to the following:

- Use of the Photograph in the Digital Database
- Use of the Photograph for Advertising and Marketing
- Parental Consent for Minors
- Optional use of Photograph for Commercial Purposes

The Consent Form that each Contributor signs includes a check box that authorizes the University of Massachusetts Boston's use of the photograph.

Some of the photograph(s) submitted will contain images of third parties.
not related to the contributor. We ask that each contributor identify all people appearing in the picture, so that we can properly identify the party. This helps us determine whether or not we will use the photograph(s) contributed, and if it is necessary to seek the permission of these non-relatives.

For those non-contributors that find their digital image on our site and do object to the appearance of the image on this site we ask that you contact us, so we can take the proper measures to address your concerns.

Protections Provided by Watermarks

Digital Watermarks are imprints embedded in an image that prevent someone from right-clicking on the image and using it in a way that may not have been intended. The University of Massachusetts Boston treasures the contributions made by contributors, and it is for this reason has decided to protect Road Show images with a digital watermark. For more information on the vendor that is providing the digital watermarks used by the University of Massachusetts Boston visit [www.digimarc.com](http://www.digimarc.com).

Other Considerations

Buildings: From time to time, a photograph may contain a person’s private residence, an artist’s work, or a sculpture in the background. The University of Massachusetts Boston respects the rights of property owners, but would like the public to know that the database they are creating is for educational purposes, and therefore the incidental inclusion of the architectural work, painting, or sculpture is permitted under US Copyright Law.

Famous Marks and Branded Clothing: We all wear clothes, some of us sport shirts that have a Reebok logo, a Red Sox logo, or another famous mark or brand. The fair use doctrine and educational nature of this database permits us to feature apparel or other products that may include such famous marks. If an entity objects to an image that includes one of these famous brands/marks we ask that you please contact the webmaster at the University of Massachusetts Boston.

Use of Minors in Photograph(s): The University of Massachusetts Boston is committed to protecting the rights of minors. For this reason we have chosen not to accept photographs of minors currently under the age of 18 without parental consent. For those images submitted with parental consent, we want parents, minors, and the public to know that the University of Massachusetts Boston has protected each image with a digital watermark to prevent the photograph from being pirated. For those photographs that capture the images of minor(s) in older photograph(s) we
recognize that these individuals are now over the age of majority, and it is for this reason that we have chosen to include them as part of the University of Massachusetts Boston.

**Conclusion**

The University of Massachusetts Boston appreciates the contributions of residents in the Commonwealth allowing the Mass. Studies Project to share their stories through treasured family photographs. The Project is sensitive to the legal rights that the photographer, copyright holder, and individual have over these photographs. It is for this reason all Contributors are asked to sign the Consent Form prior to submitting their photographs at any Road Show. It is our hope that Contributors enjoy the Show, and take great pride in deciding to share a piece of their personal history with the Commonwealth of Massachusetts.
CONTRIBUTOR #: __________________________________________

Non-Exclusive Permission:

Date: _________  Tel: ________________ Fax:  _________________

I (print name) _________________________________ do hereby give to the University of Massachusetts Boston its assigns, licensees, and legal representatives irrevocable permission to copy, display and distribute copies of the scanned documents identified by the Contributor # on this sheet, and to incorporate the scanned images in whole or in part into derivative works.

I retain all other rights to these photos, including without limitation, the right to copy, distribute, publish, display or modify the images, and to transfer, assign or grant license of any such rights.

I hereby indemnify the University of Massachusetts Boston against any claims made by 3rd parties for infringement of their rights to publicity or right to privacy.

I hereby give permission to the University of Massachusetts Boston to use my name and photographic likeness in all forms and media for advertising, trade, and any other lawful purposes.

[CHECK ALL THAT APPLY]

[ ] I hereby certify that I am above the age of 18 years old, and that all people that appear in the submitted photograph are now above the age of 18.

[ ] I hereby certify that all pictures of buildings that are included in a photograph submitted to the Massachusetts Memories Road Show were either in a public place or on private property owned by the Contributor, or a relative.

[ ] I hereby certify, if a minor, that my parent has consented to my Contribution of photograph(s) in which I appear.

[ ] I hereby expressly consent to the University of Massachusetts Boston’s use of my photograph for Commercial use in products sold to raise funds for the Mass. Studies Project, including, but not limited to use on posters, t-shirts, bumper stickers, or calendars.
III. Technology Considerations
Submitted by Rick Mitchell, Consulting Technology Specialist

Contents:

1) At the Road Show
2) Images
3) Security
4) Database Issues
5) Web Issues
1. At the Road Show

Procedures

The Mass Memories Road Show is an effort to capture images and corresponding information contributed by state residents. Road Show events are scheduled so that the public may present photos and provide the supporting documentation that describes the images’ significance.

The following general processes took place during and after the pilot Road Shows:

1) Contributors (residents with images) are assigned a unique control number.
2) Individual images are assigned unique control numbers.
3) Contributors provide information about themselves and about their images.
4) Contributors sign copyright permissions forms.
5) Images are scanned and then saved in a high resolution format.
6) Image files are manipulated to create web-ready images.
7) Image files are ported via FTP to a web server for web access.

Paper Forms

The Road Show has experimented with using paper forms to capture Contributor and Image information, but this is problematic for several reasons. First, the problem of spelling and handwriting can interfere with data entry, especially regarding the entry of email address fields, where spelling is often even less intuitive than fields such as lastname. Since a contact field such as email address may be used for further communication, the problem is more significant.

Another problem with paper forms is inconsistencies in referring to places and events that may be used in later site searches. For example, consider the varying ways in which an individual could code a reference to World War II:

<table>
<thead>
<tr>
<th>Reference</th>
<th>World War II</th>
<th>World War 2</th>
<th>WW2</th>
<th>WWII</th>
<th>World War Two</th>
<th>Second World War</th>
</tr>
</thead>
</table>

In order to standardize such references, and to assist database categorization and keyword searching, it is best to provide a table that confines the Contributor to one, defined, preset entry. Such tables could provide controlled vocabularies for image subject, for city, image type, etc.
**Electronic Forms**

The most efficient solution to the problem of paper form entry is the use of an electronic submission page. The page could be hosted online, and made accessible via wireless internet connection during the Road Show event. Since some Road Show sites will not have access to the internet, an offline version could be created to capture information without an Internet connection. This offline data would then be automatically merged into the online database when an internet connection is available.

The automated entry of Road Show data would have the following advantages over paper forms:

Vital identifying fields, such as email address, can be double-entered to ensure accuracy.
Drop-down lists ensure that keywords and static fields such as CITY will be entered uniformly.

Electronic entry reduces the burden of later entry by staff, increases the speed in which final data entry is achieved, and allows the Contributor to verify the accuracy of entered information during the Road Show event.

Online backup procedures can be incorporated into the automated process.

**Editing / Droplets**

Simple image editing can be performed onsite at the Road Show, to create a master image that is properly cropped and rotated. More extensive editing can be applied when the image is processed prior to upload to the web server. This latter stage of editing can be automated using a tool such as Photoshop, and could include the following:

Simple Brightness/Contrast Adjustment
Automated Level Adjustments
Automated Color and Brightness Adjustments
Insertion of file and copyright information.
Creation of image watermarks
Modification of default resolution and image size.
Creation of thumbnails and print copies.
Recommendations

- Electronic entry of Contributor and Image data should be considered if at all possible. The electronic form would capture data in a unified format and provide automatic update to the Road Show database.
- Since online access will not be available at all Road Show locations, an offline version of the update process should also be developed.
- An automated method of storing both online and offline Contributor data should be developed.
- Read Show technicians should be trained to perform the most basic edits on entered images, including cropping and rotating.
- Automated droplets should be created that will provide more complex image editing and default image processing.
- Adobe Photoshop will be required if droplets are utilized. A less expensive version of Photoshop (Elements) can be utilized if only simple image editing is required.

2. Images

Image Type

There are multiple image types that can be used to capture image information, including: TIFF, JPG, GIF, RAW, BMP and PNG. Of these types, only JPG, GIF and PNG are currently valid images on web browsers.

It is assumed that JPG will be the chosen format for the display of Road Show images, for the following reasons:

JPG is the most common format for digital photographs.
JPG is the accepted format for images on the web.
Although the JPG format is lossy, and an expected loss of resolution takes place using this format, this resolution loss can impact printing, but not web display.

Image Size

An optimum and a maximum image size should be chosen for the stored images. Although the final displayed image size is chosen by a web page’s HTML coding, it is desirable to save the image in the same physical size as the display. Using the same size will verify the clarity of displayed images and will save server storage and reduce FTP requirements.

Image size is typically given in pixels, and is also a factor of resolution. It is assumed that the desired size of a single image would fill approximately 50% of a laptop’s monitor. This equates to a maximum length or width of 400 pixels, or approximately 4 inches.
Maximum dimensions (length or width) may impact the appearance of cropped images.
An automated process should be used to set image size when the image is captured.

**Image Resolution**

Due to the physical differences in screen displays and printed material, display and print media are typically stored in different resolutions. This resolution is typically expressed by the number of dots per inch (dpi) that are discernable in the different media. Typically, screen resolution is given as 72 dpi, and print resolution at 300 dpi.

Although the master copy of images in the Road Show can be scanned and stored at 300 dpi, the version used in the Road Show website can, and should, be at a lower resolution. As part of web design practice, it is always desirable to optimize images to the lowest acceptable resolution to enhance page load time and to minimize server space. It is assumed that the desired resolution for the Road Show images will be 72 dpi.

A resolution of 72 dpi will adversely impact the quality of images that can be printed from the displayed image.

An automated process should be used to set image resolution when the image is captured.

**Thumbnails, Copies for Printing**

It is often desirable to keep separate copies of images for purposes other than the main image display. Very often, smaller versions called thumbnails are produced so that a group of images can be displayed as a kind of index, allowing the user to pick one small image to display the larger version.

Typically, thumbnails are stored at 72 dpi and at dimensions as small as 50 pixels per side.

Additionally, it is possible to save a high-resolution copy of an image for printing. These images would be available for download on the Road Show website. These images might be stored as 3” x 5” (900 x 1500 pixels at 300 dpi) or larger.

An automated process should be used to create secondary image types. If high-resolution images are to be created, then there are additional options for creating the initial scanned image. These images, for instance, could be created as TIFs and then converted to JPGs for the display copy.

**Storage Requirements**
Below are sample storage requirements for 1,000 images of differing types:

<table>
<thead>
<tr>
<th>Type</th>
<th>Size, 1,000 Images</th>
<th>Load Time, Single Image*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web – 4” – 72 dpi</td>
<td>1,000 kb</td>
<td>&lt; 1 second</td>
</tr>
<tr>
<td>Thumbnail – 1” – 72 dpi</td>
<td>10,000 kb</td>
<td>1 second</td>
</tr>
<tr>
<td>Print – 5” – 300 dpi</td>
<td>100,000 kb</td>
<td>8 seconds</td>
</tr>
</tbody>
</table>

* 256k cable modem

**Recommendations**

- JPGS should be chosen as the default image type.
- A default image size of approximately 4” per side should be used.
- A default resolution of 72 dpi should be assigned to each image that will be displayed on the website.
- Thumbnail images should also be created.
- Printable image versions should also be created in 300 dpi format.
- An automated process should be created to produce the desired image versions.

**3. Security**

**Embedding File and Copyright Information**

Using standard image editing tools such as *Adobe Photoshop* and *Photoshop Elements*, it is possible to incorporate ownership information within a JPG file, using fields such as owner, title, copyright status and related web address. These fields may also be used for a simple message indicating that this photo is to be used only for educational and/or non-profit purposes. More advanced data, like keywords, can be entered using the full version of Photoshop. Note that this process can be readily automated. One drawback to this function is that the file information can be removed by another Photoshop user.

Embedded copyright information is not appropriate for the Mass. Memories Road Show since Contributors retain ownership of their photos, while granting non-exclusive permission to the Road Show to use the photograph(s) as part of the project. Therefore, however, embedded copyright information may be appropriate and helpful for organizations owning their collections.

**Watermarks**
Using tools such as Photoshop, it is possible to add a watermark to an image before it is displayed. As with embedding file information, this process can be automated. Unlike file information, this watermark cannot be removed by conventional means.

Two sample watermarks are shown below:

![Watermark Examples]

**Digimarc**

Digimarc Corporation offers downloads that allow an electronic image to be digitally watermarked with embedded owner information that cannot be modified by conventional means such as Photoshop. Use of these downloads require the user to purchase a subscription to Digimarc watermark services. An annual subscription rate for a maximum of 5,000 images is estimated to cost $500.

**NOTES:**

- Ownership or usage information may be embedded in each image.
- If appropriate, copyright information should also be embedded in each image.
- The Road Show web address should also be embedded.
- An unobtrusive copyright watermark should be added to web images. The watermark could be added to one corner of the image.
- Ownership and copyright information and watermarking should be performed by a Photoshop droplet.
4. Database Issues

A Normalized Database

At its simplest, a normalized database ensures that primary data fields are not duplicated. Adhering to this concept reduces database space and provides for uniformity of entry and accessibility of data.

The following tables could be set up to contain standardized information that can be applied to a photo without repeating data, for instance in dropdown lists or pre-entered fields:

<table>
<thead>
<tr>
<th>Zipcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
</tr>
<tr>
<td>Road Show attended</td>
</tr>
<tr>
<td>Image Size</td>
</tr>
<tr>
<td>Origin</td>
</tr>
<tr>
<td>Image Type</td>
</tr>
<tr>
<td>Keywords</td>
</tr>
</tbody>
</table>

Secondary Keys

Secondary keys allow a database to be searched in meaningful ways other than by the primary key. In examining the Road Show database, the following secondary keys could be created:

<table>
<thead>
<tr>
<th>Last name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zip</td>
</tr>
<tr>
<td>City</td>
</tr>
<tr>
<td>Origin</td>
</tr>
<tr>
<td>Keywords</td>
</tr>
<tr>
<td>Email</td>
</tr>
<tr>
<td>Phone</td>
</tr>
</tbody>
</table>

MySQL/php Options

MySQL is an open source database that can be installed on any web server, and is currently installed on most commercial servers at no additional cost. In addition, most educational institutions have installed the software. For those who have not, installation is an easy task. MySQL provides the capability of installing a sophisticated, normalized database with appropriate secondary keys at minimum cost. Most importantly, an open source programming language such as *php* can be used to manipulate that data in a web environment. The combination allows the possibility of producing customized web solutions at affordable costs.

Using *php*, a variety of web related tasks can be performed against the Mass. Memories Road Show database. These tasks could include:
Automatic Contributor email notification.
Automatic update of Road Show database.
Online entry of Road Show data.
Dynamic display of Road Show data on website.
Online search capability.
System reporting.
Distribution of emails to selected Contributors.

If it is necessary to move the site to a commercial server to support a database environment, it is noted that the total yearly cost to procure such a server would be less than $40 per year.

Recommendations

- The database should be modified with the addition of new key fields.
- New secondary keys should be assigned to the database.
- The database should be migrated to MySql, an open platform database.
- Specifications for the design of php coding to access the MySQL should be investigated.
V. Web Issues

The website that presents the Road Show images to the world should be colorful, user-friendly, and highly interactive, allowing visitors to search for photos by location, time period, keyword, place of origin, etc – as well as these categories in combination.

A sample site such as www.hawaiialive.org shows what could be accomplished with a unified design concept and the use of such open source software tools such as MySQL and php.

Some quick ideas for customized, interactive webpages are as follows:

❖ Create an engaging cover page that markets the Road Show concept.
❖ Display an “Image of the Week”
❖ Display groups of images showing thumbnails of all selected.
❖ Present photo galleries showing past Road Show events.
❖ Create expanded search criteria using keywords.
❖ Create an expanded search capability using predefined secondary fields (city, origin, etc).
❖ Install comment and feedback and discussion sections

Recommendations

❖ The design of a custom website providing easy database searchability should be explored.
❖ Dynamic page options for the site’s home page should be considered.
❖ New, more powerful and more user-friendly search capabilities should be designed.
   The concept of a user feedback area should be explored.
6. Summary

The Mass Memories Road Show is an engaging concept that can be expanded in a variety of interesting directions. From a technical standpoint, there are a handful of short-term and long-term modifications that should be considered as a part of this project.

The following major recommendations have been offered in this report:

- Capture Contributor and image information on location at Road Show events via electronic data entry.
- Develop both online and offline entry software, to ensure flexibility, and consider the use of simple onsite editing options.
- Design automation routines (i.e. droplets) to set image characteristics and perform basic image operations.
- Review and adopt standards for image size and resolution and consider automatically generating thumbnails and print quality image copies.
- Utilize image security options available with software products such as Photoshop.
- Consider digital watermarking options using Digimarc
- Design a normalized database with expanded keys and accessibility using open source software (e.g. MySQL).
- Create a dynamic web site based on the expanded database and using open source php coding.
Handbook Contributors

The heart of this Handbook is the work of experienced professionals in the archival, legal and information technology fields who reviewed the procedures and protocols used by the Mass. Memories Road Show and offered recommendations for expanding and solidifying the project into the future. These consultants were guided by a dedicated, thoughtful, and enthusiastic Advisory Committee, which developed the scope and shape of the Handbook, advised the Consultants on the ins and outs of the Mass. Memories Road Show, and edited the final texts.

The members of the Advisory Committee:

- Susan Bennett, Executive Director, Lexington Historical Society
- Heather Cole, Board of Governors, Norwood Historical Society.
- April Hagins, New England Archivists "Archives on the Road"
- George Hart, Associate Director, Healey Library, UMass Boston
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Only 349 ½ communities to go!

For further information about the Mass. Memories Road Show, please contact the Massachusetts Studies Project at UMass Boston, k12.msp@umb.edu, 617-287-7654.